

PROJECT SITE



PROJECT NARRATIVE:

EDIT AS REQUIRED:

This project narrative is provided as a brief outline of the proposed scope of building improvements for this Project.

The Project consists of the construction of a new multi-unit residential rental apartment building in Fort Myers, FL accessed off of Veronica S. Shoemaker Boulevard. The program includes a total of 324 dwelling units of 6 unit types (1, 2, and 3 bedroom) with solarium, balconies, and

The dwelling units are distributed among 12 residential buildings of 3 separate building types. The residential buildings are designed to provide 3 floors of dwelling units. The buildings are classified as Type V (A) construction, and all are sprinklered to the requirements of NFPA 13R systems. The residential and amenity buildings are designed as wood frame structures that include engineered truss components for both framed floors and roofs. The buildings are placed on concrete slab

The Project program also includes a Clubhouse, Mail Kiosk and Trash enclosures, which are submitted under a seperate Cover.

on grade foundations with integral thickened edges and grade beams.

The Project scope includes site engineering and landscape improvements that are submitted under separate cover.

WINDOW SYMBOL REFER TO SCHEDULE WALL TAG WALL TYPE OR UL A

NUMBERED BY TYPE REFER TO SCHEDULE

A,B,C, ETC. IN ONE DIRECTION

ROOM NUMBER

DRAWING NUMBER

DIRECTION OF

→ SHEET NUMBER

SHEET NUMBER

\AREA

NUMBER

SCALE

DIRECTION OF

SHEET NUMBER

1,2,3, ETC. IN THE OTHER

DEFERRED SUBMITTALS:

1) Deferral of any submittal items shall have the prior

2) Submittal documents for deferred submittal items shall be submitted to the Entity designated below for the project who shall review them. These will then be forwarded by the Owner to the Building Official having jurisdiction with a notation indicating that the deferred submittal documents

have been reviewed and that they have been found to be in

eir design and submittal documents have been approved.

approval of the Building Official having jurisdiction.

general compliance with the design of the project.3) The deferred submittal items shall not be installed until

IST (INCLUDING BUT NOT LIMITED TO):

BUILDING RAILINGS & GUARDRAILS

REVIEW BY ARCHITECT

) FIRE ALARM SYSTEM

REVIEW BY ARCHITECT

AUTOMATIC FIRE SUPPRESSION (SPRINKLER)

REVIEW BY ARCHITECT

SYSTEM REVIEW BY ARCHITECT

PRE-ENGINEERED (WOOD) FLOOR & ROOF TRUSS

BUILDING IDENTIFICATION AND WAYFINDING

SIGNAGE REVIEW BY OWNER

SITE FENCING REVIEW BY LANDSCAPE ARCHITECT

PERMIT REVIEW STAMP

ISSUE HISTORY

12/06/19 DESIGN DEVELOPMENT

REVISION HISTORY

02/28/20 PERMIT REVIEW SET

SCHEMATIC DESIGN

PERMIT COMMENT RESPONSES
PERMIT COMMENT RESPONSES 2

THE ROBERT

FT. MYERS, FL

MECHANICAL / ELECTRICAL / PLUMBING LANDSCAPE ARCHITECT

OWNER/DEVELOPER	ARCHITECT
ROHDIE SCHOOLHOUSE, LLC	FUGLEBERG KOCH
	FUGLEBERG KOCH

ATTN: RON LEICHTNER 52 VANDERBILT NEW YORK, NEW YORK 10017 PHONE (212) 682-5784

A0.12 | LIFE SAFETY PLANS - BUILDING TYPE 3

A3.13 FINISH SCHEDULES

A3.14 STAIRS
A3.15 ELEVATOR

4-ARCHITECTURAL

A3.10 ENLARGED PLANS - KITCHEN/BATHROOM

A4.04 ENLARGED PARTIAL ELEVS. & METER CENTER

A3.11 ENLARGED PLANS - BATHROOM
A3.12 KITCHEN, BATH, AND LAUNDRY REQ.

A4.01 BUILDING TYPE 1 - ELEVATIONS
A4.02 BUILDING TYPE 2 - ELEVATIONS
A4.03 BUILDING TYPE 3 - ELEVATIONS

A4.10 BUILDING TYPE 1 - SECTIONS
A4.11 BUILDING TYPE 2 - SECTIONS

ATTN: MICHAEL GOVE
2555 TEMPLE TRAIL
WINTER PARK, FLORIDA 32789
PHONE (407) 629-0595 FAX (407) 628-1057

DATE

CIVIL ENGINEER

BANKS ENGINEERING

BANKS

10511 SIX MILE CYPRESS PARKWAY FORT MYERS, FLORIDA 33966 (239) 939-5490

ASE ENGINEERING SERVICES, INC.

ENGINEERINGSERVICES, INC

10244 EAST COLONIAL DRIVE, SUITE 202 ORLANDO, FLORIDA 32817 PHONE (407) 677-5565 FAX (407) 730-2999

INDEX OF DRAWINGS

SALAS O'BRIEN

SALAS O'BRIEN

202 3501 QUADRANGLE BOULEVARD, SUITE 100 ORLANDO, FLORIDA 32817 -2999 PHONE (407) 380-0400 FAX (407) 380-5900 ATTN: NAME ADDRESS

CITY, FL 3xxxx

(407) 123-4567

ATTN: NAME
ADDRESS
CITY, FL 3xxxx
(407) 123-4567

INTERIOR DESIGN

ATTN: NAME
ADDRESS
CITY, FL 3xxxx
(407) 123-4567

CONTRACTOR

\checkmark_{X}		X SHEET NUME
ф —	LEVEL REFERENCE	Name Elevation
6:12	ROOF SLOPE ARROW	6:12 SLOPE SLOPE DIRECT
6 12	ROOF SLOPE	6 SLOPE
XX	ACCESSORY TAG	LOCATION OF NOTE NOTE NOTE NOTE
XX	NOTE TAG	LOCATION OF NOTE ABTHERATIONER
XX	LEVEL CHANGE	CHANGE IN LEVEL
\triangle	REVISIO N MARK	REV. LOCATION REV. No

SYMBOL KEY:

TARGET

TITLE

REFERENCES

SECTION

REFERENCES

REFERENCES

	INDEX OF DRAWINGS	
SHT#	SHEET NAME	REV. No.
0-ARCHG		~~~
A0.01	COVER SHEET	2
A0.02	COBE ANALYSIS TO THE TOTAL CORRECTION OF THE COR	
A0.10	LIFE SAFETY PLANS - BUILDING TYPE 1	
A0.11	LIFE SAFETY PLANS - BUILDING TYPE 2	

A0.30 UL REFERENCE DIRECTORY - WALL SYSTEMS A0.31 UL REFERENCE DIRECTORY - WALL SYSTEM A0.32 UL REFERENCE DIRECTORY - WALL SYSTEMS A0.33 UL REFERENCE DIRECTORY - FLOOR SYSTEM A0.34 UL REFERENCE DIRECTORY - FLOOR SYSTEM A0.35 UL REFERENCE DIRECTORY - ROOF SYSTEM A0.36 UL REFERENCE DIRECTORY - FLOOR PENETRATIONS A0.37 UL REFERENCE DIRECTORY - PENETRATIONS A1.01 ARCHITECTURAL SITE PLAN A2.01 BUILDING TYPE 1 - GROUND LEVEL A2.02 BUILDING TYPE 1 - 2ND LEVEL A2.03 BUILDING TYPE 1 - 3RD LEVEL A2.04 BUILDING TYPE 1 - ROOF PLAN A2.05 BUILDING TYPE 2 - GROUND LEVEL A2.06 BUILDING TYPE 2 - 2ND LEVEL A2.07 BUILDING TYPE 2 - 3RD LEVEL A2.08 BUILDING TYPE 2 - ROOF PLAN A2.09 BUILDING TYPE 3 - GROUND LEVEL A2.10 BUILDING TYPE 3 - 2ND LEVEL A2.11 BUILDING TYPE 3 - 3RD LEVEL A2.12 BUILDING TYPE 3 - ROOF PLAN A2.13 ENLARGED GARAGE PLANS A2.14 ENLARGED PATIO PLANS A2.15 BREEZEWAY RCP - BLDG 1 AND 2 A2.16 BREEZEWAY RCP - BLDG 3 3-ARCHITECTURAL A3.01 | 1 BR UNIT PLANS - S1 A3.02 | 1 BR UNIT PLANS - A1

1	SHT#	SHEET NAME	REV. No.	DATE
	A4.12	BUILDING TYPE 3 - SECTIONS		
7-	05-ARCHIT			
4	A5.01	WALL SECTION DETAILS		
	A5.02	WALL SECTION DETAILS		
_	A5.03	ROOF SECTION DETAILS		
	A5.04	MISC. SECTION DETAILS		
4	A5.05	MISC. DETAILS		
-	OG ADOLUT	FCTUDAL		
-	06-ARCHIT A6.01	PLAN DETAILS		
-	A6.01	PLAN DETAILS		
1	A0.02	FLAN DETAILS		
1	07-ARCHIT	ECTURAL		
1	A7.01	DOOR SCHEDULE AND DETAILS		
	A7.02	DOOR DETAILS		
1	A7.03	WINDOW SCHEDULE AND DETAILS		
1	A7.04	WINDOW AND DOOR TAPING PROCEDURES		
		·	'	
1		TECTURE ANCILLARY		
	CH0.01	CLUBHOUSE CODE/ LIFE SAFETY PLAN		
	CH2.01	CLUBHOUSE FLOOR PLAN		
	CH2.03	CLUBHOUSE REFLECTED CEILING PLAN		
4	CH2.04	CLUBHOUSE ROOF PLAN		
	CH3.01	CLUBHOUSE INTERIOR ELEVATIONS		
_	CH3.02	CLUBHOUSE - MAIL KIOSK INTERIOR ELEVATIONS		
	CH4.01	CLUBHOUSE EXTERIOR ELEVATIONS		
	CH4.02	CLUBHOUSE EXTERIOR ELEVATIONS		
	CH4.03	CLUBHOUSE EXTERIOR ELEVATIONS		
	CH5.01	CLUBHOUSE BUILDING SECTIONS		
	CH6.01	CLUBHOUSE PLAN DETAILS		
_	CH6.02	CLUBHOUSE SECTION DETAILS		
	CH7.01	DOOR SCHEDULE AND DETAILS		
	CH7.02	CLUBHOUSE WINDOW DETAILS AND SCHEDULES		
-	CH10.01	TRASH ENCLOSURE & RECYCLE BIN		
	11-STRUCT	FLIDAL		
-	S0.01	GENERAL NOTES FOR BLDG TYPES 1,2,3		
	S0.02	SCHEDULES AND DETAILS FOR BUILDING TYPES 1,2,3		
1	S1.01	BUILDING TYPE 1 FOUNDATION PLAN		
1	S1.02	BUILDING TYPE 1 2ND FLOOR FRAMING PLAN		
1	S1.03	BUILDING TYPE 1 3RD FLOOR FRAMING PLAN		
1	S1.04	BUILDING TYPE 1 ROOF FRAMING PLAN		
1	S2.01	BUILDING TYPE 2 FOUNDATION PLAN		
1	S2.02	BUILDING TYPE 2 2ND FLOOR FRAMING PLAN		
1	S2.03	BUILDING TYPE 2 3RD FLOOR FRAMING PLAN		
1	S2.04	BUILDING TYPE 2 ROOF FRAMING PLAN		
1	S3.01	BUILDING TYPE 3 FOUNDATION PLAN		
	S3.02	BUILDING TYPE 3 2ND FLOOR FRAMING PLAN		
1	S3.03	BUILDING TYPE 3 3RD FLOOR FRAMING PLAN		
	S3.04	BUILDING TYPE 3 ROOF FRAMING PLAN		
1	S5.01	SECTIONS AND DETAILS FOR BUILDING TYPES 1,2,3		
1	S5.02	SECTIONS AND DETAILS FOR BUILDING TYPES 1,2,3		
1	S5.03	SECTIONS AND DETAILS FOR BUILDING TYPES 1,2,3		
1	S5.04	SECTIONS AND DETAILS FOR BUILDING TYPES 1,2,3		
1	S5.05	SECTION AND DETAILS FOR BUILDING TYPES 1,2,3		
1				

SHT#	SHEET NAME	REV. No.	DATE
1.5-STRU			
CS1.01	GENERAL NOTES AND SCHEDULES		
CS1.02	GENERAL NOTES AND SCHEDULES		
CS2.01	FOUNDATION PLAN		
CS3.01	ROOF FRAMING PLAN		
CS4.02	TRASH ENCLOSURE FOUNDATION PLAN		
CS5.01 CS5.02	SECTIONS AND DETAILS SECTIONS AND DETAILS		
CS5.02 CS5.03	SECTIONS AND DETAILS SECTIONS AND DETAILS		
C35.03	SECTIONS AND DETAILS		
2-MECHA	NICAL		
M0.01	LEGENDS AND SCHEDULES - MECHANICAL	1	5/06/20
M2.01	BUILDING TYPE 1 - GROUND LEVEL - MECHANICAL	1	5/06/20
M2.02	BUILDING TYPE 1 - 2ND LEVEL - MECHANICAL		
M2.03	BUILDING TYPE 1 - 3RD LEVEL - MECHANICAL		
M2.05	BUILDING TYPE 2 - GROUND LEVEL - MECHANICAL	1	5/06/20
M2.06	BUILDING TYPE 2 - 2ND LEVEL - MECHANICAL		
M2.07	BUILDING TYPE 2 - 3RD LEVEL - MECHANICAL		
M2.09	BUILDING TYPE 3 - GROUND LEVEL - MECHANICAL	1	5/06/20
M2.10	BUILDING TYPE 3 - 2ND LEVEL - MECHANICAL		
M2.11	BUILDING TYPE 3 - 3RD LEVEL - MECHANICAL		
M3.01	UNIT PLANS - MECHANICAL		
M3.02	UNIT PLANS - MECHANICAL		
M6.01	DETAILS - MECHANICAL		
2,5-MECK CM2,01	ANICAL ANICAL CLUBHOUSE FLOOR PLAN - MECHANICAL		6/03/202
	, , , , , , , , , , , , , , , , , , , ,	2	\mathcal{N}
CM2.01 CM6.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL	2	6/03/202
CM2,01 CM6.01 3-ELECT	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL	2 1	5/06/20
CM2,01 CM6.01 3-ELECTI E0.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL	2 2 2	5/06/20
CM2,01 CM6.01 3-ELECT E0.01 E0.02	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL	2	5/06/20 5/06/20 6/03/202 6/03/202
CM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL		5/06/20
CM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL	2	5/06/20 5/06/20 6/03/202 6/03/202
CM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01 E2.01 E2.02	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL	2	5/06/20 5/06/20 6/03/202 6/03/202
E0.01 E0.02 E1.01 E2.02 E2.02 E2.03	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL	2	5/06/20 5/06/20 6/03/202 6/03/202
CM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01 E2.01 E2.02	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL	2	5/06/20 5/06/20 6/03/202 6/03/202
CM2.01 CM6.01 E0.01 E0.02 E1.01 E2.01 E2.02 E2.03 E2.05	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL	2	5/06/20 5/06/20 6/03/202 6/03/202
CM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01 E2.02 E2.03 E2.03 E2.05 E2.06	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL	2	5/06/20 6/03/202 6/03/202 6/03/202
E0.01 E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL	2 2	5/06/20 6/03/202 6/03/202 6/03/202
E0.01 E0.01 E2.01 E2.02 E2.03 E2.05 E2.06 E2.09	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL	2 2	5/06/20 6/03/202 6/03/202 6/03/202
ELECTION E0.01 E2.01 E2.01 E2.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL	2 2	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20
CM2.01 CM6.01 3-ELECTI E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL	2 2 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20
ELECTI E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL	1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20
ELECTI E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - BLECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL	2 2 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20
ELECTION E0.01 E0.02 E1.01 E2.01 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - BLECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL	2 2 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20
CM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RIGAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - BLECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS AND TRASH ENCLOSURE - ELECTRICAL SCHEDULES - ELECTRICAL	2 2 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20
EM2.01 CM6.01 3-ELECT E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.01 E4.02	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS AND TRASH ENCLOSURE - ELECTRICAL SCHEDULES - ELECTRICAL	2 2 1 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20
EM2.01 CM6.01 E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.02 E4.02 E4.02	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN - ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL	2 2 1 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20
ELECTION E0.01 E0.02 E1.01 E2.01 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.01 E4.02 E4.03 E4.04	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN - ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL	2 2 1 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 6/03/202 6/03/202
ELECTION E0.01 E0.01 E2.01 E2.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.01 E4.02 E4.03 E4.04 E5.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS AND TRASH ENCLOSURE - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL POWER RISER DIAGRAMS - ELECTRICAL	2 2 1 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20
ELECTION E0.01 E0.01 E0.02 E1.01 E2.01 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.01 E4.02 E4.03 E4.04 E5.01 E5.02	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL RICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - BUILD	2 2 1 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20
ELECTI E0.01 E0.02 E1.01 E2.02 E2.03 E2.05 E2.06 E2.07 E2.09 E2.10 E2.11 E2.13 E2.14 E3.01 E3.02 E4.01 E4.02 E4.04 E5.01	CLUBHOUSE FLOOR PLAN - MECHANICAL DETAILS - MECHANICAL SYMBOL LEGEND - ELECTRICAL LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL SITE PLAN -ELECTRICAL BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 1 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 2 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL BUILDING TYPE 2 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL ENLARGED GARAGE PLANS - ELECTRICAL UNIT PLANS - ELECTRICAL UNIT PLANS AND TRASH ENCLOSURE - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL SCHEDULES - ELECTRICAL POWER RISER DIAGRAMS - ELECTRICAL	2 2 1 1 1 1 1 1	5/06/20 6/03/202 6/03/202 6/03/202 6/03/202 5/06/20 5/06/20 5/06/20 5/06/20 5/06/20 6/03/202

SHT#	SHEET NAME	REV. No.	~~ DATE~
E6.02	DETAILS AND SYSTEM RISER - ELECTRICAL	2	6/03/2020
13.5-ELEC	TRICAL TO THE TRICAL THE TRICAL TO THE TRICAL TO THE TRICAL TO THE TRICAL TO THE TRICAL THE TR	~~~~	· · · · · · · · · · · · · · · · · · ·
CE2.01	CLUBHOUSE FLOOR PLAN - POWER AND SYSTEMS	2	6/03/2020
CE2.02	CLUBHOUSE FLOOR PLAN-LIGHTING		5/06/20
		-	
14-PLUMBI	NG		
P0.01	LEGENDS, SCHEDULES AND NOTES - PLUMBING		
P2.01	BUILDING TYPE 1 - GROUND LEVEL - PLUMBING		
P2.02	BUILDING TYPE 1 - 2ND LEVEL - PLUMBING		
P2.03	BUILDING TYPE 1 - 3RD LEVEL - PLUMBING		
P2.05	BUILDING TYPE 2 - GROUND LEVEL - PLUMBING		
P2.06	BUILDING TYPE 2 - 2ND LEVEL - PLUMBING		
P2.07	BUILDING TYPE 2 - 3RD LEVEL - PLUMBING		
P2.09	BUILDING TYPE 3 - GROUND LEVEL - PLUMBING		
P2.10	BUILDING TYPE 3 - 2ND LEVEL - PLUMBING		
P2.11	BUILDING TYPE 3 - 3RD LEVEL - PLUMBING		
P3.01	UNIT PLANS - PLUMBING		
P3.02	UNIT PLANS AND TRASH ENCLOSURE - PLUMBING		
P5.01	RISER DIAGRAMS - PLUMBING		
P5.02	RISER DIAGRAMS - PLUMBING		
P5.03	RISER DIAGRAMS - PLUMBING		
P5.04	RISER DIAGRAMS - PLUMBING		
14.5-PLUM	BING		
CP2.01	CLUBHOUSE BUILDINGS - PLUMBING	1	5/06/20
CP5.01	RISER DIAGRAMS - PLUMBING		
H5-FHRE/PF	ROTECTION AND TO SET OF THE SET O	~~~~	~~~~~
FP0,01	LEGEND, SCHEDULES AND DETAILS - FIRE PROTECTION		6/03/2020
FP2.01	BUILDING TYPE 1 - GROUND LEVEL - FIRE PROTECTION	1	5/06/20
FP2.02	BUILDING TYPE 1 - 2ND LEVEL - FIRE PROTECTION		
FP2.03	BUILDING TYPE 1 - 3RD LEVEL - FIRE PROTECTION		
FP2.05	BUILDING TYPE 2 - GROUND LEVEL - FIRE PROTECTION		
FP2.06	BUILDING TYPE 2 - 2ND LEVEL - FIRE PROTECTION		
FP2.07	BUILDING TYPE 2 - 3RD LEVEL - FIRE PROTECTION		
FP2.09	BUILDING TYPE 3 - GROUND LEVEL - FIRE PROTECTION		
FP2.10	BUILDING TYPE 3 - 2ND LEVEL - FIRE PROTECTION		
FF2.10			



MICHAEL E. GOVE

THE ROBERT

Checked: D

Approval: M

Date: 09/10/20

FT. MYERS, FL

Project #: 559

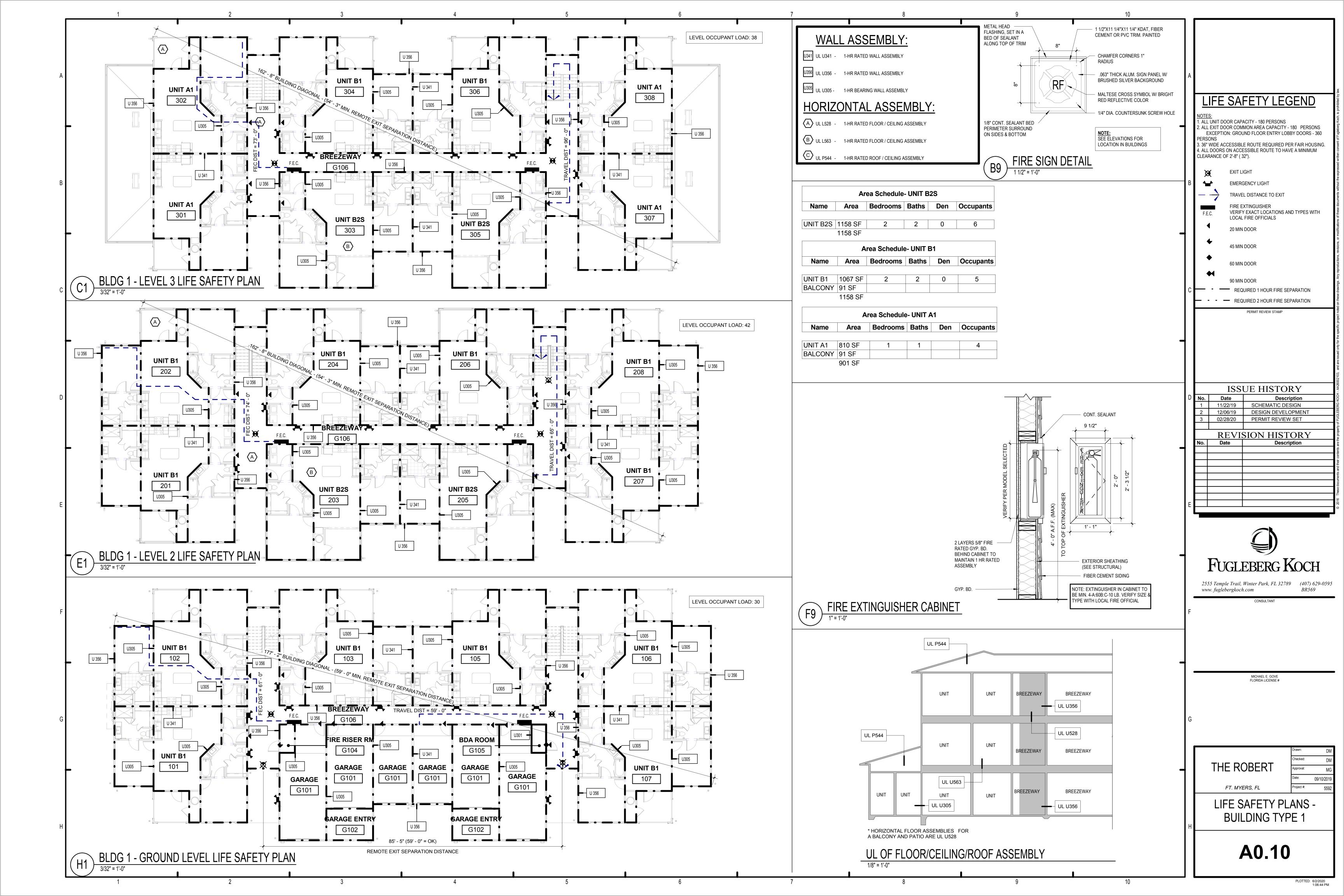
COVER SHEET

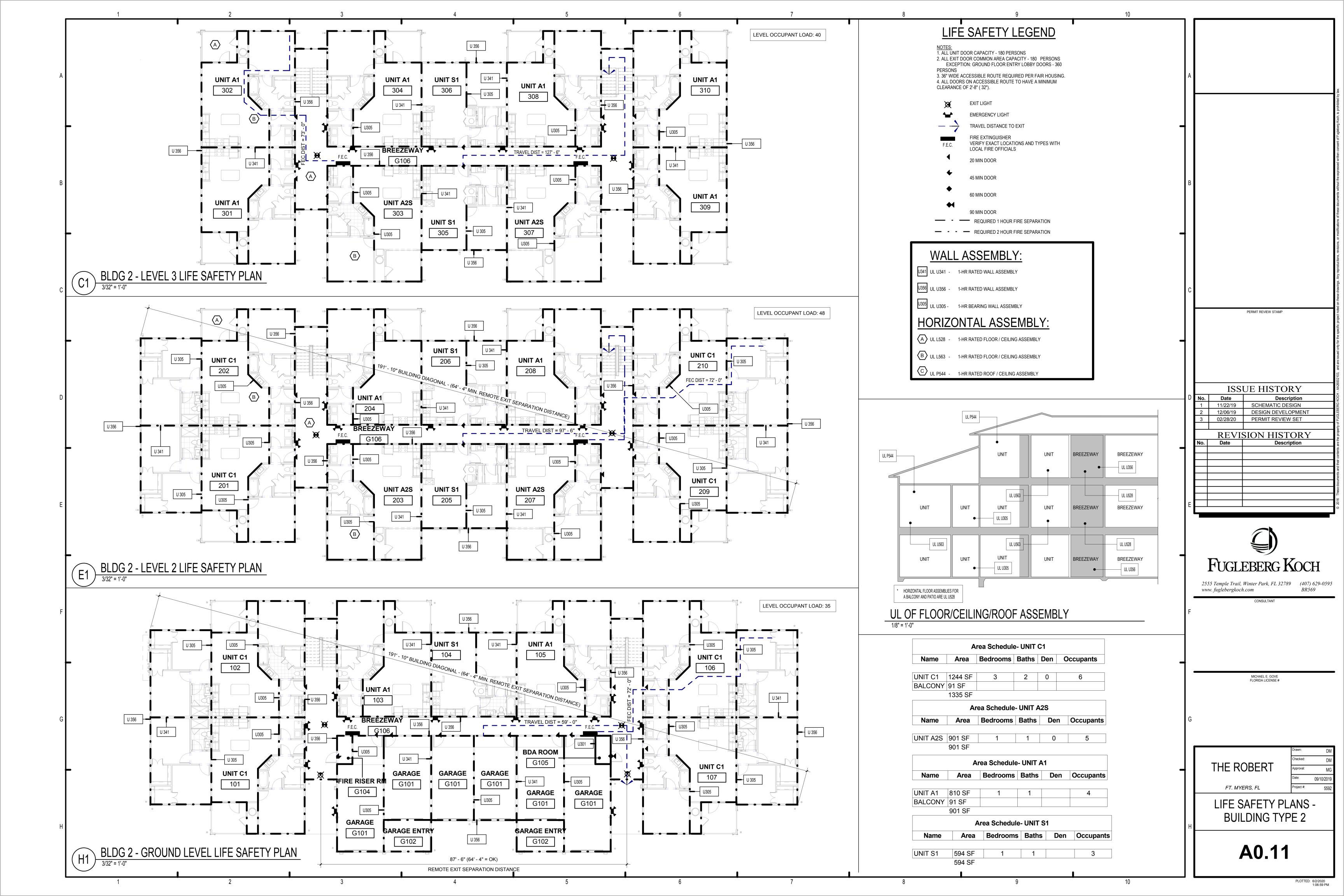
A0.01

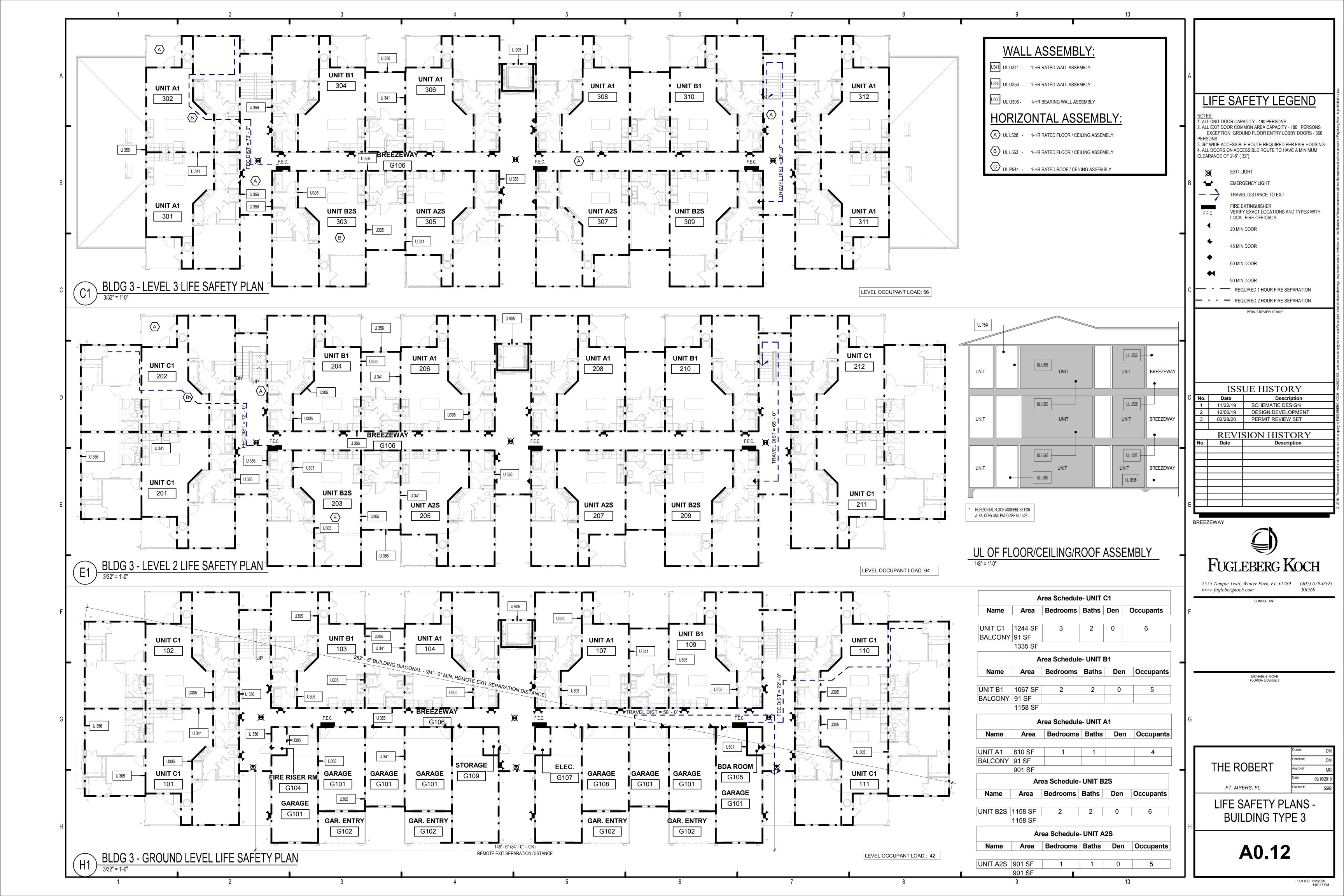
PLOTTED: 6/4/2 3:07

			SUMMARY	<u> </u>		FIRE-RESI	STANCE RA	TING REQUIR	REMENTS	MEANS OF EGI	RESS - [FBC T	ABLE 1014.3 & 10	<u>16.2</u>									
1.	BUILDING CODE:		<u>ABLE CODES</u> RIDA BUILDING C	ODE			-	<u>NBLE 601)</u> TS - TYPE V(A)		OCCUPANCY	LOCATIO	MAX. TRAVEL I TO EXIT (ALLO	OMARIEN IRAVEL	REMARKS				FT. MY	ERS, Florida - UNIT TAB	LE	8/2/2019	
А	LIFE SAFETY COL			0005					V(A)	CLASSIFICATION R-2 - DWELLING	BUILDING TYPE 1,	UNSPRINK.	SPRINK. (ACTUAL) 125 53'-0"	REMARKS			BUILDING TYPE 1	UNIT UNIT 'S-1' 'A-1'		UNIT UNIT 'B-2S' 'C-1'	UNIT TOTALS	A
3.	PLUMBING CODE	: 2017 FLOR	RIDA PLUMBING	CODE		STRUCTURAL FRA	AMF:	REQ'D	PROV	R-2 - EXIT ACCESS	BUILDING TYPE 1,	<i>'</i>	250 127'-6"					1 BR 1 BR STUDIO STD	1 BR 2 BR	2 BR 3 BR (GARAGE	
4.	ENERGY CODE:		RIDA ENERGY CO D AMMENDMENT		IL		<u>AME:</u> MNS, GIRDERS, TRU		1	1) See Life Safety Plans	for specific information.						1ST FLOOR 2ND FLOOR	0 0	0 6	0 0 2	6 6 0 8	
L	FIRE CODE:		RIDA FIRE PREVE		11 11	BEARING WALLS: EXTERIOR (PER TA NTERIOR	ABLE 601/602/704.10	J) 1 1	1 1*		nterior exit stairways are in	nterconnected by a 1-hour fire-			f		3RD FLOOR UNITS PER	0 4	0 2	2 0	0 8	
6.	ACCESSIBILITY C	ACCESSI	NCES: 2017 FLC BIBILITY FHA - FA BIBILITY GUIDELIN	IR HOUSING		NONBEARING WAL	LLS AND PARTITION ABLE 601/602)	<u>1S:</u>	0	Exception 2: Where a	building is equipped throu	be measured along the shorte ughout with an automatic sprint access doorways shall not be	<i>kler system</i> in accordance w	vith Section 903.3.1.1 or 903.3.	1.2,		BUILDING UNITS PER (4)	0 4	0 14	4 0	6 22	
7.	ELECTRICAL COL					NTERIOR (PER SE FLOOR CONSTRUC		C AND 1	0	diagonal dimension of	f the area served.						BUILDINGS BUILDING TYPE 2	0 16	0 56	16 0	24 88	
8.	MECHANICAL CO	DE: 2017 FLOR	RIDA MECHANICA	AL CODE		JOISTS PER EXCER		AND	1"		roughout with an automat	ic sprinkler system in accordar s are permitted in accordance		903.3.1.2. See section 903 fo	r		1ST FLOOR	1 2	0 0	0 4	6 7	
ь I					-	ROOF CONSTRUCT	TANCE (PER TABLE (1	1*	_	, ,	·					2ND FLOOR 3RD FLOOR	2 2	2 0 2	0 4 0	0 10 0 10	
). NFPA 13R, STAN IN RESIDENTIAL STORIES IN HEI	OCCUPANCIE	ES UP TO, AND II		٦ ا	10 ≤ X ≤ 30'	,	1 ELOW AND LIFE-SAFET	1 Y SHEETS FOR	MAXIMUM ARI	EA OF EXTERI	OR WALL OPENIN	NGS:				UNITS PER BUILDING	5 10	4 0	0 8	6 27	
		,	DE PARAM	METERS		ADDITIONAL INFOR			1 SHEETS FOR	FROM TABLE 705.8 - [ASSUMED PROPERTY L	FBC 2017: BUILDING]						UNITS PER (4) BUILDINGS	20 40	16 0	0 32	24 108	
		APAR	RTMENTS:	<u>IL I LI CO</u>			BALCONIE	<u> </u>		AGGGMEDT NOT ENTIL	INC DIOTANOL.	ALLOWABLE (WORST O	<u></u> <u>AL</u>				BUILDING TYPE 3 1ST FLOOR	0 2	0 2	0 4	10 8	
	ALL		PROJECT	FERENCE RE	6	Balconies and simila	and similar projection ar projections of comb	ins. bustible construction other tance rated in accordance	er than <i>fire-</i>	UNPROTECTED, SPRINK	KLERED (UP, S)	ALLOWABLE (WORST (CASE)				2ND FLOOR 3RD FLOOR	0 2	2 2	2 4	0 12	
	ID SPEED 19 SMIC ZONE	N/A		SEC. 1609 UL SEC. 1613	f	or floor construction	n or shall be of Type I\	tance rated in accordanc IV construction in accordance ceed 50 percent of the bu	ance with Section	0 FT TO 3 FT OVER 3 FT TO 5 FT		NP NP 15%					UNITS PER BUILDING	0 10	4 6	4 8	10 32	
SNO	DW LOAD	N/A	N/A S	SEC. 1608		on each floor. Exceptions:				OVER 5 FT TO 10 FT OVER 10 FT TO 15 FT OVER 15 FT TO 20 FT		25% 16% 45% 75%					UNITS PER (4) BUILDINGS	0 40	16 24	16 32	40 128	
		N/A		EC 1805.2.1	3	 Balconies and si shall be permitte 	ed to be of Type V cor	buildings of Type III, IV a	not be required to	OVER 20 FT TO 25 FT OVER 25 FT TO 30 FT		NL NL NL					12 TOTAL BUILDINGS	20 96	32 80	32 64	88 324	
zc	OMPONENTS AND ONE DETAILS ON S	TRUCTURAL D	DRAWINGS `			areas. 4. Where sprinkler	protection is extende	prinkler protection is extended to the balcony areas, the balcony area		OVER 30' FROM ASSUMED PI	ROPERTY LINE	NK NR					PERCENT OF TOTAL UNITS	6.17% 29.62%	9.88% 24.70%	9.88% 19.75%	100 100.00%	
	VIND SPEED WAS ATEGORY II LEE CO			NTERPOLATION	UNDER	length of the bal	lcony on each floor sh	all not be limited.			INSULATION	AND FENESTRA	TION REQUIREN	MENTS BY COMPO	ONENT							PERMIT REVIEW STAMP
	BUILDING C	ODE PAF	RAMETER	S - [FBC 2	<u>017]</u>						(FLORIDA	ENERGY CONSE	RVATION CODE	2017 - TABLE 402	2.1.2)	OLAD B.VALUE		'S-1' 'A-1' 1 BR 1 BR	'A-2S' 'B-1' 1 BR 2 BR	'B-2S' 'C-1' 2 BR 3 BR (GARAGE	
			AREA	<u>-</u>	THIS PROJE	СТ	BEEEBENGE			CLIMATE FENEST ZONE U-FAC	CTOR U-FACTOR	FENESTRATION R-VALUE	WALL R-VALUE KNE	EWALL WALL R-VALUE		SLAB R-VALUE CRAWL SPACE & DEPTH WALL R-VALUE		STUDIO STD		END STD	UARAGE	
DE	SCRIPTION	(Table 503)	MODIFICATION REQUIREMENT	BLDG TYPE 1 W/GARAGE	BLDG TYPE W/GARAG	BLDG TYPE 3 E W/GARAGE	REFERENCE (FBC)	REMA	RKS	1A NF PROVIDED 0.4	R 0.75 40 N/A	0.25 30 0.30 38		N/A 3/4 N/A N/A	13 0 19 N/A	0 0 N/A N/A	NSF AREA		 			
CO TYF	NSTRUCTION PE	TYPE V(A)	TYPE V(A)	TYPE V(A)	TYPE V(A)) TYPE V(A)	TABLE 503										GSF AREA	566 774 594 901	- 	1,115 1,197 1,158 1,335		
	E / OCCUPANCY			R-2/U	R-2/U	R-2/U	CH. 3 & 4							AL CHECKLIST -			Definitions	Gypsum Board (Bald	· · · · · · · · · · · · · · · · · · ·		f	ISSUE HISTORY
D OC	E RATING UPANCY	1 HR 1 HR	1 HR 1 HR	1 HR	1 HR 1 HR	1 HR 1 HR	CH. 6 TABLE 508.3.	.3		_		[FBC 2017] (AP	ARIMENIS)		DESIGN APPRO				ditioned space including exterior a ior wall or common wall centerline			No. Date Description
	PARATION RINKLER	NFPA 13R	NFPA 13R	NFPA 13R	NFPA 13R		TABLE 903					SUBCATEGORY	MANUFACTURER	PRODUCT DESCRIPTION	PRESSURE NUMBI							1 11/22/19 SCHEMATIC DESIGN 2 12/06/19 DESIGN DEVELOPMENT
	/EL 1	12,000 SF	21,000 SF	8,178 SF	8,976 SF	· ·	TABLE 506.2			NOTES: 1) OCCUPANCY SEPAR UNITS PER SECTION		A. EXTERIOR DOORS SWINGING - GLASS	THERMA-TRU CO.	PROFILES	+/- 47 FL 204	61 R4 12/31/2021	5 mg/s	MPONENT	NSULATION INSPECTION CO	OMPONENT CRITERIA CRITERIA	A	3 02/28/20 PERMIT REVIEW SET
LE\	/EL 2 /EL 3	12,000 SF 12,000 SF	21,000 SF 21,000 SF	10,494 SF 9,464 SF	11,372 SF 9,636 SF		TABLE 506.2			(VERTICAL-WALLS) (VERTICAL-WALLS)		SWINGING - FLUSH	THERMA-TRU CO.		+/- 47 FL 204				Exterior thermal envelope insu contact and continuous alignm	lation for framed walls is ent with building envelop		REVISION HISTORY No. Date Description
	RAGE - (U)	3,000 SF		2,316 SF	2,396 SF	(2) + 2.050				2) HALLWAY = 0.2 x 40 44" (MIN. WIDTH)	OCCUPANTS = 8" <	SECTIONAL	CLOPAY BLDG PRODUCTS CO.	WINDCODE W8 GARAGE DO	OOR +46 / -50 FL 56	84.6 12/31/2038	Air barrier and th	ermal barrier	Breaks or joints in the air barri Air-permeable insulation is no Air-permeable insulation is ins	t used as a sealing materia	al.	
-	TAL BLDG AREA	36,000 SF	63,000 SF	30,452 SF	32,380 SI	ŕ				1020.2 Exception 2:Th		B. WINDOWS					Ceiling/attic		Air barrier in any dropped ceil and any gaps are sealed.	ing/soffit is substantially		
	ZZ/LOFT INCI. GHT LIMIT (S)	3 STORIES		NO 3 STORIES	NO 3 STORIE	NO S 3 STORIES	SECTION 505 TABLE 504.4			less than 50.	CCUPANTS = 12" < 44"	SINGLE HUNG	CUSTOM WINDOW	8100 SINGLE HUNG SH-3050 8150 PW	E +67/-75 FL 5823. +/-80 FL5823		Cennigratic		Attic access (except unvented sealed. Corners and headers are insula		drop down stair is	
HE	GHT IT/PROVIDED (FT)	50'-0"		38'-10"	39'-2"	38'-10"	TABLE 504.3			(MIN. WIDTH) 1011.2 Exception 1: S	Stairways serving an	FIXED	SYSTEMS INC.	6130 FW	+7-60 FL3623	- Ko 61/21/2020	Walls Windows and do	ors	Junction of foundation and sill Space between window/door is	plate is sealed.	ed.	
ОС	CUPANT LOAD	200 GROSS	3	42 PERS.	48 PERS	64 PERS.	TABLE 1004.1.2			occupant load of less width of not less than		C. PANEL WALL SOFFITS	JAMES HARDIE	HARDIE SOFFIT	N/A NOA 17-0	0821.21 05/01/2022	Rim joists Floors		Rim joists are insulated and in Insulation is installed to maint	clude an air barrier.		
	I No. OF EXITS I. STAIR WIDTH	2 44 INCHES		2 44 INCHES	2 44 INCHE	3 44 INCHES	TABLE 1006.3.1 S. 1005.1 / 1009.1			_		SIDING	JAMES HARDIE	HARDIE PLANK SIDING	N/A NOA 17-0		(including above floors)	-garage and cantilevered	decking. Air barrier is installed at any e Insulation is permanently attac		ı.	
	BUILDING /	AREA MO		-		SCHEDULE ABOV		<u> </u>				SIDING	JAMES HARDIE	HARDIE PANEL SIDING	N/A NOA 17-0	0821.21 05/01/2022	Crawl space wall	S	Exposed earth in unvented cra with overlapping joints taped.		Class I vapor retarder	
-		PARTMEN SS AREA TABUI										D. ROOFING PRODUCTS					Shafts, penetration	ons	Duct shafts, utility penetration or unconditioned space are sea	led.	•	
B F	uilding Type 6 - Blo = 247' + 247' + 72' -	lg 7: 21,000 sf + 72' = 638'	= MAX FLOOR (CHECK OK								UNDERLAYMENTS ASPHALT SHINGLES	POLYGLASS CERTAINTEED	ICE AND WATER SHIELD LANDMARK	N/A NOA 17-0 N/A NOA 18-1		Narrow cavities Garage separation		Batts in narrow cavities are cu sprayed/blown insulation. Air sealing is provided betwee	**************************************	e Marie 17 o al area de la companya	FUGLEBERG KOC
	crease due to Front =(L1 x w1 + L2 x w2											UNDERLAYMENTS	INTERWRAP	RHINOROOF STANDARD OFF RIDGE VEN	N/A FL 15216		Recessed lighting		Recessed light fixtures are air Exception-fixtures in condition	tight, IC rated, and sealed		2555 Temple Trail, Winter Park, FL 32789 (407) www. fuglebergkoch.com BR.
	=(247' x 30' + 247' x = 30	(30' + 72' x 30' -	+ 72' x 17.5')/638	'								OFF RIDGE VENT RIDGE VENT	CERTAINTEED	STANDARD RIDGE VENT -	N/A NOA 19-0		Plumbing and wi	ring	Insulation is placed between o around wiring and plumbing, o piping and wiring.			CONSULTANT
=	= [(F/P)25] (30/30 [(636'/636')25] (3													12" UNFILTERED			Shower/tub on ex	terior wall	Showers and tubs on exterior with them from the exterior wall.	valls have insulation and a	an air barrier separating	-
=.	[125] (30/30) 75																Electrical/phone Common wall	box on exterior walls	Air barrier extends behind box Air barrier is installed in comm	non wall between dwellin	g units.	
M IF	aximum Building Ard TYPE V-A:	ea Check															HVAC register b	oots	HVAC register boots that pend drywall. Fireplace walls include an air l		re sealed to subfloor or	
T Aa	a= [At + (NS x lf) a=[12,000 + (12,000	x .75)															тпортасс		Trireplace wans include an air	AITIO,		
	12,000 + 9,000] 21,000 allowed max	building																				MICHAEL E. GOVE FLORIDA LICENSE #
	,000 * 3 stories = 6	•		 .																		
<u> </u>	RCHITEC	IURAL A																				
$G \left[\begin{array}{c} A \\ \overline{\Delta} \end{array} \right]$	BV ABOVE		BSMT. E	BRICK BASEMENT BETWEEN	CO CO		NATE =	EAST	F.E.	CABINET	R GL GLAS GR. GRAI GYP. GYPS	DE "		MAX. MAXIMUM M.C. MINERAL CORE MECH. MECHANICAL	O O.C. ON CENTE	Q ER Q.T. QUA	RRY TILE	SHLV./SH SHE SHT. SHE SIM. SIMI	ET <u> </u>	VARIES		3
A(CC.FL. ACCESS		B.U. E B.W. E	BUILT-UP BOTH WAYS	CP ⁻ CSI	T. CARPET MT. CASEMEN	EA. NT E.F.	EACH EACH FACE	F.F. F.H	FINISH FLOOR .C. FIRE HOSE CABINE	т Н	J.F. JNT.	JOINT FILLER JOINT	MEMB. MEMBRANE MEZZ. MEZZANINE	OD OVERFLO' OH. OVERHEA	W DRAIN QTY. QUA	NTITY	SPEC. SPE SQ. SQL	CIFICATION V.B. ARE VCT	VINYL BASE VINYL COMPOSITI	ON TILE	
Α.	TILE D. AREA DI	RAIN	CAB. (CABINET	C.T - CTF D	CERAMIC R. CENTER	E.I.F.S	AND FINISH SY	JLATION FIX [*] STEM F.L.	Γ FIXTURE FLOW LINE	H. HIGH H.B. HOSI H.C. HOLL	E BIBB K		MFTR MANUFACTURE MGR. MANAGER M.H. MANHOLE	R OPNG. OPENING OPP. OPPOSITE	R. RISE RAD. RAD		S.S.	I RECESSED VER. STAINLESS STEEL VERT. STAGGERED V.I.F.	VERIFY VERTICAL VERIFY IN FIELD		Drawn:
Al	DJ. ADJACE DJUST. ADJUST	NT	CB. / TB. (CORKBOARD/ FACKBOARD CATCH BASIN	<u>ה</u> D.	DEPTH	EL. / E	ELEV. ELEVATION C. ELECTRICAL V. ELEVATOR	FLR FLU	R. FLOOR FLUORESCENT	H/C HANI HD. HEAI	DICAPPED KIT.	KITCHEN	MIN. MINIMUM MISC. MISCELLANEOL MLDG. MOLDING	s $\frac{P}{PART.}$ PARTITION	R.B. RUB	BER BASE LECTED CEILING	STD. STA STL. STE	NDARD			THE ROBERT Checked: Approval:
	FLOOR		CEM. (CER. (CEMENT CERAMIC	DBI DE ^C DE ^C	G. DEGREE T. DETAIL	ELEV EMEF ENCL	R. EMERGENCY L. ENCLOSURE	F.O F.O F.O	.C. FACE OF CONCRET .F. FACE OF FINISH	E HDWD. HARI H.M. HOLL	DWARE DWOOD L. LOW METAL LAB.	LONG OR LENGTH	MLWK. MILLWORK M.O. MASONRY OPE	PH PRE HUNG NING PL. PLATE	G RD ROC RE: REF	F DRAIN ER TO	STOR. STO STRUCT. STR	RAGE W UCTURAL W/	WEST / WIDE WITH		Date:
Al	LT. ALTERN LUM. / AL. ALUMIN NG. ANGLE		C.H. (CEILING HEIGHT CIRCLE CONTROL JOINT	D.F DIA	. DRINI . DIAMETEI	R EQUI	EQUAL IP. EQUIPMENT EACH WAY	F.O F.R F.S		HORIZ. HOR NT H.P. HOR	ZONTAL LAM. SE POWER LAV.	LAVATORY	M.R. MOISTURE RES MRB. MARBLE M.T. MARBLE THRES	STIVE P.L. PROPERT P.LAM. PLASTIC L HOLD PLAS. PLASTER	AMINATE REF. REF. REINF. REINF. REINF. REINF.	RIGERATOR IFORCED UIRED		PENDED W.C.	WATER CLOSET WASHER/DRYER (WOOD	СОМВО	FT. MYERS, FL Project #:
AI AI	NOD. ANODIZ PPROX. APPROX	(IMATE	CLG. (CLKG. (CEILING CAULKING	DIF DIM	F. DIFFUSEF 1. DIMENSIC	R E.W.C ON EXIST	C. ELECTRIC WAT T. EXISTING	ER COOLER FT.	FOOT OR FEET 6. FOOTING		HT L.H. TING, VENTILATION LIN	LABEL LEFT HAND LINEN	MTD. MOUNTED MTL METAL	PLYWD. PLYW PNL. PANEL	OOD REV. REV RH RIGI	ISED / REVISION IT HAND	T TRE	WP. AD W.R. GUE & GROOVE W/O	WATER PROOF WATER RESISTAN	ıт Т	CODE ANALYSIS
A	RCH. ARCHITI JTO. AUTOM/ /G. AVERAG	ATIC	CLO.	CENTER LINE CLOSET CLEAR	DIS DIV DN.	SP. DISPOSAL 7. DIVIDER . DOWN	EXP. EXT. EXTR	EXTERIOR	INT FUF FUT E.V.	. FUTURE		AIR CONDITIONING L.L.V.	LONG LEG VERTICAL LINE		PR. PAIR PRECAST	S	OPENING	TEMP GL. TEM	PERED GLASS WNF FERRAZZO	WITHOUT WELDED WIRE FA	BRIC	
BI BI	D. BOARD LBD. BLACK E	BOARD	CMU. (CONCRETE MAS JNIT	DR	DOOR AP. DRAPERY	<u>F.</u> Y F.A.	FIRE ALARM		GAUGE	I IN. INCH		I OUVFR	N NORTH N/A NOT APPLICABL N.I.C. NOT IN CONTRA	PREFAB. PREFABRI E PROJ. PROJECT CT PROP PROPERT	- _Y SAFB SOL	ND ACOUSTICAL	TH. THIC	EK FOP OF			
BI	LDG. BUILDIN LK/BLK'G BLOCK (M. BEAM	G	COL. C	CLEAR OPENING COLUMN COMMUNICATIO	DTI	L. DETAIL G. DRAWING	POUT F.D. F.D.C G	FLOOR DRA		LV. GALVANIZE . GRAB BAR	INSUL. INSU INT. INTE	$\begin{array}{ccc} LATION & & & M \\ RIOR & & & & \\ & & MAS. \end{array}$	MASONRY	NO. NUMBER NOM. NOMINAL	P.T. PRESSUR	E TREATED S.C.	FIBER BOARD SOLID CORE SCHEDULE		CAL			A0.02
B(B.	OT. BOTTON		CONC. (CONN. (CONCRETE CONNECTION	DW DW	R. DRAWER		CONNECTION FOUNDATION	GEI	N. GENERAL CONTRAC		MATL.	MATERIAL	N.T.S. NOT TO SCALE	PVC POLYVINY PVRS PAVERS	SECT. SEC	TION ARE FOOT / FEET	U.O.N. UNL	ESS OTHERWISE NOTED	•		
			CONST. C	CONSTRUCTION			F.E.	FIRE EXTINGUI	SHER		Į									<u> </u>		

BUILDING CODE ANALYSIS - FLORIDA BUILDING CODE, 2017 EDITION





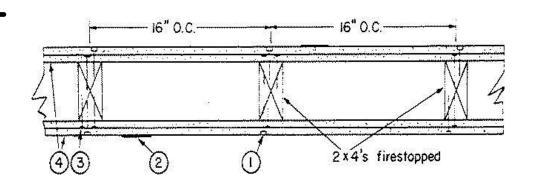


Finish Rating — 66 Min.

Finish Rating — 66 Min. This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method. such as

Canada, a load restriction factor shall be used — See Guide BXUV. or BXUV7. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or

cUL Certification (such as Canada), respectively



. **Nailheads** — Exposed or covered with joint compound.

2. **Joints** — Exposed joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. 3. Nails — 6d cement coated nails 1-7/8 in, long, 0.0915 in, shank diam, 1/4 in, diam heads, and 8d cement coated nails 2-3/8 in. long, 0.113 in. shank diam, 9/32 in. diam heads.

4. **Gypsum Board*** — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with the 1-7/8 in. nails spaced 6 in. OC. Outer layer attached to studs over inner layer with the 2-3/8 in. long nails spaced 8 in. OC. Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side

When used in widths other than 48 in., gypsum board to be installed horizontally When **Steel Framing Members*** (Item 6, 6A, 6B, or 6C) are used, base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced max 24 in. OC; face layer attached with 1-5/8 in. long Type S bugle-head steel screws spaced max 12 in. OC. **AMERICAN GYPSUM CO** — Types AGX-1, M-Glass, AG-C, AGX-11, LightRoc

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1 **CABOT MANUFACTURING ULC** — Type X, 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold& Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing **CERTAINTEED GYPSUM INC** — Types EGRG, GlasRoc, GlasRoc-2, Type C, Type X, Type X-1

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD, LGLLX, CLLX GEORGIA-PACIFIC GYPSUM L L C — Types 5, 6, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6. LS, TG-C, Type X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, GreenGlass Type X, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Sheathing Type-DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type

LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5. FSW-6. FSW-8, FSW-C, FSW-G, FSMR-C, FSL

NATIONAL GYPSUM CO — Rivadh, Saudi Arabia — Type FR, or WR. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2, PG-3, PG-3W, PG-4, PG-5, PG-5W, PG-5WS, PG-9, PG-11, PG-C or PGS-WRS PANEL REY S A — Types PRC, PRC2, PRX, RHX, MDX, ETX, GREX, GRIX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 THAI GYPSUM PRODUCTS PCL — Type C or Type X

UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX USG BORAL DRYWALL SFZ LLC — Types C, SCX, USGX

USG MEXICO S A DE C V — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX,

■ 4A. Gypsum Board* — (As an alternate to Item 4) — Nom 3/4 in. thick, installed as described in Item 4. CGC INC — Types AR, IP-AR

UNITED STATES GYPSUM CO — Types AR, IP-AR USG MEXICO S A DE C V — Types AR, IP-AR 4B. **Gypsum Board*** — (As an alternate to Items 4 and 4A) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 4. Joint

covering (Item 2) not required. CGC INC — Type SHX

UNITED STATES GYPSUM CO — Type SHX USG MEXICO S A DE C V — Type SHX 4C. Gypsum Board* — (As an alternate to Items 4, 4A or 4B — Not Shown) — For Direct Application to Studs Only- For use on one or both sides of the wall as the base layer or one or both sides of the wall as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, F4j.one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws

spaced as described in Item 4. **RAY-BAR ENGINEERING CORP** — Type RB-LBG. 4D. **Gypsum Board*** — As an Alternate to Item 4 — 5/8 in. thick applied either horizontally or vertically. Inner layers fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. Outer layers fastened to framing with 1-7/8 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. All joints in face layers

staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. **AMERICAN GYPSUM CO** — Types AGX-1, M-Glass, AG-C, LightRoc 4E. **Gypsum Board*** — (As an alternate to Items 4 through 4D) — 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically and secured as described in Item 4.

GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board 4F. Gypsum Board* — (As an alternate to Item 4) — Not to be used with item 6, 6A, 6B or 6C. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically and secured as described in Item 4.

NATIONAL GYPSUM CO — Type SBCB 4G. **Gypsum Board** * — (As an alternate to Items 4 through 4F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES 4H. Gypsum Board* — (As an alternate to Item 4) — Not to be used with item 6, 6A, 6B, or 6C, 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and secured as described in Item 4.

CERTAINTEED GYPSUM INC — Type SilentFX 4l. **Gypsum Board*** — (As an alternate to item 4) — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with 1-1/4 in. long Type W steel screws spaced 8 in. OC. Outer layer attached to studs over inner layer with 2 in. long Type W steel screws spaced 8 in. OC offset 6 in. from base layer. Vertical joints located over studs. Vertical and horizontal joints between inner and outer layers staggered. Outer layer joints covered with joint tape and compound, screwheads covered with joint compound. As an alternate to the joint compound nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Wallboard other than 48 in. wide must be applied horizontally.

The SoundBreak XP Type X Gypsum Board is not to be used with Item 6, 6A, 6B, or 6C. NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-C, FSW-G. FSMR-C, SoundBreak XP Type X Gypsum Board

■ 4J. **Gypsum Board*** — (As an alternate to Items 4) — For Direct Application to Studs Only- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum"

4K. **Gypsum Board*** — For use with Item 7 — 5/8 in. thick, two layers applied vertically. Inner layer attached to resilient channels with 1 in. long steel screws spaced 8 in. OC. Outer layer attached to resilient channels over inner layer with 1-5/8 in. long steel screws spaced 8 in. OC. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. Insulation, Items 8 or 9 is required. **AMERICAN GYPSUM CO** — Types AGX-1, M-Glass, AG-C, AGX-11

4L. **Gypsum Board*** — (As an alternate to Items 4) — For Direct Application to Studs Only- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when

installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall 4M. **Gypsum Board*** — (As an alternate to Item 4) — 5/8 in. thick, 4 ft. wide, two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in Item 4. **CERTAINTEED GYPSUM INC** — 5/8" Easi-Lite Type X 4N. **Gypsum Board*** — (As an alternate to 5/8 in. Type FSW in Items 4 or 4I) — Nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Two layers of 5/16 in. for every single layer of 5/8 in. gypsum board described in Item 4 or 4l. Horizontal joints on the same side need not be staggered. Inner layer of each double 5/16 in. layer attached with fasteners, as described in item 4 or 4I, spaced 24 in. OC. Outer layer of each double 5/16 in. layer attached per

NATIONAL GYPSUM CO — Type FSW 4O. Wall and Partition Facings and Accessories* — (As an alternate to Items 4 through 4N) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527 4P. **Gypsum Board*** — (As an alternate to Item 4) — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with 1-1/4 in. long Type W steel screws spaced 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. Outer layer attached to studs over inner layer with 1-7/8 in. long Type W steel screws spaced 10 in. OC offset 5 in. from base layer with the last two screws 4 and 1 in. from the edges of the board. Vertical joints located over studs. Vertical and horizontal joints between inner and outer layers staggered. Outer layer joints covered with joint tape and compound, screwheads covered with joint compound. When used in widths other

than 48 in., gypsum panels are to be installed horizontally. CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A, Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX 4Q. Gypsum Board* — (As an alternate to Item 4. For use with Item 13) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board UL Classified for Fire Resistance (CKNX) eligible for use in Design Nos. U305 and L501 or G512. Two layers, applied either horizontally or vertically, and screwed to studs with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the board when applied

as the base layer. For the face layer, screw length to be increased to 2-1/2 in. All joints in face layers staggered with joints in base layers. When used in widths other than 48 in., gypsum panels are to be installed horizontally. 4R. **Gypsum Board*** — As an Alternate to Item 4 — 5/8 in. thick applied either horizontally or vertically. Inner layers fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. Outer layers fastened to framing with 1-7/8 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. CERTAINTEED GYPSUM INC — Types EGRG, GlasRoc, GlasRoc-2, Type C, Type X, Type X-1, Easi-Lite Type X,

4S. Gypsum Board* — (As an alternate to Item 4. For use with Item 13A) — 5/8 in. thick, two layers applied vertically. Inner layer attached to studs with the 1-7/8 in. nails spaced 6 in. OC. Outer layer attached to studs over inner layer with the 2-3/8 in. long nails spaced 8 in. OC. Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. UNITED STATES GYPSUM CO — Type SCX

5. **Molded Plastic*** — Not Shown, Optional — Solid vinyl siding mechanically secured over the outer layer to framing members in accordance with manufacturer's recommended installation details. ALSIDE, DIV OF ASSOCIATED MATERIALS INC

GENTEK BUILDING PRODUCTS LTD VYTEC CORP

6. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described A. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 4. B. Steel Framing Members* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC., and secured to study with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75) 6A. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as

described below A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to stude as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

B. Steel Framing Members* — Used to attach furring channels (Item 6Aa) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

B. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as

A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Bb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

B. Steel Framing Members* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2-1/2 in. coarse drywall screw through the center hole. Furring channels are

REGUPOL AMERICA — Type SonusClip 6C. Steel Framing Members* — (Optional, Not Shown) —Resilient channels and Steel Framing Members as described below:

a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to study as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 4. b. Steel Framing Members* — Used to attach resilient channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient

channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw. **KEENE BUILDING PRODUCTS CO INC** — Type RC+ Assurance Clip 7. Furring Channel — Optional — Not Shown — For use on one side of the wall with Item 4K — Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Item 8 or

to fill interior of wall, attached to the nom 4 in. face of the studs with staples placed 24 in. OC. **ROCKWOOL** — Type SAFEnSOUND **THERMAFIBER INC** — Type SAFB, SAFB FF 9. Batts and Blankets* — (As an alternate to Item 8) — Min. 3 in. thick glass fiber batts bearing the UL Classification

8. Batts and Blankets* — Required for use with resilient channels, Item 7, min. 3 in. thick mineral wool batts, placed

Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the stud cavities. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies. 9A. Fiber, Sprayed* — (Optional) — As an alternate to Batts and Blankets (Item 8), Required for use with resilient channels, Item 7, Not for use with Item 6, 6A, 6B, or 6C. — Spray applied mineral wool insulation. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).

AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus 10. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 or QR-510 11. Cementitious Backer Units* — (Optional Item Not Shown — For Use On Face Of 2 Hr Systems With All

Standard Items Required) — 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied horizontally or vertically with vertical joints centered over studs. Face layer fastened over gypsum board to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. NATIONAL GYPSUM CO — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus 12. Wall and Partition Facings and Accessories* — (Optional, Not Shown) - When the Wall Assembly is used as

an External Wall, on the External side of the wall one of the following Wall and Partition and Facing Accessories may be used, refer to items (A) to (C) below. A. Non Insulated system with metal channels — Install moisture barrier over the Gypsum Board Item 4 and Install Acry Metal Channels vertically at a horizontal spacing not greater than 24 inches OC., over the moisture barrier. Acry Metal Channels attached through the moisture barrier and the Gypsum Board to the Wood Studs using fasteners specified by the manufacturer and fasteners spaced max., 24 in. OC. Install Acrytec Panels on Acry Metal Channels using 1-1/4" long corrosion coated stainless steel screws spaced at a max spacing of 24 inches OC, along with manufacturer's approved adhesive (3M 540 or Tremco Vulcum 116). Adhesive to be applied in a zigzag pattern along every channel. Joint treatment in between panels shall be Tremco illmod 600 pre compressed polyurethane foam sealant.

B. Insulated system with metal channels — Install moisture barrier over the Gypsum Board Item 4. Install galvanized Z girt channels specified by the manufacturer over the moisture barrier and the Gypsum Board Item 4. Z girt channels to be installed horizontally at a max. spacing of 24" OC. Z girt channels attached through the Gypsum Board and the moisture barrier to the wood studs with screws provided by the manufacturer at a max spacing of 24 inches OC. Install mineral wool insulation between the Z girts. Maximum thickness of mineral wool insulation not to exceed 6 in. As per manufacturer's instructions install

Acry Metal Channels vertically over the Z girts at a max horizontal spacing of 24 in. OC. Acrytec Panels installed on Acry channel with 1-1/4" long corrosion coated stainless steel screws at a max spacing of 24 in. OC, along with manufacturers approved adhesive (3M 540 or Tremco Vulcum 116). Adhesive to be applied in a zigzag pattern along every channel. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant. C. **Non insulated wood strapping system** — Install moisture barrier over the Gypsum Board Item 4 and

Install 1" x 3" wood strapping vertically at a horizontal spacing not greater than 24 inches OC., over the moisture barrier. 1" x 3" wood strapping attached through the moisture barrier and the Gypsum Board to the Wood studs using fasteners specified by the manufacturer and fasteners spaced max., 24 in. OC. Acrytec Panels to be installed on the 1" x 3" wood strapping using manufacturers approved stainless steel fasteners spaced at maximum 24 inches OC along with Tremco Vulcum 116 adhesive applied in a zigzag pattern along every wood strap. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

D. Insulated Wood Strapping System — Install moisture barrier over the Gypsum Board Item 4. Install Extruded Polystyrene Insulation over moisture barrier and the Gypsum Board Item 4, max thickness of insulation not to exceed 4 inches. Install 1" x 3" wood strapping vertically at a horizontal spacing not greater than 24 inches OC. Wood strapping attached through the Insulation, the Gypsum Board and moisture barrier to the Wood Studs using fasteners specified by the manufacturer and fasteners spaced max. 24 in. OC. Acrytec Panels to be installed over the wood strapping using manufacturers approved stainless steel fasteners at a max spacing of 24 in. OC and Tremco Vulcum 116 adhesive applied in a zigzag pattern along every wood strap. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane

foam sealant. **ACRYTEC PANEL INDUSTRIES** — Nominal 5/8 inch thick Acrytec Panel. 13. Foamed Plastic* — (Optional, Not Shown - For use with Item 4Q) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. SES FOAM INC — Nexseal™ 2.0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam. For use in Bearing

and Non-Load Bearing Walls. 13A. Foamed Plastic* — (Optional, Not Shown - For use with Item 4S) — Spray applied, foamed plastic insulation, to completely filling stud cavity.

GACO WESTERN L L C — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M. 14. Foamed Plastic* — (Optional, Not Shown - For use over Gypsum Board, Item 4) - Polyisocyanurate foamed

plastic boards, any thickness applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as authorized by the Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions. HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci Class A", "Xci 286".

"Xci Foil (Class A)", "Xci CG", "Xci Foil", "Xci CG NH", "Xci Foil NH" 15. Building Units* — (Optional, Not Shown - For use over Gypsum Board, Item 4) Polyisocyanurate composite foamed plastic boards, any thickness, applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as authorized by the Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

Last Updated on 2020-02-04

Design No. U341

February 05, 2020

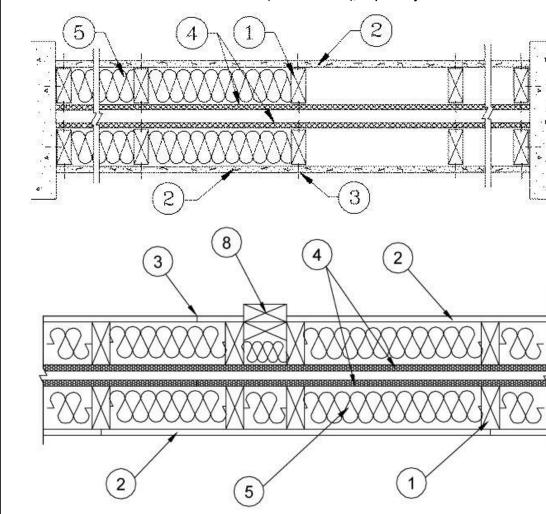
Bearing Wall Rating — 1 Hr

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as

cUL Certification (such as Canada), respectively.

Finish Rating — Min 20 min.

Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7 * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or



HORIZONTAL SECTION 1. **Wood Studs** — Nom 2 by 4 in., spaced 24 in. OC max. Cross braced at mid-height and effectively firestopped at top and bottom of wall. No min. air space between stud rows except to accommodate

attachment of sheathing, where required. See items 4 and 5. 2. Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom 5/8 in. thick 4 ft wide. Gypsum board applied horizontally or vertically, unless specified below, and nailed to studs and bearing plates 7 in. OC with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam head. As an alternate, No. 6 bugle head drywall screws, 1-7/8 in. long, may be substituted for the 6d cement coated nails. When Steel Framing Members* (Item 6-6C) are used, wallboard attached to furring channels with 1 in.

long Type S bugle-head steel screws spaced 12 in. OC. When used in widths other than 48 in., gypsum board to be installed horizontally. AMERICAN GYPSUM CO — CKNX.R14196 **BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO** — CKNX.R19374

CABOT MANUFACTURING ULC — CKNX.R25370 **CERTAINTEED GYPSUM INC** — CKNX.R3660 **CGC INC** — CKNX.R19751 CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — CKNX.R18482 GEORGIA-PACIFIC GYPSUM L L C — CKNX.R2717 LOADMASTER SYSTEMS INC — CKNX.R11809

NATIONAL GYPSUM CO — CKNX.R3501 PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — CKNX.R7094 PANEL REY S A — CKNX.R21796 SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — CKNX.R19262 THAI GYPSUM PRODUCTS PCL — CKNX.R27517 **UNITED STATES GYPSUM CO** — CKNX.R1319

USG BORAL DRYWALL SFZ LLC — CKNX.R38438

USG BORAL DRYWALL SFZ LLC — CKNX.R38438

USG MEXICO S A DE C V — CKNX.R16089 2A. **Gypsum Board*** — (As an alternate to Item 2, not shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5C. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber,

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-530 (finish rating 23 min).

2B. Gypsum Board* — (As an alternate to Item 2, not shown) — Any 5/8 in. thick gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified companies listed below shown in the Gypsum Board* (CKNX) category. Applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. **UNITED STATES GYPSUM CO**

USG BORAL DRYWALL SFZ LLC USG MEXICO S A DE C V

2C. Gypsum Board* — (As an alternate to Item 2. Not Shown) — 5/8 in, thick gypsum panels applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. **AMERICAN GYPSUM CO** — Types AGX-1, M-Glass, AG-C, LightRoc

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1 NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL **THAI GYPSUM PRODUCTS PCL** — Type C or Type X

2D. **Gypsum Board*** — (As an alternate to Items 2, 2A, 2B and 2C) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed as described in Item 2. When used in widths of other than 48 in., gypsum boards are to be installed horizontally. **GEORGIA-PACIFIC GYPSUM L L C** — GreenGlass Type X, Type DGG.

2E. **Gypsum Board*** — (As an alternate to Items 2 through 2D) — 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically only and secured as described in Item 2. **GEORGIA-PACIFIC GYPSUM L L C** — Type X ComfortGuard Sound Deadening Gypsum Board. 2F. Gypsum Board* — (As an alternate to Items 2 through 2E) - Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8

in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC. Not for use with item #6. NATIONAL GYPSUM CO — Type SBWB 2G. Gypsum Board* — (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES. 2H. Gypsum Board* — (As an alternate to Items 2 through 2G) — Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally fastened to the studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. CERTAINTEED GYPSUM INC — Type SilentFX

21. Wall and Partition Facings and Accessories* — (As an alternate to Items 2 through 2H) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527. 2J. **Gypsum Board*** — (As an alternate to 5/8 in. Type FSW in Item 2) — 2 layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal joints on the same side need not be staggered. Inner layer

attached with fasteners, as described in item 2, spaced 24 in. OC. Outer layer attached per Item 2. NATIONAL GYPSUM CO — Type FSW. 2K. Gypsum Board* — (As an alternate to Item 2) — 5/8 in, thick gypsum panels, with beyeled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX 3. **Joints and Nailheads** — Gypsum board joints of outer layer covered with tape and joint compound. Nail heads of outer layer covered with joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced with paper tape. 4. Sheathing — (Optional) — Septum may be sheathed with min 7/16 in. thick wood structural panels min grade "C-

D" or "Sheathing" or min 1/2 in. thick **Mineral and Fiber Boards***. See Mineral and Fiber Boards (CERZ) category for names of Classified companies. 5. Batts and Blankets* — 3-1/2 in. max thickness glass or mineral fiber batt insulation. Optional when sheathing

(Item 4) is used on both halves of wall. See Batts and Blankets (BZJZ) category for list of Classified companies. 5A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the

U S GREENFIBER L L C — INS735, INS745 and INS750LD for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only. 5B. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC — Cellulose Insulation 5C. Batts and Blankets* — (Required for use with Wall and Partition Facings and Accessories, Item 2A. Use of Sheathing, Item 4, does not nullify requirement of Item 5C for use with Item 2A) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, frictionfitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers. 5D. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) and Item 5A when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed

4.30 lbs/ft³. INTERNATIONAL CELLULOSE CORP — Celbar-RL 5E. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft³.

APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized Cellulose Insulation 6. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as

A. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item

B. Steel Framing Members* — Used to attach furring channels (Item a) to studs (Item 1). Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels. PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).

6A. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2. b. Steel Framing Members* — Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. PLITEQ INC — Type Genie Clip

6B. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to stude as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2. b. **Steel Framing Members*** — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R 6C. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as

A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2. B. **Steel Framing Members*** — Used to attach furring channels (Item 6CA) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

REGUPOL AMERICA — Type SonusClip 6D. Steel Framing Members* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below:

a. **Resilient Channels** — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 2. b. **Steel Framing Members*** — Used to attach resilient channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw. **KEENE BUILDING PRODUCTS CO INC** — Type RC+ Assurance Clip

2B. 7. Wall and Partition Facings and Accessories* — (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510 8. Mineral and Fiber Board* — ((Optional, Not Shown) — For optional use as an additional layer on one or both sides of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing as described in Item 2. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

HOMASOTE CO — Homasote Type 440-32 9. Non-Bearing Wall Partition Intersection — (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

(Optional, Not Shown) Alternate Construction For Use On One Side Of The Wall. 10. Mineral and Fiber Board* — For use with Items 10A-10D) —Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

10A. Glass Fiber Insulation — (For use with Item 10) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies. 10B. Batts and Blankets* — (As an alternate to Item 10B, For use with Item 10), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC. THERMAFIBER INC — Type SAFB, SAFB FF

10C. **Adhesive** — (For use with Item 10) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A). 10D. **Gypsum Board*** — (For use with Item 10) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 10). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.

AMERICAN GYPSUM CO — Type AG-C **CERTAINTEED GYPSUM INC** — Type C CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C NATIONAL GYPSUM CO — Types FSK-C, FSW-C PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C **PANEL REY S A** — Type PRC THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Type CTypes C, IP-X2, IPC-AR

HOMASOTE CO — Homasote Type 440-32

USG BORAL DRYWALL SFZ LLC — Type C **USG MEXICO S A DE C V** — Types C, IP-X2, IPC-AR * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2020-02-05

11/22/19 SCHEMATIC DESIGN 12/06/19 DESIGN DEVELOPMENT 3 | 02/28/20 | PERMIT REVIEW SET REVISION HISTORY Date Description

PERMIT REVIEW STAMP

ISSUE HISTORY

Date

FUGLEBERG KOCH 2555 Temple Trail. Winter Park. FL 32789 (407) 629-0595 www.fuglebergkoch.com

THE ROBER FT. MYERS, FL

IL REFERENCE DIRECTORY - WALL SYSTEMS

09/10/201

Design No. U305

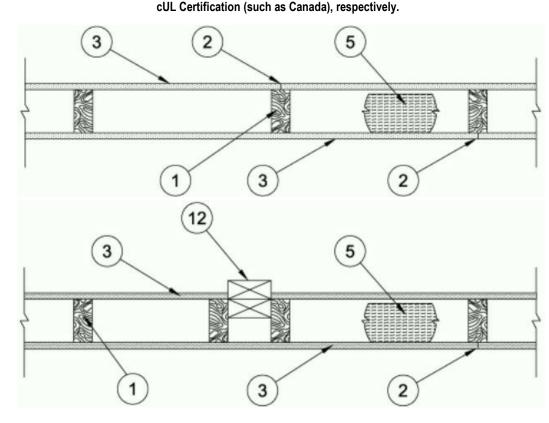
Bearing Wall Rating — 1 Hr Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

STC Rating - 56 (See Item 9) This design was evaluated using a load design method other than the Limit States Design Method (e.g.,

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or

Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as

Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7



1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped. 2. **Joints and Nail-Heads** — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. **Gypsum Board*** — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F, **Steel Framing** Members*.

When Items 6, 6B, 6C, 6D, 6E, or 6F, Steel Framing Members*, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6A, **Steel Framing Members***, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, selftapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway

AMERICAN GYPSUM CO — Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type AGX-12 (finish rating 22 min), Type LightRoc (finish rating 23 min.) or Type AG-C **BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO** — Type DBX-1 (finish

CABOT MANUFACTURING ULC — Type X (finish rating 22 min), 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing **CERTAINTEED GYPSUM INC** — Type C, Type X or Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min). Type IP-X2 (finish rating 24 min). Type SCX (finish rating 24 min). Type SHX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min), Type ULIX (finish rating 20 min) CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type

LGLLX (finish rating 21 min), Type CLLX (finish rating 24 min) GEORGIA-PACIFIC GYPSUM L L C — Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing -

Type DGL2W (finish rating 22 min) NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min). Type FSW-8, Type FSLX (finish rating 21 min).

NATIONAL GYPSUM CO — Riyadh, Saudi Arabia — Type FR, or WR. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS, PGS-WRS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 PG-13 (Nails increased to 2 in.), or Type PG-C PANEL REY S A — Type GREX, GRIX, PRX, PRC, PRC2; Types RHX, Guard Rey,

MDX, ETX (finish rating 22 min) **SIAM GYPSUM INDUSTRY (SARABURI) CO LTD** — Type EX-1 (finish rating 26

THAI GYPSUM PRODUCTS PCL — Type C, Type X (finish rating 26 min) UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULIX (finish rating 20

USG BORAL DRYWALL SFZ LLC — Type SGX (finish rating 24 min). **USG MEXICO S A DE C V** — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type ULX (finish rating 22 min)

3A. **Gypsum Board*** — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LighttRoc (finish rating 25 min.) **CERTAINTEED GYPSUM INC** — Type C, Type X or Type X-1 (finish rating 26 min) CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min)

NATIONAL GYPSUM CO — Type FSW (finish rating 24 min) UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min) **USG BORAL DRYWALL SFZ LLC** — Types C, SCX, SGX (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min) 3B. **Gypsum Board*** — (As an alternate to Item 3) — Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.

CGC INC — Types AR, IP-AR **UNITED STATES GYPSUM CO** — Types AR, IP-AR **USG MEXICO S A DE C V** — Types AR, IP-AR

3C. **Gypsum Board*** — (As an alternate to Items 3, 3A and 3B) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not

CGC INC — Type SHX **UNITED STATES GYPSUM CO** — Type SHX **USG MEXICO S A DE C V** — Type SHX

3D. Gypsum Board* — (As an alternate to Items 3, 3A, 3B, or 3C — Not Shown) — For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". **RAY-BAR ENGINEERING CORP** — Type RB-LBG (finish rating 24 min) 3E. **Gypsum Board*** — (As an alternate to Items 3, 3A, 3B, 3C, and 3D) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be

installed horizontally **GEORGIA-PACIFIC GYPSUM L L C** — Type DGG (finish rating 20 min), GreenGlass

Type X (finish rating 23 min) 3F. **Gypsum Board*** — (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) — 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter.

CGC INC — Type USGX (finish rating 22 min) **UNITED STATES GYPSUM CO** — Type USGX (finish rating 22 min.) **USG BORAL DRYWALL SFZ LLC** — . Type USGX (finish rating 22 min.)

USG MEXICO S A DE C V — Type USGX (finish rating 22 min.) 3G. **Gypsum Board*** — (As an alternate to Items 3 through 3F) — 5/8 in. thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. **GEORGIA-PACIFIC GYPSUM L L C** — Type X ComfortGuard Sound Deadening

Gypsum Board (finish rating 27 min) 3H. **Gypsum Board*** — (As an alternate to Items 3) — Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

NATIONAL GYPSUM CO — Type SBWB 3I. **Gypsum Board*** — (As an alternate to Items 3 through 3H, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically, Panels nailed 7 in, OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES (finish rating 20 min)

3J. **Gypsum Board*** — (As an alternate to Item 3) — Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically or horizontally. Gypsum panels secured per item 3 or 3A.

CERTAINTEED GYPSUM INC — Type SilentFX 3K. **Gypsum Board*** — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally. NATIONAL GYPSUM CO — Type FSK (finish rating 20 min). Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min). 3L. **Gypsum Board*** — (As an alternate to Item 3) — For Direct Application to Studs

Only — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".

MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum" 3M. **Gypsum Board*** — (As an alternate to Items 3) — For Direct Application to Studs Only — For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed

over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4. **RADIATION PROTECTION PRODUCTS INC** — Type RPP - Lead Lined Drywall 3N. **Gypsum Board*** — (As an alternate to Item 3) — 5/8 in. thick, 4 ft. wide, applied horizontally or vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in Item 3 or 3A. CERTAINTEED GYPSUM INC — Easi-Lite Type X (finish rating 24 min), Easi-Lite Type

X-2 (finish rating 24 min) 30. Wall and Partition Facings and Accessories* — (As an alternate to Item 3, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527 (finish rating 24 min).

3P. **Gypsum Board*** — (As an alternate to Item 3, Not Shown) — Two layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by wood studs. Horizontal joints on the same side between face and base layers need not be staggered. Base layer gypsum panels fastened to studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to studs with 1-7/8 in. long drywall nails spaced 8 in. OC starting with a 4" stagger.

NATIONAL GYPSUM CO — Type FSW (finish rating 25 min) 3Q. Gypsum Board* — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally. CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type

LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX 3R. **Gypsum Board*** — (As an alternate to Item 3. For use with Item 5H) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied either horizontally or vertically, and screwed to panels with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the board when applied as the base layer. When used in widths other than 48 in., gypsum panels are to be

installed horizontally. 3S. **Gypsum Board*** — 3/4 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gvpsum panels secured as described in Item 3 with nail length increased to 2 in. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type

3T. Wall and Partition Facings and Accessories* — (As an alternate to 5/8 in, thick board as outlined in Item 3) — Nominal 1-3/8 in, thick, 4 ft wide panels, applied vertically or horizontally. Fastened with #6 x 2 in. long drywall screws spaced 8 in. OC along the perimeter and 12 in. OC in the field. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type

3U. **Gypsum Board*** — (As an alternate to Item 3 - For use with Item 5J) — 5/8 in. thick, 4 ft. wide, applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

UNITED STATES GYPSUM CO — Type SCX

4. **Steel Corner Fasteners** — (Optional) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. Batts and Blankets* — (Optional — Required when Item 6A is used (RC-1)) — Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities. **CERTAINTEED CORP**

JOHNS MANVILLE KNAUF INSULATION LLC MANSON INSULATION INC

ROCKWOOL — Types Acoustical Fire Batts and Type AFB, min. density 1.69 pcf / 27.0 kg/m³ **ROCKWOOL MALAYSIA SDN BHD** — Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO — Delta Board THERMAFIBER INC — Type SAFB, SAFB FF 5A. Fiber. Sprayed* — (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in

accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³. in accordance with the application instructions supplied with the product. When Item 6B is used, Fiber, Sprayed shall be INS735, INS745, INS750LD, INS765LD or INS773LD.

USGREENFIBER LLC — INS735, INS745 and INS750LD for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only 5B. **Fiber**, **Sprayed*** — (Not Shown - Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray applied cellulose insulation

material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. **NU-WOOL CO INC** — Cellulose Insulation

5C. Batts and Blankets* — Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, friction-fitted to fill interior of wall. **THERMAFIBER INC** — Type SAFB, SAFB FF

5D. Glass Fiber Insulation — (As an alternate to Item 5C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the interior of the wall. See **Batts and** Blankets (BKNV or BZJZ) Categories for names of Classified companies. 5E. **Batts and Blankets*** — (Required for use with Wall and Partition Facings and Accessories, Item 3D) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

5F. Fiber, Sprayed* — (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D) — As an alternate to Batts and Blankets (Item 5) and Item 5A -Spray applied granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the

product. See **Fiber**, **Sprayed** (CCAZ). AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

5G. Fiber, Sprayed* — (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D). — As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30

INTERNATIONAL CELLULOSE CORP — Celbar-RL 5H. **Foamed Plastic*** — (Optional -For use with Item 3R) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling

SES FOAM INC — Nexseal[™] 2.0 or Nexseal[™] 2.0 LE Spray Foam and Sucraseal Spray Foam.

5l. **Fiber**, **Sprayed*** — (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79

APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized Cellulose 5J. **Foamed Plastic*** — (Optional, Not Shown - For use with Item 3U) —

Spray applied, foamed plastic insulation, to completely filling stud cavity. GACO WESTERN L L C — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M

6. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to stude as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. PAC INTERNATIONAL L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6A. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel Framing Members on one side of studs as described below: a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as

described in Item 3. b. Steel Framing Members* — Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. KINETICS NOISE CONTROL INC — Type Isomax

6B. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to stude as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in

b. **Steel Framing Members*** — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips PLITEQ INC — Type Genie Clip

6C. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels

and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3. b. **Steel Framing Members*** — Used to attach furring channels (Item

6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips. **STUDCO BUILDING SYSTEMS** — RESILMOUNT Sound Isolation

Clips - Type A237 or A237R 6D. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels

and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. Gypsum board attached to furring channels as described in Item 3. b. **Steel Framing Members*** — Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring

REGUPOL AMERICA — Type SonusClip

channels are friction fitted into clips.

6E. **Steel Framing Members*** — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below: a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 3. b. Steel Framing Members* — Used to attach resilient channels (Item 6Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-

KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip 6F. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and

Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. or 1-1/2 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in

b. **Steel Framing Members*** — Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound 7. **Furring Channel** — Optional — Not Shown — For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required. 8. Caulking and Sealants — (Not Shown, Optional) — A bead of acoustical

9. **STC Rating** — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except: A. Item 2, above — Nailheads Shall be covered with joint compound. B. Item 2, above — Joints As described, shall be covered with fiber tape and

sealant applied around the partition perimeter for sound control.

ioint compound. C. Item 5, above — Batts and Blankets* The cavities formed by the stude shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above — Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly. E. Item 8, above — Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control. F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC

10. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

11. **Cementitious Backer Units*** — (Optional Item Not Shown — For Use On Face Of 1 Hr Systems With All Standard Items Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints

need not be backed by framing **NATIONAL GYPSUM CO** — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. **Non-Bearing Wall Partition Intersection** — (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-

bearing wall.

13. **Mesh Netting** — (Not Shown) — Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row. 14. Mineral and Fiber Board* — (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

bearing wall partition stud depth shall be at a minimum equal to the depth of the

HOMASOTE CO — Homasote Type 440-32 14A. **Mineral and Fiber Board*** — (Optional, Not Shown) — For use with Items 14B-14E) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

HOMASOTE CO — Homasote Type 440-32 14B. Glass Fiber Insulation — (For use with Item 14A) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies. 14C. Batts and Blankets* — (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC.

THERMAFIBER INC — Type SAFB, SAFB FF 14D. **Adhesive** — (For use with Item 14A) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A). 14E. **Gypsum Board*** — (For use with Item 14A) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw

heads covered with joint compound. Finish Rating 30 Min. **AMERICAN GYPSUM CO** — Type AG-C **CERTAINTEED GYPSUM INC** — Type C CGC INC — Types C. IP-X2, IPC-AR

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A **GEORGIA-PACIFIC GYPSUM L L C** — Types 5, DAPC, TG-C NATIONAL GYPSUM CO — Types FSK-C, FSW-C PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C **PANEL REY S A** — Type PRC

THAI GYPSUM PRODUCTS PCL — Type C UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR **USG BORAL DRYWALL SFZ LLC** — Type C **USG MEXICO S A DE C V** — Types C, IP-X2, IPC-AR 14F. **Mineral and Fiber Board** — (Optional, Not Shown) — For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards applied vertically to studs on one side of the wall in between the wood studs and the UL Classified Gypsum Board (Item 3). Fiber boards installed with 1-1/4 in. long, Type W, bugle head, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as to fastener type and

spacing, except that the required fastener length shall be increased by a

minimum of 1/2 in. Not evaluated or intended as a substitute for the required laver(s) of UL Classified Gypsum Board. **BLUE RIDGE FIBERBOARD INC** — SoundStop

Last Updated on 2020-02-04

PERMIT REVIEW STAMP **ISSUE HISTORY** Date Description 11/22/19 SCHEMATIC DESIGN 12/06/19 DESIGN DEVELOPMENT 3 | 02/28/20 | PERMIT REVIEW SET REVISION HISTORY Date Description

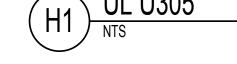
FUGLEBERG KOCH 2555 Temple Trail. Winter Park. FL 32789 (407) 629-0595 www.fuglebergkoch.com

THE ROBERT

FT. MYERS, FL IL REFERENCE DIRECTORY - WALL SYSTEM

09/10/2019

A0.31

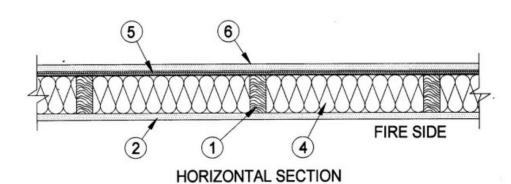


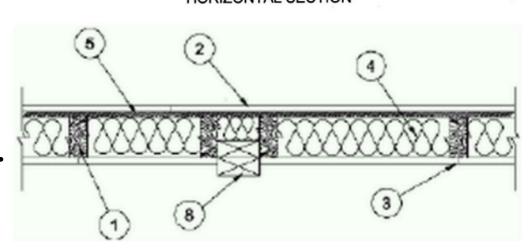
Design No. U356

Bearing Wall Rating - 1 Hr Rating Exposed to Fire on Interior Face Only Bearing Wall Rating — 1 Hr Rating Exposed to Fire on Exterior Face (See Item 6E) Finish Rating — 23 Min or 25 Min (See Item 2C) This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

November 26, 2019

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.





1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC with two 2 by 4 in. top and one 2 by 4 in. bottom plates. Studs laterally-braced by wood structural panel sheathing (Item 5). When Mineral and Fiber Boards* (Item 5A) are considered as bracing for the studs, the load is restricted to 76% of allowable axial load. Walls effectively fire stopped at top and bottom of wall.

2. Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom 5/8 in. thick, 4 ft wide, applied vertically and nailed to studs and bearing plates 7 in. OC with 6d cement-coated nails, 1-7/8 in. long with 1/4 in. diam head. When Item 7, 7B, 7C, 7D or 7E **Steel Framing Members***, is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 7A Steel Framing Members*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers.

AMERICAN GYPSUM CO — CKNX.R14196 BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — CKNX.R19374 **CABOT MANUFACTURING ULC** — CKNX.R25370

CERTAINTEED GYPSUM INC — CKNX.R3660

CGC INC — CKNX.R19751 CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — CKNX.R18482 GEORGIA-PACIFIC GYPSUM L L C — CKNX.R2717

LOADMASTER SYSTEMS INC — CKNX.R11809 NATIONAL GYPSUM CO — CKNX.R3501 PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — CKNX.R7094

PANEL REY S A — CKNX.R21796 SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — CKNX.R19262

THAI GYPSUM PRODUCTS PCL — CKNX.R27517 UNITED STATES GYPSUM CO — CKNX.R1319 USG BORAL DRYWALL SFZ LLC — CKNX.R38438 USG MEXICO S A DE C V — CKNX.R16089

2A. Gypsum Board* — (As an alternate to Item 2, Not Shown) — Any 5/8 in. thick 4 ft wide gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified Companies listed below shown in the **Gypsum Board*** (CKNX) category. Applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.

UNITED STATES GYPSUM CO

USG BORAL DRYWALL SFZ LLC USG MEXICO S A DE C V

2B. **Gypsum Board*** — (As an alternate to Item 2, Not Shown) — 5/8 in. thick 4 ft wide gypsum panels applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.

AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc **CABOT MANUFACTURING ULC** — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing **CERTAINTEED GYPSUM INC** — Type C, Type X, Type X-1, Easi-Lite Type X-2 **GEORGIA-PACIFIC GYPSUM L L C** — Types X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, Type X ComfortGuard Sound Deadening Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-11, PGS-WRS. **THAI GYPSUM PRODUCTS PCL** — Type C or Type X 2C. **Gypsum Board*** — (As an alternate to Item 2, Not Shown) — For Use with Item 5A only - 5/8 in. thick 4 ft wide gypsum panels applied horizontally and attached to studs and bearing plates with 1-1/4

in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screws 1 in.and 4 in. from edges of board. Finish Rating is 25 min. **CABOT MANUFACTURING ULC** — 5/8 Type X, Type Blueglass Exterior Sheathing GEORGIA-PACIFIC GYPSUM L L C — Type X, Veneer Plaster Base-Type X, Water Rated-Type X,

Sheathing Type-X, Soffit-Type X PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-11, PGS-WRS 2D. **Gypsum Board*** — (As an alternate to Item 2) — Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC.

NATIONAL GYPSUM CO — Type SBWB 2E Gypsum Board* — (As an alternate to Items 2 through 2D) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES. 2F. **Gypsum Board*** — (As an alternate to Item 2) — Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and fastened to the studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.

CERTAINTEED GYPSUM INC — Type SilentFX 2G. Wall and Partition Facings and Accessories* — (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527. 2H. **Gypsum Board*** — (As an alternate to Item 2) — 5/8 in. thick gypsum panels, with beveled,

square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX 21. **Gypsum Board*** — (As an alternate to Item 2) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be

installed horizontally AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LightRoc (finish rating 25 min.)

NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL 2J. **Gypsum Board*** — (As an alternate to Item 2) - 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread steel screws spaced a max 8 in. OC with the last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum boards are to be installed horizontally. **CERTAINTEED GYPSUM INC** — Type C, Type X or Type X-1(finish rating 26 min), Easi-Lite Type X

(finish rating 24 min), Easi-Lite Type X-2, Type EGRG or GlasRoc or GlasRoc Sheathing (finish rating 3. Joints and Fastener Heads — (Not Shown) — Gypsum board joints covered with tape and joint

compound. Fastener heads covered with joint compound. 4. Batts and Blankets* — Mineral fiber or glass fiber insulation, 3-1/2 in. thick, pressure fit to fill wall cavities between studs and plates. Mineral fiber insulation to be unfaced and to have a min density of 3 pcf. Glass fiber insulation to be faced with aluminum foil or kraft paper and to have a min density of 0.9 pcf (min R-13 thermal insulation rating).

See Batts and Blankets* (BKNV) Category in the Building Materials Directory and Batts and Blankets* (BZJZ) Category in the Fire Resistance Directory for names of Classified Companies.

4A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions

supplied with the product. **U S GREENFIBER L L C** — INS735 and INS745 for use with wet or dry application. INS515LD, INS541LD, INS735, INS745, INS765LD, and INS773LD are to be used for dry

application only. 4B. **Fiber**, **Sprayed*** — As an alternate to Item 4 and 4A — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 4.58 lb/ft 3. **NU-WOOL CO INC** — Cellulose Insulation

4C. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft³.

INTERNATIONAL CELLULOSE CORP — Celbar-RL 4D. **Fiber. Sprayed*** — As an alternate to Batts and Blankets (Item 4) — Spray applied. granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions

supplied with the product. See Fiber, Sprayed (CCAZ). AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus 5. Wood Structural Panel Sheathing — Min 7/16 in. thick, 4 ft wide wood structural panels, min grade "C-D" or "Sheathing". Installed with long dimension of sheet (strength axis) or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 6d cement coated box nails spaced 6 in. OC at perimeter of panels and 12

in. OC along interior studs. 5A. **Mineral and Fiber Boards*** — As an alternate to Item 5 - Min 1/2 in. thick. 4 ft wide sheathing, installed vertically to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 1-1/2 in. long galvanized roofing nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs. As an option a weather resistive barrier may be applied over the Mineral

6. **Exterior Facings** — Installed in accordance with the manufacturer's installation instructions. One of the following exterior facings is to be applied over the sheathing: A. Vinvl Siding — Molded Plastic* — Contoured rigid vinyl siding having a flame

spread value of 20 or less. See Molded Plastic (BTAT) category in the Building Materials

Directory for names of manufacturers. B. **Particle Board Siding** — Hardboard exterior sidings including patterned panel or lap siding. C. Wood Structural Panel or Lap Siding — APA Rated Siding, Exterior,

plywood, OSB or composite panels with veneer faces and structural wood core, per PS 1 or APA Standard PRP-108, including textured, rough sawn, medium density overlay, brushed, grooved and lap siding. D. **Cementitious Stucco** — Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat. Thickness from 3/8 to 3/4

in., depending on system. E. **Brick Veneer** — Any type on nom 4 in. wide brick veneer. When brick veneer is used, the rating is applicable with exposure on either face. Brick veneer fastened with corrugated metal wall ties attached over sheathing to wood studs with 8d nail per tie: ties spaced not more than each sixth course of brick and max 32 in. OC horizontally. One in. air space provided between brick veneer and sheathing

F. Exterior Insulation and Finish System (EIFS) — Nom 1 in. Foamed Plastic* insulation bearing the UL Classification Marking, attached over sheathing and finished with coating system, or Portland cement or synthetic stucco systems, in accordance with manufacturer's instructions. See Foamed Plastic (BRYX and CCVW) categories for names of Classified

G. **Siding** — Aluminum or steel siding attached over sheathing to studs. H. **Fiber-Cement Siding** — Fiber-cement exterior sidings including smooth and patterned panel or lap siding. I. Wall and Partition Facings and Accessories* — Stone veneer is mortar

bonded to a lath, scratch coat and water resistant barrier applied to sheathing, installed in accordance with the manufacturers installation instructions, and meeting the requirements of local code agencies. **ELDORADO STONE OPERATIONS L L C** — Type Eldorado Stone J. Cementitious Backer Units — 1/2 in. or 5/8 in., min. 32 in. wide.- Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum 3/4 in., spaced a max of 8 in. OC. Horizontal joints need not be backed by framing. When Cementitious Backer Units are used, the ating is applicable with exposure on either face. Cementitious Backer Units for use as substrate for exterior finishes such as ceramic tile, slate, marble, natural stone, manufactured stone, thin brick, or Portland cement or synthetic

NATIONAL GYPSUM CO — Type PermaBase

6A. Building Units* — As an alternate to Exterior Facing Item 6 — Insulated steel panels, 12 through 42 in. wide. Attached over sheathing through retainer clips to studs or support steel with No. 14 hex head self-tapping screws located at each joint in the concealed lip of the units and spaced in accordance with the structural design requirements. KINGSPAN INSULATED PANELS INC — Types 200, 300, 400, 900, or KS series, 2 through 6 in. thickness; CWP-V, H, 2 through 3 in. nominal thickness or Designwall 2000 or Designwall 4000, 2 and 3 in. nominal thickness.

7. **Steel Framing Members*** — (Optional, Not Shown) — Furring Channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to stude as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2. b. **Steel Framing Members*** — Used to attach furring channels (Item 7A) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75). 7A. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel

Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Two layers of gypsum board attached to furring channels as described in Item 2.

b. **Steel Framing Members*** — Used to attach furring channels (Item 7Aa) to interior side of studs. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.

KINETICS NOISE CONTROL INC — Type Isomax. 7B. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. **PLITEQ INC** — Type Genie Clip

7C. **Steel Framing Members*** — (Optional, Not Shown) — Furring channels and Steel

Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as

described in Item 2. b. **Steel Framing Members*** — Used to attach furring channels (Item 7Ca) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

fitted into clips.

7D. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 7Db. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2.

b. Steel Framing Members* — Used to attach furring channels (Item 7Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. **REGUPOL AMERICA** — Type SonusClip

7E. Steel Framing Members* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below:

a. **Resilient Channels** — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in

b. **Steel Framing Members*** — Used to attach resilient channels (Item 7Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip 8. Non-Bearing Wall Partition Intersection — (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

<u>Last Updated</u> on 2019-11-26



PERMIT REVIEW STAMP **ISSUE HISTORY** Date 11/22/19 SCHEMATIC DESIGN 12/06/19 DESIGN DEVELOPMENT 3 02/28/20 PERMIT REVIEW SET REVISION HISTORY Date Description

FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com

THE ROBERT 09/10/201 FT. MYERS, FL UL REFERENCE DIRECTORY

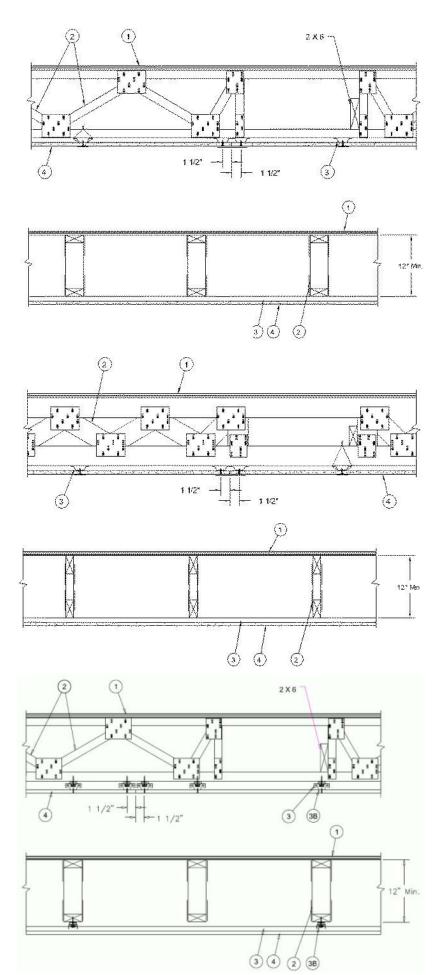
- WALL SYSTEMS

A0.32

Finish Rating - 22 Min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. **Flooring System** — The flooring system shall consist of one of the following:

System No. 1 Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d

System No. 2 Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper. Finish Flooring — Min 3/4 in. thickness of lightweight insulating concrete with Perlite Aggregate* or Vermiculite

Aggregate*, or gypsum concrete. See Perlite Aggregate (CFFX) and Vermiculite Aggregate (CJZZ) categories for names of manufacturers.

System No. 3 Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick. Floor Mat Materials* — (Optional)— Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor

Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

ECORE INTERNATIONAL INC — Type QTscu 4002 **HACKER INDUSTRIES INC** — Type Hacker Sound-Mat. Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with

Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

ECORE INTERNATIONAL INC — Type QTrbm 3006-3 **HACKER INDUSTRIES INC** — Type Hacker Sound-Mat II.

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm) **HACKER INDUSTRIES INC** — FIRM-FILL SCM 125

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Qurl 55/025 Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor.

Floor topping thickness shall be a min of 1-1/4 in. (32 mm) HACKER INDUSTRIES INC — FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm) HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075

Metal Lath — (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath.

When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat. Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High

Strength, Gyp-Span Radiant System No. 4 Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.010 in. thick. Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD LATICRETE SUPERCAP L L C — Types LRK, HSLRK **USG MEXICO S A DE C V** — Types LRK, HSLRK, CSD

regarding the minimum thickness of floor topping over each floor mat material. UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand

Alternate Floor Mat Material* — (Optional) - Floor mat material nominal 3/8 in. thick loose laid over the subfloor. Floor

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Finish Flooring — Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive

expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

compressive strength of 1500 psi. Refer to manufacturer's instructions regarding the minimum thickness of floor topping

Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor

Metal Lath — (Optional) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat

Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive

strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping having a min compressive strength

Alternate Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick plywood or min 7/16 in.

Finish Floor - Mineral and Fiber Board* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All

thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping having a min compressive strength

ACG MATERIALS — Accu-Crete types NexGen, Green, Prime, B, M, and PrePour, AccuRadiant, AccuLevel types G40,

Alternate Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor.

ACG MATERIALS — AccuQuiet types P80, C40, D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375,

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to

Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor.

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor.

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor.

compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of

Subflooring — Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face

grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels

secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss.

strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance

Gypsum Board* — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension

TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank

perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in.

Floor Mat Materials* — (As an alternate to the single layer gypsum board) — Floor mat material loose laid over the

installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each

and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and

other with 1 in. long No. 6 Type G bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor.

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor.

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor.

compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a min. of 1 in.

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping having a min compressive

strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Gypsum Board* — (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board,

OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a

with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be

of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum

strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and

strength axis of panels to be perpendicular to the trusses with joints staggered.

strength axis of panels to be perpendicular to the trusses with joints staggered.

strength axis of panels to be perpendicular to the trusses with joints staggered.

MAXXON CORP — Types Maxxon Standard and Maxxon High Strength

regarding the minimum thickness of floor topping over each floor mat material.

strength axis of panels to be perpendicular to the trusses with joints staggered.

strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) Commercial asphalt saturated felt, 0.030 in. thick.

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix

strength axis of panel to be perpendicular to trusses with joints staggered.

strength axis of panels to be perpendicular to the trusses with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

Floor topping thickness shall be a minimum of 1 in.

Floor topping thickness shall be a minimum of 1-1/2 in

Floor topping thickness shall be a minimum of 3/4 in.

strength may be substituted for the 6d nails.

minimum of 12 inches from the joints of the subfloor.

MAXXON CORP — Type Encapsulated Sound Mat.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

Floor topping thickness shall be a minimum of 1 in.

Floor topping thickness shall be a minimum of 1-1/2 in.

Floor topping thickness shall be a minimum of 3/4 in.

strength axis of panels to be perpendicular to the trusses with joints staggered.

DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

from the joints of the subfloor

System No. 15

a minimum of 3/4 in.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

ULTRA QUIET FLOORS — UQF-A, UQF-Super Blend, UQF-Plus 200

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Portland cement, 300 lbs of sand with 5-1/2 gal of water.

Portland cement, 300 lbs of sand with 5-1/2 gal of water.

AERIX INDUSTRIES — Floor Topping Mixture

MAXXON CORP — Type Encapsulated Sound Mat.

topping for use with floor mat reinforcement.

lbs/sq yd loose laid over the floor mat material.

ELASTIZELL CORP OF AMERICA — Type FF

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Floor Underlayment SRM-25 Alternate Floor Mat Materials* — (Optional) — Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.

GRASSWORX L L C — Type SC50

topping shall be a min 3/4 in. thick.

System No. 6

System No. 7

System No. 8

System No. 9

System No. 10

System No. 12

topping shall be a min of 3/4 in.

Floor topping shall be a min of 3/4 in.

EM.375S, EM.750, and EM.750S.

System No. 13

a minimum of 3/4 in.

System No. 14

over each floor mat material.

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered. **Vapor Barrier** — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Floor Mat Materials* — (Optional) — Nom 3/32 in. thick loose laid over the subfloor. Floor topping thickness shall be

a minimum of 3/4 in. PLITEQ INC — Type GenieMat RST02 Floor Mat Materials* — (Optional) — Nom 3/16 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in

Finish Flooring — Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive PLITEQ INC — Type GenieMat FF03NP strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and Floor Mat Materials* — (Optional) — Nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I minimum of 3/4 in.

> PLITEQ INC — Type GenieMat FF06 Floor Mat Materials* — (Optional) — Nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a

> PLITEQ INC — Type GenieMat FF10 Floor Mat Materials* — (Optional) — Nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

PLITEQ INC — Type GenieMat FF17 Floor Mat Materials* — (Optional) — Nom 1 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in. PLITEQ INC — Type GenieMat FF25

Subflooring — Nom. 1-1/2 in. thick T & G laminated composite plywood sub-floor panels to be perpendicular to the trusses with end joints staggered 4 ft. End joints centered over top chord of trusses. Subfloor panels secured to trusses with construction adhesive and #8 by 3 in. wood screws spaced 12 in. OC in the field and 6 in. OC at the end

RSP INDUSTRIES INC — SAP board

System No. 18 Subflooring — Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Wall and Partition Facings and Accessories* - Sound Barrier (Optional) — Acoustic Sleeper pads stapled to the top of the subfloor and centered over wood trusses. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through Acoustic Sleeper pads to the trusses

STC ARCHITECTURAL PRODUCTŠ L L C DBA STC SOUND CONTROL — Acoustic Sleeper Finish Floor — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Butt joints of panels have the option of being sealed with any UL Classified caulk or sealant found under - Fill, Void or Cavity Materials* (XHHW).

System No. 19 Structural Cement-Fiber Units* — For use with UNITED STATES GYPSUM CO Types C, IP-X2, IPC-AR and ULIX gypsum boards only. Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in, from the end edges of the panel UNITED STATES GYPSUM CO — Types STRUCTO-CRETE, USGSP

Subflooring — Min 23/32 in. thick T & G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength

may be substituted for the 6d nails. Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus 2. Trusses — Parallel chord trusses, spaced a max 24 in. OC, fabricated from nom 2 by 4 in. lumber with lumber oriented vertically or horizontally. Min truss depth is 12 in. when item 9 is not employed. Min truss depth is 18 in. when item 9 is employed. Truss members secured together with min No. 20 MSG galv steel truss plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split-tooth-type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated

on approx 7/8 in. centers with four rows of teeth per in. of plate width. 3. Furring Channels — Furring channels, 7/8 in. deep by 2-9/16 in. or 2-11/16 in. or 2-23/32 in. wide at the base and 1-7/16 in. wide at the face, formed from No. 25 ga galv steel, spaced 24 in. OC perpendicular to trusses. Channels secured to trusses with double strand of No. 18 SWG galv steel wire spaced 48 in. OC. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Two furring channels used at end joints of gypsum board (Item 4), each extending a min of 6 in. beyond both side edges of

3A. **Resilient Channels** — (Not Shown) — As an alternate to Item 3, resilient channel formed from No. 26 MSG galv steel, spaced 16 in. OC perpendicular to trusses. Channels secured to each truss with 1-1/4 in. long No. 6 Type S bugle head steel screw. Channels overlapped at splices 4 in. Two resilient channels used at end joints of gypsum board (Item 4), each extending a min of 6 in. beyond both side edges of the board.

8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to the bottom chord of alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item 3. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two min 7/16 in. long No. 6 self-tapping framing screws, at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. When Fiber, Sprayed (Item 6) is used, furring channel spacing reduced to 16 in. OC and two layers of nom 5/8 in. thick, 4 ft wide gypsum board shall be installed as described in Item 4.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75). 3C. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC., and secured to the bottom chord to alternating trusses with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. Two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 6. When Item 3C is used and Batts and Blankets* are added per Section III Item 18 Blanket Insulation in the General Information of this Directory (BXUV), clips spaced 48 in. OC, furring channels spaced 16 in. OC max, 3-1/2 in. max. Batts and Blankets* secured to plywood subfloor with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC, and two layers of gypsum board required as described in Item 4A. When the Batts and Blankets* are draped over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses, the furring channel spacing shall be

reduced to 12 in. OC, and two layers of gypsum board required as described in Item 4A. KINETICS NOISE CONTROL INC — Type Isomax. 3D. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC. and secured to the bottom chord to alternating trusses with one No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 4. Not evaluated for use with Item 6.

PLITEQ INC — Type Genie Clip 3E. Steel Framing Members* — (Optional, Not Shown) — For use with Item 7B - Used as an alternate method to attach furring channels to trusses. Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam. washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire Additional clips are required to hold the Gypsum Butt joints as described in item 4. Not evaluated for use with Item 6.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R 3F. Resilient Channels — For use with Item 4B and 7A - Resilient channels, formed from No. 25 MSG galv steel and shaped as shown, spaced 12 in. OC perpendicular to joist. Channels overlapped 4 in. at splices and secured to each joist with 1-1/4 in. Type S screws. Min end clearance of channels to wall to be 1/2 in. Additional resilient channels positioned so as to coincide with end joints of gypsum board.

to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 7C is applied over the resilient channel/gypsum panel ceiling membrane.

3H. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach furring channels to 1 in. diam. washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire .Additional clips are required to hold the Gypsum Butt joints as described in item 4. Not evaluated for use with Item 6. **REGUPOL AMERICA** — Type SonusClip

3I. Steel Framing Members — (Not Shown) — As an alternate to Item 3, main runners, cross tees, cross channels and wall angle as listed below.

a. Main Runners — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv. steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the When Steel Framing Members (Item 3M) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in b. Cross Tees or Channels — Nom 4 ft long cross tees, with 15/16 in. or 1-1/2 in. wide face, or nom 4 ft long cross channels, with 1-1/2 in. wide face, spaced 16 in. OC, installed perpendicular to the main runners. Additional cross tees

Item 4. Butt joints staggered minimum 24 in. OC.

or channels used 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation. c. Wall Angle or Channel — Painted or galv. steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC. To support steel framing member ends and for screw-attachment of the gypsum panel. **USG INTERIORS LLC** — Type DGL or RX

3J. Steel Framing Members* — (Optional, Not Shown) — Used to attach resilient channels (Item 3A) to trusses (Item 2). Clips spaced 48 in. OC on adjacent trusses, and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional resilient truss where it is secured with a clip.

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip 3K. Resilient Channels — For use with items 3L, 4F, and 7G — Formed from min 26 MSG galv steel installed perpendicular to trusses. When Item 7G is draped over channels, channels spaced a maximum 12 in. OC. Channels UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR secured to each truss as described in Item 3L. Channel ends butted and centered under the joists and attached to the joists with one screw at each end. Additional resilient channels positioned so as to coincide with end joints of gypsum board as shown in the above illustration. Additional channels shall extend min 3 in. beyond each side edge

3L. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to joists (Item 2). For use with items 3K, 4F and 7G. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the joists and attached to the joists with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints, as described in Item 3K. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the joists with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.

ACOUSTIC PROPERTIES L L C — Types RC-1 Boost 3M. Steel Framing Members* — (Optional, Not Shown) — As an alternate to Item 3. a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced 24 in. OC, perpendicular to trusses. located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG CGC INC — Type ULIX galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 4), each extending a min of 6 in. beyond both side edges of the board. b. Cold Rolled Channels — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 3Md) and conforming with PS1-83 specifications, or min 3/4 in. thickness of any Floor Topping Mixture secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along (CCOX) bearing the UL Classification Marking as to Fire Resistance, min Truss depth (Item 2) is bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.c. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 3Md) location with 16d nails or minimum 2-1/2 in. screws.d. Steel Framing Members* — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.

PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip 3N. Steel Framing Members* — (Optional, Not Shown) — As an alternate to Item 3. a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to trusses and friction fit into Steel Framing Members (Item 3Nc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of wide gypsum board is installed with long dimensions perpendicular to resilient channels. Gypsum the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 4). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels. b. **Blocking** — Where truss design does not permit direct, over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking

6. **Fiber, Sprayed*** — (Dry Dense Packed 100% Borate Formulation) — (Not Shown, Optional) at each Steel Framing Member (Item 3Nc) location with 16d nails or minimum 2-1/2 in. screws.

c. Steel Framing Members* — Used to attach furring channels (Item 3Na) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws

Sprayed, Dry Dense Packed) is used, Furring Channels (Item 3F) or Resilient Channels (Item through each of the provided hole locations. Furring channels are friction fitted into clips. PAC INTERNATIONAL L L C — Type RSIC-S1-1 Ultra

Gypsum Board* — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to furring or resilient channels. Gypsum board secured with 1 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. End joints secured to both resilient channels as shown in the end joint detail. When Steel Framing Members (Item 3B) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board

6A. Fiber, Sprayed* — (Loose Fill 100% Borate Formulation) — (Not Shown, Optional) — The is installed with long dimension perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long No. 6 Type S bugle head screws spaced 12 in. OC in the field of the board. Gypsum board butt joints shall be staggered 2 ft within the assembly, and shall occur between the main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels at each butt joint shall be spaced approximately 3-1/2 in. OC, and be attached to the bottom chord of the truss with one RSIC-1 clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. When both Steel Framing Members (Item 3B) and Fiber, Sprayed (Items 6 or 6A) are used, furring channel spacing reduced to 16 in. OC and two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimension perpendicular to furring channels. Base layer secured to furring channels with nom 1 in. long No. 6 Type S bugle head screws spaced 12 in. OC in the field of the board. Gypsum board butt joints shall be staggered 2 ft within the assembly, and shall occur between the main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels at each butt joint shall be spaced approximately 3-1/2 in. OC, and be attached to the bottom chord of the truss with one RSIC-1 clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer secured to furring channels using 1-5/8 in. long No. 6 Type S screws spaced 8 in. OC and 1-1/2 in. from the end joint. Butted end joints to be offset a min. of 8 in. from base layer end joints. Butted side joints of outer layer to be offset min. 18 in. from butted side joints of base layer. When Steel Framing

Members (Item 3C) are used, two layers of nom 5/8 in. thick, 4 ft wide are installed with long dimensions perpendicular to 3B. Steel Framing Members* — (Optional) — Used as an alternate method to attach furring channels to trusses (Item furring channels. Base layer attached to the furring channels using 1 in. long No. 6 Type S bugle-head steel screws 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to the bottom chord of alternating trusses with No. spaced 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft. within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels shall be spaced approximately 4 in. OC, and be attached to underside of the truss with one Isomax clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer attached to the furring channels using 1-5/8 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field. The end of the outer layer boards at the butt joint shall be attached to the base layer boards with 1-5/8 in. long Type G screws spaced 8 in. OC and 1-1/2 in. from the end joint. Butted end joints to be offset a min of 8 in. from base layer end joints. Butted side joints of outer layer to be

offset min 18 in. from butted side joints of base layer. When **Steel Framing Members** (Item 3D) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 16 in. within the assembly. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. These additional furring channels shall be attached to underside of the truss with Genie clips as described in Item 3D. Screw spacing along the gypsum board butt joint shall be 6 in. OC. When Steel Framing Members (Item 3E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as

Isolation Clip at each end of the channel. When Fiber, Sprayed (Items 6 or 6A) is used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels. Base layer gypsum board secured with 1 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. End joints secured to both resilient channels as shown in the end joint detail. Outer layer gypsum board secured with 1-5/8 in. long No. 6 Type S bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. Outer layer shall be finished as described in Item 5. When Foamed Plastic insulation (Item 7E) is applied to the underside of the subflooring, screw spacing shall be reduced to 8 in. OC with minimum 1-1/4 in. long Type S screws to install gypsum to the resilient channels (Item 3A). Resilient channels (Item 3A) to be spaced maximum 12 in. OC. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. End joints secured to both resilient channels as shown in

into the main channel that runs between . Butt joint furring channels shall be attached with one RESILMOUNT Sound

When Steel Framing Members (Item 3E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with overall length and width shall not exceed 18-11/16 in. by 18-11/16 in. long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend 3G. Resilient Channels — For Use With Item 4C and 7C. Formed from min 25 MSG galv steel installed perpendicular one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

When Steel Framing Members* (Item 3I) are used, one layer of 5/8 in. thick, 48 in. wide gypsum board, installed with long dimension perpendicular to cross channels with side joints centered along main runners. Gypsum board fastened to cross channels with 1 in. long No. 8 Type S bugle head steel screws located 1/2 in. from end joints and 1-3/4 in. from side accordance with the manufacturers installation instructions provided with the damper. joints and spaced 8 in. OC along the end joints and in the field. Panels fastened to cross tees with 1 in. long, Type S trusses. Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with bugle-head screws spaced in the field and 8 in. OC along end joints. Panels fastened to main runners with 1 in. long. Type 9B. Deleted. S bugle-head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 to 1/2 in. from panel edge. Gypsum board sheets screw attached to leg of wall angle with 1 in. long No. 8 Type S bugle head steel screws spaced 12 in. OC. End joints of panels shall be staggered with spacing between joints on adjacent panels not less

When Steel Framing Members (Item 3J) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper long dimensions perpendicular to resilient channels. Gypsum board secured to resilient channels with nom 1 in. long Type assembly installed in accordance with the manufacturers installation instructions. S bugle-head steel screws spaced 8 in. OC in the field of the board and located 3/4 in. from side joints and 1-1/2 in. from end joints. Gypsum board joints are to be staggered by a minimum of 24 in.

Item 4. Adjacent butt joints staggered minimum 48 in. OC. When Steel Framing Members (Item 3N) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in AMERICAN GYPSUM CO — Type AG-C

CGC INC — Types C, IP-X2, IPC-AR CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A **GEORGIA-PACIFIC GYPSUM L L C** — Types 5, DAPC, TG-C NATIONAL GYPSUM CO — Types eXP-C, FSK-C, FSW-C, FSW-G

CERTAINTEED GYPSUM INC — Type C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C

THAI GYPSUM PRODUCTS PCL — Type C UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR **USG BORAL DRYWALL SFZ LLC** — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent 4A. **Gypsum Board** — For use when Item 3C is used and **Batts and Blankets*** are secured to the plywood subfloor, to the trusses or draped over the furring channel/gypsum panel ceiling nembrane as described in Item 3C. For method of gypsum board installation, see Item 4. CGC INC — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR 4B. **Gypsum Board*** — For use when **Batts and Blankets*** (Item 7A) and Resilient Channels (Item 3F) are used. Nom 5/8 in. thick, 4 ft wide gypsum board installed with long dimension perpendicular to resilient channels. Nom 1 in. long No. Type S bugle head screws are driven through channel spaced 8 in. OC. End joints of gypsum board similarly fastened to additional resilient channels positioned at end joint locations. **AMERICAN GYPSUM CO** — Type AG-C.

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C 4C. Gypsum Board* — For use with Items 3G and 7C or 3I and 7F, and 7C. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and

UNITED STATES GYPSUM CO — Type ULIX

system is 20 min.

4D. **Gypsum Board*** — For use when Flooring System (Item 1) consists of both System No. and min 15/32 in. plywood, min grade "Underlayment" or "Sturd-I-Floor" with T & G edges and 18 in. and Batts and Blankets (Item 7D) and Resilient Channels (Item 3A) are used. One layer of nom 5/8 in. thick, 48 in. wide gypsum board installed with long dimension perpendicular to resilient channels. Gypsum board secured with 1 in. long Type S bugle head steel screws. Screws spaced 1 in. from side joints, and 12 in. OC in the rest of the field. Screws spaced 1-1/2 in. from the end joints. End joints secured to both resilient channels as shown in end joint detail. When batt insulation (Item 7D) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel (Item 3A) spacing shall be reduced to 12 in. OC., and gypsum board screws spaced 1 in. from side joints, and 8 in. OC in the rest of the field. For use only with Ceiling Damper described in Item 9R. PANEL REY S A — Type PRC2

4F. Gypsum Board* — For use with Items 3K, 3L, and 7G— One layer of nom 5/8 in. thick, 4 ft board secured to resilient channels with min nom 1 in, long Type S bugle-head steel screws spaced 8 in. OC in the field of the board and located 3/4 in. from side joints and 1-1/2 in. from end joints. Gypsum board butt joints are to be staggered by a minimum of 24 in. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C 5. **Finishing System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound

surface of gypsum board. — The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product. When Item 6 (Fiber, 3A) spacing shall be reduced to 12 in. OC. When Item 6 (Fiber, Sprayed, Dry Dense Packed) is a used, two layers of gypsum board required as described in Item 4. Not evaluated for use with

US GREENFIBER LLC — INS735, INS745, INS750LD, INS765LD, INS773LD, and SANCTUARY to be used with dry application only. finished rating when Fiber, Sprayed is used has not been determined. The fiber is applied without water or adhesive at a minimum dry density of 0.5 lb/ft³ and at a max thickness of 3-1/2 in., in accordance with the application instructions supplied with the product. When Item 6A (Fiber,

Sprayed, Loose Fill) is used, Furring Channels (Item 3F) or Resilient Channels (Item 3A) spacing shall be reduced to 12 in. OC. When Item 6A (Fiber Sprayed, Loose Fill) is used, two layers of gypsum board required as described in Item 4. Not evaluated for use with Item 3C. U S GREENFIBER L L C — INS735, INS745, INS750LD, INS765LD, INS773LD, & SANCTUARY to be used with dry application only. 7. Batts and Blankets* — (Not Shown) — For use with Item 3D — Nom 3 in. thick mineral wool

insulation held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 18 in. OC. A. Batts and Blankets* — For Use With Items 3F and 4B — Glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance having a_ min. density of 0.5 pcf, draped over the resilient channel/gypsum panel ceiling membrane. No

7B. Batts and Blankets* — (Not Shown) — For use with Item 3E — Nom 3-1/2 in. thick, min. 2 tiber glass insulation held suspended in the concealed space with nominal 0.090 in. diam steel wires attached to the wood trusses at nominally 16 in. OC. 7C. Batts and Blankets* or Fiber, Sprayed* — For Use with Item 4C (Not Shown) — Min. 3-1/ in thick with no limit on maximum thickness fitted in the concealed space, draped over the

resilient channel (Item 3G)/gypsum board (Item 4C) ceiling membrane. 7D. **Batts and Blankets*** — For Use With Item 4D — Insulation may be secured to plywood subfloor with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Insulation may alternatively be draped over the resilient channels and gypsum board ceiling membrane, and the resilient channels and gypsum board attachment shall be modified as specified in Item 4D. Any glass fiber insulation bearing the UL Classification Marking for Surface Burning Characteristics and/or Fire Resistance, and having a min density of 0.5 pcf

and max thickness of 3-1/2 in. may be used. 7E. Foamed Plastic* — (As alternate to Item 6 and 6A, Not Shown) — Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft³ or 2.0 lb/ft³ density, depending on the product installed. Spray foam insulation is limited to use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 3A) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 4) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 4) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Item 9) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 3, 3B through 3F, 3G, 6, 6A, 7 through 7D. Not evaluated with Flooring System (Item 1) Configuration No. 1.

Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+ gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the 7F. Batts and Blankets* — (Not Shown) For Use with Item 3I and 4C — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. There is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the Steel Framing Members and gypsum panel membrane. 7G. Batts and Blankets* — (Not Shown) For Use with Item 3L, 3K, and 4F — Glass fiber or

BASF CORP — Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206,

mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. There is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or_ draped over the Steel Framing Members and gypsum panel membrane. 8. Air Duct* — (Optional) — Any UL Class 0 or Class 1 flexible air duct installed in accordance

with the instructions provided by the damper manufacturer. 9. Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max. nom area shall be 349 sq in. Max. register opening. Aggregate damper openings shall not exceed 175 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. An aluminum or steel grille (Item 10) shall be installed in accordance with

installation instructions. MIAMI TECH INC — Model Series RxCRD, RxCRDS or RxCRPD 9A. Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. leep trusses. Not for use with flooring system 1 or 17. Max damper assembly size nom 18 in. long by 18 in. wide and 4-1/4 in. high, or 8 in. diam. fabricated from galv steel. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in

9C. Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max 12 in. diameter damper with insulated register box assembly. The maximum size of the register box assembly is nom. 20 in. long by 20 in. wide and 4 in. high fabricated from galv steel. Aggregate area of the register opening(s)

AIRE TECHNOLOGIES INC — Series 57 9D. Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with min. 18 in. deep trusses. Not for use with flooring system 1 or 17. Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with duct board plenum box assembly. The maximum outer dimensions of the plenum box assembly are 23-1/2 in. long by 19-1/2 in. wide and 17 in. high fabricated from 6pcf, 1-1/2 to 2 in. thick Knauf Air Duct Board M*. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.

RUSKIN COMPANY — Model CFD7T or CFDR7T

PERMIT REVIEW STAMP **ISSUE HISTORY** Date SCHEMATIC DESIGN 11/22/19 12/06/19 DESIGN DEVELOPMENT 02/28/20 PERMIT REVIEW SET REVISION HISTORY Date Description

FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www.fuglebergkoch.com

THE ROBERT 09/10/2019

L REFERENCE DIRECTORY - FLOOR SYSTEM

FT. MYERS, FL

w/ Box or 51 w/Box 9F. Ceiling Damper* — (Optional. To be used with Air Duct Item 8). — For use with min 18 in. deep trusses Not for use with flooring system 1 or 17. Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.

LLOYD INDUSTRIES INC — Model CRD 50-BT, CRD 50-EA-BT, CRD 55-BT, CRD 55 EA-BT UNITED ENERTECH CORP — Model C-S/R-WT-L, C-S/R-EA-L, C-S/R-BT, C-S/R-EA-BL 9G. Ceiling Damper* — (Optional. To be used with Air Duct Item 8). For use with min 18 in. deep trusses Not for use with flooring system 1 or 17. Max plenum box size nom 13 in. long by 13 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers

installation instructions provided with the damper. LLOYD INDUSTRIES INC — Model CRD 50-BT-6, CRD 50-EA-BT-6, CRD 55-BT-6, CRD 55

9H. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.

PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA — Model

9l. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 113 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq ft of ceiling area. ■ Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions. **BROAN-NUTONE L L C** — Model RDFUWT

9J. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). Ceiling damper & fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 79 sq in. with the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A metallic grille (Item 10) shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C — Models RDJ1 and RDH 9K. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8). For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. METAL-FAB INC — Models MSCD-HC and MRCD-HC

9L. Alternate Ceiling Damper* — (Optional, To be used with Air Duct Item 8). Ceiling damper & ■ fan assembly for use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C — Model RDMWT 9M. Alternate Ceiling Damper* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 10) shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C — Model RDMWT2 9N. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8) — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom 21 in. long by 18 in. wide, fabricated from galvanized steel. Plenum box max size nom 21 in. long by 18 in. wide by 14 in. high (inner dimension) fabricated from either galvanized steel or min 1 in. thick Listed Duct Board bearing the UL Listing Marking having a min R-Value of 4.3. Installed in accordance with

the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.

GREENHECK FAN CORP — Model CRD-1WT 90. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8) — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom 12 in. long by 12 in. wide with an 8 in. diameter damper, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 72 sq in. per

100 sq ft of ceiling area. **GREENHECK FAN CORP** — Model CRD-2WT 9P. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 324 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 14 in. Aggregate damper openings shall

not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS — Model RD-521 **POTTORFF** — Model CFD-521

9Q. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 196 sq in. with the length not to exceed 26 in. and the width not to exceed 14 in. Max height of damper shall be 7 in. Aggregate damper openings shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) not to exceed 144 in.² shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS — Model RD-521-BT **POTTORFF** — Model CFD-521-BT 9R. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the

manufacturers installation instructions provided with the damper. A steel grille (Item 10) shall be

installed in accordance with installation instructions. **C&S AIR PRODUCTS** — Models RD-521-IP, RD-521-NP

POTTORFF — Models CFD-521-IP, CFD-521-NP 9S. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Not for use with flooring system 1 or 17. Max nom area shall be 144 sq in. with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 10) shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS — Models RD-521-90, RD-521-NP90 POTTORFF — Models CFD-521-90, CFD-521-90NP

9T. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 8.) — For use with Item 4D only. Not for use with flooring system 1. Max nom 8 in. diameter by 3-1/8 in. high, fabricated from galvanized steel. Plenum box max size nom 12 in. long by 12 in. wide by 3 in. high fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 72 sq in. per 100 sq ft of ceiling area. NAILOR INDUSTRIES INC — Types 0755, 0755A

SAFE AIR DOWCO — Types 0455, 0455A 9U. **Damper*** — (Optional, to be used with Air Duct Item 8) For use with min 18 in. deep trusses. Max nom 11-1/8 in. long by 13-5/8 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to

exceed 76 sq in. per 100 sq ft of ceiling area. **GREENHECK FAN CORP** — Model CRD-310WT

10. **Grille** — Aluminum or Steel grille, installed in accordance with the installation instructions provided with the ceiling damper. 11. Discrete Products Installed in Air-handling Spaces* — Automatic Balancing Valve/Damper

— (Not Shown - Optional) — For use with item 9A, Ruskin Company's Model CFD7T damper (CABS). Ceiling damper to be provided with plenum box per damper manufacturer's instructions with side outlet only. Entire assembly to be installed into any UL Class 0 or Class 1 flexible air duct in accordance with the instructions provided by the automatic balancing valve/damper manufacturer.

METAL INDUSTRIES INC — Model ABV-4, ABV-5, ABV-6 * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively

<u>Last Updated</u> on 2020-02-18



Design No. L563

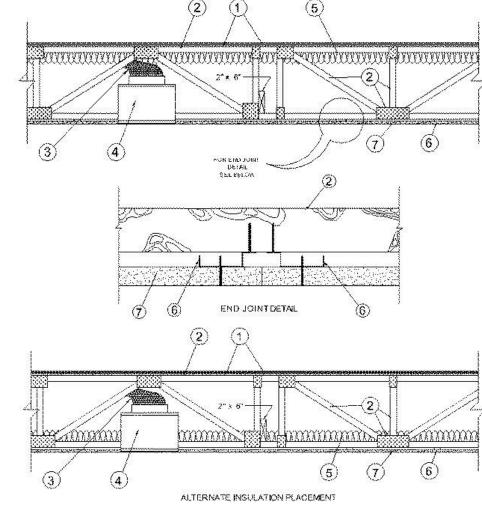
February 18, 2020

Unrestrained Assembly Rating - 1/2 Hr, 1 Hr (See item 1, System 1)

Finish Rating - 25 Min (See Items 5 or 5A and 7), 20 Min. (See Items 6E and 7A) This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as

Canada, a load restriction factor shall be used — See Guide <u>BXUV</u> or <u>BXUV7</u>

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



. Flooring System — The flooring system shall consist of one of the following:

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIPTM nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring — Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural

to trusses with joints staggered. System No. 2 - Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with | KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Floor Mat Materials* - (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture. See Perlite Aggregate (CFFX) and Vermiculite Aggregate (CJZZ) categories for names of manufacturers. **ECORE INTERNATIONAL INC** — Type QTscu 4002

HACKER INDUSTRIES INC — Type Hacker Sound-Mat Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of

floor-topping mixture. **ECORE INTERNATIONAL INC** — Type QTrbm 3006-3 **HACKER INDUSTRIES INC** — Type Hacker Sound-Mat II. Alternate Floor Mat Materials - (Optional)— Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor

Floor topping thickness shall be a min of 3/4 in. (19 mm) HACKER INDUSTRIES INC — FIRM-FILL SCM 125 Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor.

Floor topping thickness shall be a min of 1 in. (25 mm) HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Qurl 55/025 Alternate Floor Mat Materials - (Optional)— Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. | fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in. Floor topping thickness shall be a min of 1-1/4 in. (32 mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 400, Quiet Qurl 60/040 Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm)

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075 Metal Lath (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sg vd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. HACKER INDUSTRIES INC -Firm-Fill Gyp Conc, Firm-Fill 2010, 3310,4010, Firm-Fill High Strength, Gyp-Span Radiant strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. System No. 3 - Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with ACG MATERIALS — AccuCrete types NexGen, Green, Prime, B, M, and PrePour, AccuRadiant, AccuLevel types G40, end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples

having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Finish Floor - Mineral and Fiber Board* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints. **HOMASOTE CO** — Type 440-32 Mineral and Fiber Board

System No. 4 Subflooring — Min Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal | Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt. and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and

lateral resistance strength may be substituted for the 6d nails. **Vapor Barrier - (Optional)** — Nom 0.010 in. thick commercial asphalt saturated felt. Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instruct. accompanying the material for specific mix design. **UNITED STATES GYPSUM CO** — Types LRK, HSLRK, CSD

LATICRETE SUPERCAP L L C — Types LRK, HSLRK

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions | KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N regarding the minimum thickness of floor topping over each floor mat material. UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand

Floor Underlayment SRM-25 Alternate Floor Mat Materials* - (Optional) — Nom 3/8 in. thick floor mat material loose laid over the subfloor. **GRASSWORX L L C** — Type SC50

end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. **Vapor Barrier - (Optional)** — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water. **ELASTIZELL CORP OF AMERICA** — Type FF

System No. 7 - Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with | being sealed with any UL Classified caulk or sealant found under - Fill, Void or Cavity Materials* (XHHW). end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. **Vapor Barrier - (Optional)** — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5.5 gal of water. **AERIX INDUSTRIES** — Floor-Topping Mixture

System No. 8 - Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with ECTEK INTERNATIONAL INC — Type MegaBoard end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand. ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 9 - Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 | located 1/2 in. from the end edges of the panel. in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. **MAXXON CORP** — Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* - (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material. **MAXXON CORP** — Type Encapsulated Sound Mat

Floor Mat Reinforcement — (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping | SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus for use with floor mat reinforcement. Metal Lath - (Optional) 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat

Fiber Glass Reinforcement — (Optional) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs./sq. yd loose laid over the floor mat material. System No. 10 - Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or non-veneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications PRP-108. Plywood or non-veneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be

Vapor Barrier — (Optional) Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive

plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping

shall be a min of 3/4 in. FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2 System No. 11- Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick. **Vapor Barrier** — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper. Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in **KEENE BUILDING PRODUCTS CO INC** — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in. KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

topping thickness shall be a minimum of 1-1/2 in. KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panel to be perpendicular | Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

> System No. 12 - Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of 100 sq ft of ceiling area. Installed in accordance with the manufacturers installation instructions provided with the damper. plywood or strength axis of panels to be perpendicular to the joists with joints staggered. **Vapor Barrier** — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper. Finish Flooring — Min 3/4 in. thickness of lightweight insulating concrete with Perlite Aggregate* or Vermiculite **Aggregate***, or gypsum concrete.

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in. KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT System No. 13

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or nonveneer APA Rated "Sturd-I-Floor" T& G panels per APA specifications PRP-108. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal & lateral resistance strength may be substituted for 6d nails. **Vapor Barrier** — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive G50 and SD30.

Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. ACG MATERIALS — AccuQuiet types P80, C40, D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375,

EM.375S, EM.750, and EM.750S. System No. 14 - Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or nonveneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications PRP-108. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

substituted for the 6d nails.

DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD and GSL RH. Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a **KEENE BUILDING PRODUCTS CO INC** — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in. Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor

topping thickness shall be a minimum of 1-1/2 in. KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor

topping thickness shall be a minimum of 3/4 in. System No. 5 - Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in. KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 15 - Subflooring — Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Plywood or non-veneer APA rated panels secured to trusses w/ const. adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. gypsum board butt joints, as described in Item 7. Wall and Partition Facings and Accessories* - Sound Barrier (Optional) — Acoustic Sleeper pads stapled to the top | PLITEQ INC — Type Genie Clip of the subfloor and centered over wood trusses. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through Acoustic Sleeper pads to trusses.

STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL — Acoustic Sleeper Finish Floor — Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Butt joints of panels have the option of trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. System No. 16 - Subflooring - Structural Cement-Fiber Units* — Nominal 19 mm (3/4 in.) thick tongue and groove structural cement-fiber units. Long dimension of panels to be perpendicular to trusses with end joints staggered. Panels fastened to the trusses with #10 self-drilling, self-tapping cement board screws 1-3/4 in. long. Screws shall be spaced 6 in. center grommet. Furring channels are friction fitted into clips. RSIC-1 clips for use with 2-9/16 in. wide furring channels. OC along the perimeter of each sheet and 12 in. OC in the field of each sheet. Screws shall be spaced 1/2 in. from end joints and 1 in. from side joints.

ECTEK INTERNATIONAL INC — Armoroc Panel Subflooring (Alternate) — Building Units* — Nom 3/4 in. thick, tongue and grooved boards. Long dimension of boards to be perpendicular to trusses with end joints staggered a min of 4 ft. and centered over the trusses. Boards secured to trusses with 1-1/4 in. long self-drilling, self- tapping screws spaced a max of 12 in. OC in the field with screws located 1 in. from long edge, and max 8 in. OC along the end joints with screws located 1/2 in. from end joint.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring — Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

System No. 17 Structural Cement-Fiber Units* — For use with UNITED STATES GYPSUM CO Types C, IP-X2, IPC-AR and ULIX gypsum boards only. Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge,

UNITED STATES GYPSUM CO — Types STRUCTO-CRETE, USGSP System No. 18

provided by the damper manufacturer.

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

2. Trusses — Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in. when Ceiling Dampers* are not used. Min truss depth is 18 in. when Ceiling Damper* is used. Truss members secured together with min 0.036 0356 in. thick galvanized steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tool has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width. 3. Air Duct* (Optional) — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions

4. Ceiling Damper* (Optional). To be used with Air Duct Item 3. — For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper

AIRE TECHNOLOGIES INC — Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot. LLOYD INDUSTRIES INC — Model CRD 50-BT, CRD 50-EA-BT, CRD 55-BT, CRD 55 EA-BT UNITED ENERTECH CORP — Model C-S/R-WT-L, C-S/R-EA-L, C-S/R-BT, C-S/R-EA-BL

4A. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 13 in. long by 13 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. LLOYD INDUSTRIES INC — Model CRD 50-BT-6, CRD 50-EA-BT-6, CRD 55-BT-6, CRD 55 EA-BT-6, CRD50-W X-BT-

4B. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max size ceiling outlet in plenum box nom 12 in. long by 12 in. wide. Plenum box fabricated from galv steel. Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Installed in accordance with the manufacturers installation instructions provided with the damper. AIRE TECHNOLOGIES INC — Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD

LLOYD INDUSTRIES INC — Model CRD 50-95BT, CRD 50-EA-95BT, CRD 55-95BT, CRD 55 EA-95BT 4C. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Max size ceiling outlet in plenum box nom 16 in. long by 16 in. wide. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.

CROWN PRODUCTS CO INC — Models CRD50-FGPB-4.2-CP, -6.0-CP; CRD50-FGPB-4.2-EA-CP, -6.0-EA-CP. LLOYD INDUSTRIES INC — Models CRD 50- FGPB-4.2, - 4.2 NI, -6.0, -6.0 NI; CRD50-EA-FGPB-4.2, -4.2 NI, -6.0, -4D. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 15 in. long by 15 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper.

LLOYD INDUSTRIES INC — Models 45-CRD-LT-BT and 45-CRD-LTD-BT 4E. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max size ceiling outlet in plenum box nom 10 in. long by 10 in. wide. Plenum box fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per **LLOYD INDUSTRIES INC** — Model 45-LTD-95-BT-4 4F. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 15 in.

wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 96 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. LLOYD INDUSTRIES INC — Model CRD50-w X-BT 4G. Alternate Ceiling Damper* — For use with min. 18 in. deep trusses. Max. nom area shall be 349 sq in. Max. overall length and width shall not exceed 18-11/16 in. by 18-11/16 in. with max. 16 in. by 16 in. register opening. Aggregate

damper openings shall not exceed 175 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. An aluminum or steel grille (Item 9) shall be installed in accordance with installation instructions. MIAMI TECH INC — Model Series RxCRD, RxCRDS or RxCRPD

4H. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper **METAL-FAB INC** — Models MSCD-HC and MRCD-HC

5. Batts and Blankets* — (Optional) - Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. When no insulation is installed in the concealed space resilient channels (Item 6) are spaced 24 in. OC. When the resilient channels (Item 6) are spaced 16 in. OC, the insulation shall be a max of 3-1/2 in. thick, and shall be secured against the subflooring with staples at 12 in. OC or held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 12 in. OC. When the resilient channels are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6A) are used, there is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the resilient channels (or Steel Framing Members) and gypsum panel membrane. The finished rating has only been determined when the insulation is secured to the subflooring.

5A. Loose Fill Material* — (Optional) - As an alternate to Item 5, when the resilient channels (Item 6) are spaced a max of 12 in. OC, or when the Steel Framing Members (Item 6A) are used - Any loose fill material bearing the UL Classification Marking for Surface Burning Characteristics. There is no limit in the overall thickness of insulation. The finished rating when loose fill material is used has not been determined 5B. Cavity Insulation - Batts and Blankets* or Loose Fill Material* - (Not Shown) — (As described above in Items 5

and 5A) — For Use with Item 7A — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6E)/gypsum board (Item 7A) ceiling membrane. 6. Resilient Channels — Formed from min 25 MSG galv steel installed perpendicular to the trusses. When insulation (Item 5) is secured to the underside of the subfloor, the resilient channels are spaced 16 in. OC. When insulation (Items 5) or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channels are spaced 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of panel.

6A. Alternate Steel Framing Members — (Not Shown) - As an alternate to Items 6, main runners, cross tees, cross channels and wall angle as listed below: A. Main Runners — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the bottom

B. Cross Tees — Nom 4 ft long, 1-1/2 in. wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or cross channels used at 8 in. from each side of butted gypsum panel end joints. The cross tees or cross channels may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation. C. Cross Channels — Nom 4 or 12 ft long, installed perpendicular to main runners, spaced 16 in. OC.

D. Wall Angle or Channel — Painted or galv steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC. To support steel framing member ends and for screwattachment of the gypsum panel.

CGC INC — Type DGL or RX. **USG INTERIORS LLC** — Type DGL or RX.

6B. **Steel Framing Members*** — (Not Shown) — As an alternate to Items 6 and 6A. a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC, and secured to the bottom chord of alternating trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the

6C. **Steel Framing Members*** — (Not Shown) - As an alternate to Items 6, 6A and 6B. a. Furring Channels — Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to

18 AWG galv steel wire near each end of overlap. b. Steel Framing Members* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. course drywall screw through the RSIC-1 (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75). 6D. Alternate Steel Framing Members* — (Not Shown) As an alternate to items 6 to 6C, furring channels and Steel Framing Members as described below.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R 6E. **Resilient Channels - (Not Shown)** — For Use With Item 7A - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 5B is applied over the resilient channel/gypsum panel (Item 7A) ceiling membrane. 6F. Alternate Steel Framing Members* — (Not Shown) As an alternate to items 6 to 6E, furring channels and

Steel Framing Members as described below

perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap. b. Steel Framing Members* — Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7. **REGUPOL AMERICA** — Type SonusClip

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC,

6G. Steel Framing Members* — — (Optional, Not Shown) — As an alternate to Item 6. a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board. b. Cold Rolled Channels — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Gd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv

steel wire ties, one at each end of overlap. c. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Gd) location with 16d nails or minimum 2-1/2 in. screws.

d. Steel Framing Members* — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket. PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6H. Steel Framing Members* — (Not Shown) — As an alternate to Item 6 a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6Hc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Hc) location with 16d nails or minimum 2-1/2 in. screws. c. Steel Framing Members* — Used to attach furring channels (Item 6Ha) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.

PAC INTERNATIONAL L L C — Type RSIC-S1-1 Ultra 61. Steel Framing Members* — (Optional - Not Shown) — Used to attach resilient channels (Item 6) to trusses (Item 2). Clips spaced 48 in. OC and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Philips Modified screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional resilient channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured w/ a cli📻

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip 7. Gypsum Board* — Nom 5/8 in. thick, 48 in. wide gypsum panels. When resilient channels (Item 6) are used, sum panels installed with long dimension perpendicular to resilient channels. Gypsum panels—secured with 1 in. long Type S bugle head steel screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from end joints. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane the screw spacing shall be reduced to 8 in. OC. End joints secured to both resilient channels as shown in end joint detail. When Steel Framing Members (Item 6A) are used, gypsum panels installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Panels fastened to cross tees with 1 in. long Type S bugle-head screws spaced 8 in. OC in the field and along end joints. Panels fastened to main runners with 1 in. long Type S bugle-head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 to 1/2 in. from board edge. End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 2 ft OC. When Steel Framing Members (Item 6B) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Screw spacing is reduced to 8 in. OC when insulation is applied over the furring channel/gypsum panel ceiling membrane. Gypsum board butted end joints shall be staggered minimum 16 in. within the assembly. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. These additional furring channels shall be attached to underside of the truss with Genie clips as described in Item 6B. Screw spacing along the gypsum board butt joint shall be 6 in. OC. When Steel Framing Members (Item 6C) are used, gypsum panels installed with long dimensions perpendicular to furring channels. Panels attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 8 in. OC along butted end joints and in the field of the panel. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum panel shall be supported by a single length of furring channel equal to the width of the gypsum panel plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the truss with one clip at each end of the channel. When Steel Framing Members (Item 6D) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end joint. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel. When Steel Framing Members (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed

with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at

every truss involved with the butt joint When Steel Framing Members (Item 6G) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Adjacent butt joints staggered minimum 48 in. OC. When **Steel Framing Members** (Item 6H) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as

described in Item 7. Butt joints staggered minimum 24 in. OC. **AMERICAN GYPSUM CO** — Type AG-C **CGC INC** — Types C, IP-X2, IPC-AR CONTINENTAL BUILDING PRODUCTS OPERATING CO. L L C — Type LGFC-C/A **NATIONAL GYPSUM CO** — Types eXP-C, FSW-G, FSW-C, FSK-G, FSK-C.

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR **USG BORAL DRYWALL SFZ LLC** — Type C 7A. Gypsum Board* - (Not Shown) — For use with Items 5B and 6E. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.

CGC INC — Type ULIX UNITED STATES GYPSUM CO — Type ULIX 8. Finishing System - (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

9. Grille — Aluminum or Steel grille, installed in accordance with the installation instructions provided with the

Last Updated on 2020-02-18

ISSUE HISTORY Date SCHEMATIC DESIGN 11/22/19 12/06/19 DESIGN DEVELOPMENT 02/28/20 PERMIT REVIEW SET REVISION HISTORY Date Description

PERMIT REVIEW STAMP



www.fuglebergkoch.com

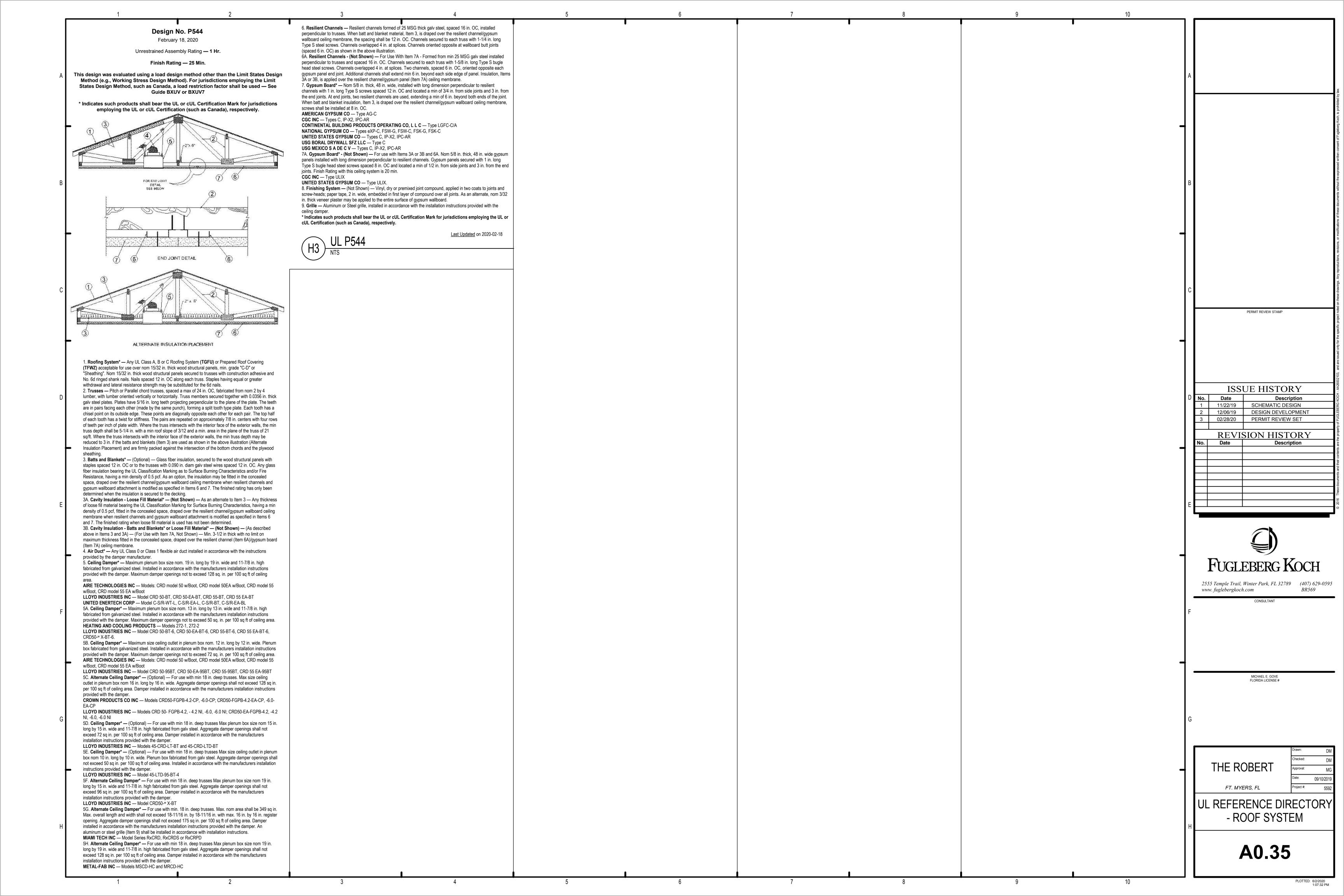
2555 Temple Trail. Winter Park. FL 32789 (407) 629-0595

THE ROBER1

FT. MYERS, FL

UL REFERENCE DIRECTORY - FLOOR SYSTEM

09/10/2019



1. Floor-Ceiling Assembly — The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design No. L505, L511 or L536 in the UL Fire Resistance Directory, as summarized below: A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or

1. Floor-Ceiling Assembly — The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the

Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. B. Wood Joists — Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped.

C. Furring Channels — (Not shown) — Resilient galv steel furring channels installed perpendicular to wood joists between first and second layers of wallboard (Item 1D) and spaced max 24 in. OC. D. **Gypsum Board*** — Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. First layer of wallboard nailed to wood joists. Second layer of wallboard screw-

attached to furring channels. Max diam of ceiling opening is 3/8 in. greater than the outside 2. Through Penetrants — One metallic pipe, conduit or tubing to be centered within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of floor and ceiling. The following types and sizes of metallic pipes, conduits or tubing may be used: A. Steel Pipe — Nom 3 in. diam (or smaller) Schedule 5 (or heavier) steel pipe. B. **Conduit** — Nom 3 in. diam (or smaller) electrical metallic tubing or steel conduit. C. Copper Tubing — Nom 1-1/2 in. diam (or smaller) Type L (or heavier) copper tubing. 3. Fill, Void or Cavity Material* — Sealant — Fill material forced into annular spaces to fill

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

space to max extent possible. Sealant shall be installed flush with floor and ceiling.

PRC-DESOTO INTERNATIONAL INC — Type PR-805 Sealant

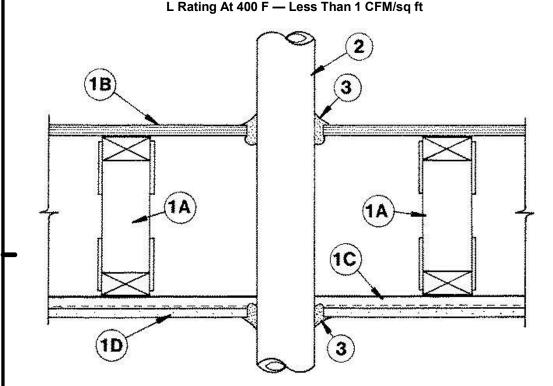
<u>Last Updated</u> on 1992-12-04



System No. F-C-1006

April 03, 2007 F Rating — 1 Hr

T Ratings — 0 and 1 Hr (See Item 2) L Rating At Ambient — Less Than 1 CFM/sq ft



. Floor-Ceiling Assembly — The 1 hr fire rated wood joist, wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500-Series Design in the UL Fire Resistance Directory, as summarized below: A. Joists or Trusses — Nom 2 by 10 in. (51 by 254 mm) lumber joists, min 12 in. (305 mm) deep parallel chord

trusses fabricated from nom 2 by 4 in. (51 by 102 mm) lumber in conjunction with galv steel truss plates or Structural **Wood Members*** with bridging as required. B. Flooring — Nom 3/4 in. (19 mm) thick plywood flooring with or without Floor Topping Mixture*. Diam of circular

cutouts is 1/4 to 1/2 in. (6 to 13 mm) larger than outside diam of the pipe. C. Furring Channels — Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of trusses D. **Gypsum Board*** — Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick, screw-attached to furring channels. Diam of

circular cutouts is 1/4 to 1/2 in. (6 to 13 mm) larger than outside diam of the pipe. 1.1 Chase Wall — (Optional, now shown) — The through penetrants (Item No. 2) may be routed through a 1 hr firerated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the

manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall

include the following construction features: A. Studs — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. Sole Plate — Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of circular cutouts is 1/4 to 1/2 in. (6 to 13 mm) larger than outside diam of the pipe. C. Top Plate — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4

in. (51 by 102 mm) lumber plates, tightly butted. Diam of circular cutouts is 1/4 to 1/2 in. (6 to 13 mm) larger than outside diam of the pipe. D. **Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and

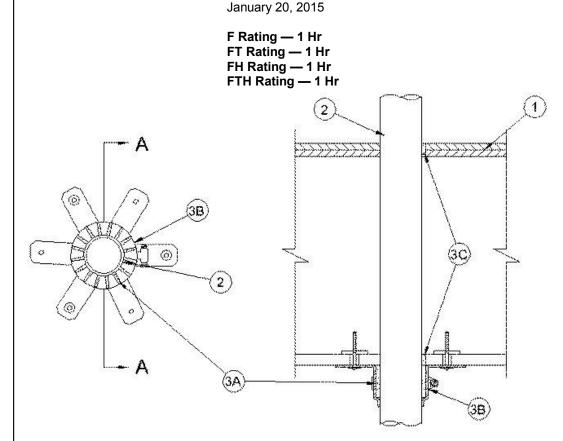
2. Through-Penetrant — Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe or cast iron pipe nom 4 in. (102 mm) diam (or smaller) steel conduit or steel EMT or nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tubing. Pipe to be installed approx midway between joists or trusses and centered in circular cutouts. | specified in the individual Floor-Ceiling Design. Max diam of opening shall be 127 mm (5 in.).

be rigidly supported on both sides of Floor-Ceiling assembly. T Rating is 1 hr for nom 4 in. (102 mm) diam (or smaller) penetrants. T Rating is 0 hr for all penetrants greater C. Gypsum Board* — Nom 16 mm (5/8 in.) thick, 1.2 m (4 ft) wide as specified in the individual Floor-Ceiling Design. than nom 4 in. (102 mm) diam.

3. Fill, Void or Cavity Materials* — Caulk or Sealant — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within the 2. **Through Penetrants** — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. annulus, flush with bottom surface of ceiling or top plate. An additional min 1/4 in. (6 mm) crown of fill material applied Annular space between pipe and edge of opening to be as specified in the table below. Pipe to be rigidly supported on to perimeter of penetrant at its egress from the top of flooring and underside of ceiling or from top of sole plate and underside of top plate.

3M COMPANY — CP 25 WB+ or FB-3000 WT * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

System No. F-C-2006



System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side. 1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized

SECTION A-A

A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening shall be 67 mm (2-5/8 in.). B. Wood Joists* — Nom 254 mm (10 in.) deep (or deeper) lumber, steel or combination lumber and steel joists. trusses or **Structural Wood Members*** with bridging as required and with ends firestopped. C. Gypsum Board* — Nom 16 mm (5/8 in.) thick, 1.2 m (4 ft) wide as specified in the individual Floor-Ceiling

2. **Through Penetrants** — One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Annular space between pipe and edge of opening to be min 0 in. (point contact) and max 6 mm (1/4 in.). Pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic

A. Polyvinyl Chloride (PVC) Pipe — Nom 51 mm (2 in.) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. B. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 51 mm (2 in.) diam (or smaller) Schedule 40 solid or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 51 mm (2 in.) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems. D. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 51 mm (2 in.) drain (or smaller) SDR 11 CPVC for use in closed (process or supply) piping systems.

3. **Firestop System** — The firestop system shall consist of the following: A. Fill, Void or Cavity Material* — Wrap Strip - Layers of intumescent wrap strip are continuously wrapped around the pipe with ends held in place with tape. Wrap strip butted tightly against bottom surface ceiling. Size of wrap strip and number of layers for a given size penetrant are shown in table below. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E W25/1" or CP648-E W45/1-3/4" Firestop

Number of Layers Nom. Wrap Strip Width mm (in.) Designation

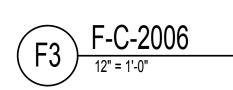
CP648-E W25/1" CP648-E W45/1-3/4" 44 (1-3/4)

B. Steel Collar — Steel collar fabricated from coils of precut min 0.016 in. thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 1 in. (for 1 in. wide wrap strip) or 1-/34 in. (for 1-3/4 in. wide wrap strip) deep with 1 in. wide by 2 in. long anchor tabs on 1-3/4 in. centers for securement to the underside of floor or both surfaces of wall. The opposite side incorporates retainer tabs, 1/2 in. wide by 3/16 in. long, prebent toward the pipe surface. Collar shall be tightly wrapped over the wrap strip, overlapping min. 1 in at seam. A nom 1/2 in. wide stainless steel hose clamp shall be secured to the collar at its mid-height. Every other anchor tab of collar secured to gypsum ceiling at every other tab with 1/4 in. diam by 1-1/2 in. long steel toggle bolts in conjunction with ¼ in by ¾ in diameter steel washers.

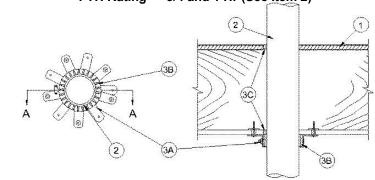
C. Fill, Void or Cavity Materials*-Sealant — Min 16 mm (5/8 in.) thickness of fill material applied within the annulus, flush with the bottom surface of the gypsum board. Min 19 mm (3/4 in.) thickness of fill material applied within the annulus, flush with the top surface of the floor. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2015-01-20



System No. F-C-2007 January 20, 2015 F Rating — 1 Hr FT Rating — 3/4 and 1 Hr (See Item 2) FH Rating — 1 Hr FTH Rating — 3/4 and 1 Hr (See Item 2)



System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side. . Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be

SECTION A-A

constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below: A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as Annular space between penetrant and periphery of opening shall be min 1/8 in. (3 mm) to max 1/4 in. (6 mm). Pipe to B. Wood Joists* — Nom 254 mm (10 in.) deep (or deeper) lumber, steel or combination lumber and steel joists, trusse

or Structural Wood Members* with bridging as required and with ends firestopped. Max diam of opening shall be 127 mm (5 in.).

both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes may be used: A. Polyvinyl Chloride (PVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) SDR11 or SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 102 mm (4 in.) diam (or smaller) SDR 11 CPVC for use in <u>Last Updated</u> on 2007-04-03 | closed (process or supply) piping systems. **IPEX INC** — AquaRise

Nom Diam of Pipe, mm (in.) Min/Max Annular Space, mm (in.) T Rating - H

CP648-E W45/1-3/4" 76 (3) CP648-E W25/1" 102 (4)

CP648-E W45/1-3/4" 102 (4)

annulus, flush with the top surface of the floor.

Certification (such as Canada), respectively.

51 (2) (or smaller) 0-6 (0-1/4) 102 (4) (or smaller) 0-13 (0-1/2) 3. **Firestop System** — The firestop system shall consist of the following: A. Fill, Void or Cavity Material* — Wrap Strip - Layers of intumescent wrap strip are continuously wrapped around the pipe with ends held in place with tape. Wrap strip butted tightly against bottom surface of floor or both surfaces of wall. Size of wrap strip and number of layers for a given size penetrant are shown in table below. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP648-E W25/1" or CP648-E W45/1-3/4" Firestop Wrap

Designation Max Pipe Size mm (in.) Number of Layers Nom Wrap StripWidth mm (in.)

B. Steel Collar — Steel collar fabricated from coils of precut min 0.4 mm (0.016 in.) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be nom 25 mm (1 in.) (for 1 in. wide wrap strip) or 44 mm (1-3/4 in.) for 1-3/4 in. wide wrap strip) deep with 25 mm (1 in.) wide by 51 mm (2 in.) long anchor tabs on 44 mm (1-3/4 in.) centers for securement to the underside of floor or both surfaces of wall. The opposite side incorporates retainer tabs, 12 mm (1/2) in.) wide by 5 mm (3/16 in.) long, prebent toward the pipe surface. Collar shall be tightly wrapped over the wrap strip, overlapping min. 1 in at seam. A nom 12 mm (1/2 in.) wide stainless steel hose clamp shall be secured to the collar at its mid-height. Every other anchor tab of collar secured to gypsum ceiling at every other tab with 6 mm (1/4 in.) diam by 38 mm (1-1/2 in.) long steel toggle bolts in conjunction with 6 mm (¼ in.) by 19 mm (¾ in.) diameter steel washers. C. Fill, Void or Cavity Materials*-Sealant — Min 16 mm (5/8 in.) thickness of fill material applied within the annulus, flush with the bottom surface of the gypsum board ceiling. Min 16 mm (5/8 in.) thickness of fill material applied within the

25 (1)

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - FS-ONE Sealant or FS-ONE MAX Intumescent Sealant. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL

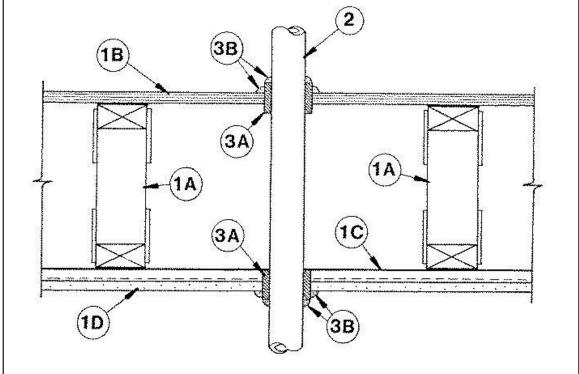
Last Updated on 2015-01-20



System No. F-C-2008

May 20, 2005

F Rating — 1 Hr T Rating — 1 Hr L Rating At Ambient — 7 CFM/sq ft (See Item 3B) L Rating At 400 F — Less Than 1 CFM/sq ft (See Item 3B)



1. Floor Assembly — The fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Trusses — Min 12 in. (305 mm) deep parallel chord trusses fabricated from 2 by 4 in. (51 by 102 mm) lumber in conjunction with galv steel truss plates or **Structural Wood Members*** with bridging as required. B. Flooring — Nom 3/4 in. (19 mm) thick plywood flooring with or without Floor Topping Mixture*. Diam of hole-sawed opening in flooring to be 1/2 to 3/4 in. (13 to 19 mm) larger than diam of pipe. Max diam of opening in

C. Furring Channels — Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of D. **Gypsum Board*** — Nom 4 ft (1.22 m) wide by 5/8 in. (16 mm) thick, screw-attached to furring channels. Diam of hole-sawed opening in gypsum wallboard ceiling to be 1/2 to 3/4 in. (13 to 19 mm) larger than diam of pipe. Max diam of opening in ceiling is 3 in. (76 mm)

2. Nonmetallic Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 polyvinyl chloride (PVC), SDR 13.5 chlorinated polyvinyl chloride (CPVC) or solid-core Schedule 40 acrylonitrile-butadiene-styrene (ABS) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. One pipe to be installed approx midway between trusses and centered in circular openings in flooring and in ceiling. A nom 1/4 in. to 3/8 in. (6 to 10 mm) annular space is required in the firestop system. Pipe to be rigidly supported on both sides of Floor-Ceiling assembly.

2A. Electrical Nonmetallic Tubing+ — Nom 1 in. (25 mm) diam (or smaller) corrugated wall ENT constructed of polyvinyl chloride. ENT to be installed as a complete system with all terminations in junction boxes, outlet boxes or other approved enclosures as specified in the National Electrical Code. Max one ENT per through opening. ENT to be centered in opening and rigidly supported on both sides of the Floor-Ceiling assembly. See Electrical Nonmetallic Tubing (FKHU) category in Electrical Construction Materials Directory for names of

3. **Firestop System** — The details of the firestop system shall be as follows: A. Fill, Void or Cavity Materials* — Wrap Strip — Nom 1/4 in. (6 mm) thick intumescent elastomeric material faced on one side with aluminum foil, supplied to 2 in. (51 mm) wide strips. Nom 2 in. (51 mm) wide strip tightlywrapped around nonmetallic pipe (foil side exposed), secured with two steel tie wires and slid into hole-sawed opening in flooring (Item 1B) and in gypsum wallboard ceiling (Item 1D). Bottom edge of wrap strip to project 9/16 to 11/16 in. (14 to 17.5 mm) below bottom surface of flooring and below bottom (ceiling) surface of gypsum

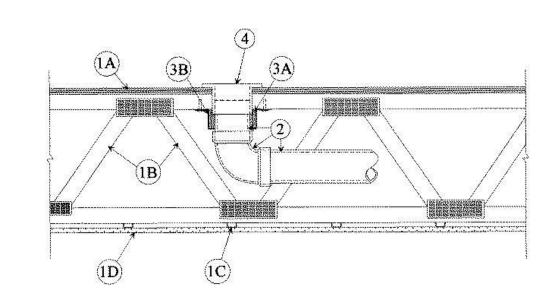
3M COMPANY — Type FS-195+ B. Fill, Void or Cavity Materials* — Caulk, Sealant or Putty — Nom 1/4 in. (6 mm) thickness of caulk or putty to be applied to the exposed edge of the wrap strip layer (top of flooring and bottom of gypsum board ceiling). Generous application of caulk or putty to be applied to fill all gaps at the wrap strip/flooring and wrap strip/gypsum board ceiling interfaces.

3M COMPANY — CP 25WB+ Caulk, FB-3000 WT Sealant, MP+ Stix Putty (Note: L Ratings apply only when Type CP 25WB+ caulk or FB-3000 WT sealant is used. CP 25WB+ not suitable for use with CPVC pipes.) * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2005-05-20

November 26, 1997 F Rating — 1 Hr T Rating — 1 Hr

System No. F-C-2037



1. Floor-Ceiling Assembly — The fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details of the floor-ceiling assembly are summarized below: A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening is 5 in.

B. Wood Joists — Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required with ends firestopped. C. Furring Channels — Resilient galv steel furring installed perpendicular to wood joists (Item 1B) between wallboard (Item 1D) and wood joists as required in the individual Floor-Ceiling Design. D. Gypsum Board* — Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. Wallboard

secured to wood joists as specified in the individual Floor-Ceiling Design. 2. **Drain Piping** — Nom 4 in. diam (or smaller) Schedule 40 polyvinyl chloride (PVC) or acrylonitrile butadiene styrene (ABS) drain piping and fittings. Diam of circular opening hole through flooring (Item 1A) to be max 1/2 in. larger than outside diam of pipe. Short length of pipe with 90 degree elbow fitting cemented into bottom socket of closet flange (Item 5). Drain piping cemented to elbow.

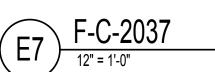
3. **Firestop System** — The firestop system shall consist of the following: A. Fill, Void or Cavity Materials* — Wrap Strip — Nom 1/4 in. thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. wide strips. Nom 1-1/2 in. wode strips tightly-wrapped around nonmetallic pipe with the edges butted against the underside of flooring and around the entire perimeter of the hole-sawed opening. Two layers of wrap strip are required. Each layer of wrap strip to be installed with butted seam, butted seams in successive layers staggered or aligned. Wrap strip layer(s) temporarily held in position using aluminum foil tape.

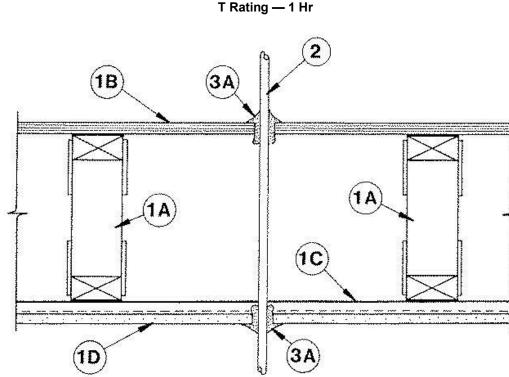
SPECIFIED TECHNOLOGIES INC — SpecSeal RED Strip B. Steel Collar — Collar fabricated from coils of precut 0.016 in. thick (30 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be nom 1-1/2 in. deep with min four 1 in. wide by 2 in. long anchor tabs for securement to top surface of flooring. Retainer tabs, 3/4 in. wide tapering down to 1/4 in. wide and located opposite the anchor tabs, are folded 90 degrees toward through-penetrant surface to maintain the annular space around the through-penetrant and to retain the wrap strips. Steel collar wrapped around wrap strips and through-penetrant with a 1 in. wide overlap along its perimeter joint and secured together by means of a min 1/2 in. wide by 0.028 in. thick stainless steel hose clamp at mid-height of the steel collar. As an alternate to the steel hose clamp, the steel collar can be secured together by means of three No. 8 by 3/8 in. long steel sheet metal screws. Anchor tabs of collar bent outwards and secured to top surface of flooring or underside of floor using min 3/4 in. long steel wood screws in conjunction with 1/4 in., by 1-1/4 in. diam steel fender washers.

4. Closet Flange — PVC or ABS closet stub sized to accommodate drain pipe. Closet flange installed in hole-sawed opening in flooring system with flange secured to top of flooring with steel screws. 5. Water Closet — (Not Shown) — Floor mounted vitreous china water closet.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

<u>Last Updated</u> on 1997-11-26





System No. F-C-3007

August 18, 2011

F Rating — 1 Hr

1. Floor Assembly — The 1 hr fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series

Design in the UL Fire Resistance Directory, as summarized below: A. Trusses — Min 12 in. (305 mm) deep parallel chord trusses fabricated from nom 2 by 4 in. (51 by 102 mm) lumber in conjunction with galv steel truss plates or Structural Wood Members* with bridging as required. B. Flooring — Nom 3/4 in. (19 mm) thick plywood flooring with or without Floor Topping Mixture*. Max diam of opening is 1-1/4 in. (32 mm).

C. Furring Channels — Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of D. Gypsum Board* — Nom 4 ft (1.22 m) wide by 5/8 in. (16 mm) thick, screw-attached to furring channels.

Max diam of opening is 1-1/4 in. (32 mm). 1.1 Chase Wall — (Optional, Not Shown) — The through penetrants (Item No. 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum board chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance

Directory and shall include the following construction features: A. Studs — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs. B. Sole Plate — Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly

C. Top Plate — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 1-1/2 in. (38 mm) D. **Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

2. Cables — One cable to be installed eccentrically or concentrically in opening with annular space between the cable and the periphery of the opening of min 0 in. (0 mm, point contact) to max 1-1/4 in. (32 mm). Cable to be rigidly supported on both sides of Floor-Ceiling assembly. The following types of cables may be used. A. Max seven conductor No. 12 AWG (or smaller) power/control cables with polyvinyl chloride insulation and jacket materials.

B. Max 100 pair No. 22 AWG (or smaller) telecommunication cables with polyvinyl chloride insulation and iacket materials. C. Max four conductor with ground No. 2/0 AWG (or smaller) aluminum SER cables with polyvinyl chloride

insulation and jacket materials. 2A. Through Penetrating Product* — Max one through-penetrating product to be installed eccentrically or concentrically in opening with annular space between the through-penetrating product and the periphery of the opening of min 0 in. (0 mm, point contact) to max 1-1/4 in. (32 mm). Through-penetrating product to be rigidly supported on both sides of floor or wall assembly. The following types of through-penetrating products may be

A. Max four copper conductors No. 2/0 AWG (or smaller) aluminum or steel Armored Cable# or Metal-Clad

AFC CABLE SYSTEMS INC B. Two or more twisted copper conductor No. 6 AWG (or smaller) **Power Limited Circuit Cable+** with or

without a jacket under a metal armor. AFC CABLE SYSTEMS INC C. Two or more twisted copper conductor No. 10 AWG (or smaller) Power Limited Fire Alarm Cable+ with

without a jacket under a metal armor. AFC CABLE SYSTEMS INC D. Two or more twisted copper conductor No. 12 AWG (or smaller) Non Power Limited Fire Alarm Cable+

with or without a jacket under a metal armor. AFC CABLE SYSTEMS INC 3. Fill, Void or Cavity Materials* — Caulk, Sealant or Putty — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with bottom surface of ceiling or top plate. An additional min 1/4 in. (6

mm) crown of fill material applied to perimeter of penetrant at its egress from the top of flooring and underside of ceiling or from top of sole plate and underside of top plate. 3M COMPANY — CP 25WB+ caulk, MP+ Stix putty or FB-3000 WT sealant * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2011-08-18

+Bearing the UL Listing Mark

REVISION HISTORY Date Description FUGLEBERG KOCH

PERMIT REVIEW STAMP

ISSUE HISTORY

11/22/19 SCHEMATIC DESIGN

3 02/28/20 PERMIT REVIEW SET

12/06/19 DESIGN DEVELOPMENT

Date

2555 Temple Trail. Winter Park. FL 32789 (407) 629-0595 www. fuglebergkoch.com

THE ROBERT 09/10/201 FT. MYERS, FL

IL REFERENCE DIRECTORY - FLOOR PENETRATIONS

A0.36

F Ratings — 1 & 2 Hr. (See Item 1B) T Rating — 1/2 Hr. 1B 5 5 SECTION A-A

System No. W-L-8011

December 10, 2008

1. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. O.C. with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. O.C.

B. **Gypsum Board*** — 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 3-1/2 in.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrant** — A max of two pipes or tubing to be installed within the opening. Of the two pipes, or tubing only one of the pipes or tubing shall have a nom diam greater than 1/2 in. The annular space between

tubing, only one of the pipes or tubing shall have a nom diam greater than 1/2 in. The annular space between pipes or tubing and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. Pipes or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

A. Steel Pipe — Nom 1 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.

C. Copper Tubing — Nom 1 in. diam (or smaller) Type L (or heavier) copper tubing.

D. Copper Pipe — Nom 1 in. diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation — Plastics+ — Nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on a max of one pipe or tubing. The annular space between penetrating item and periphery of opening shall be min 1/2 into max 3/4 in. The space

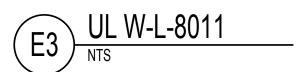
between pipes or tubing shall be 0 in. (point contact)
See **Plastics+** (QMFZ2) category in the Recognized Component Directory for names for manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

4. **Cables** — One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials. Cable to be spaced a min 0 in. (point contact) to max 1/2 in. from the other penetrants. The space between the cable and the periphery of the opening shall be a min 0 in. (point contact) to max 1/2 in. Cable to be rigidly supported on both sides of wall assembly.

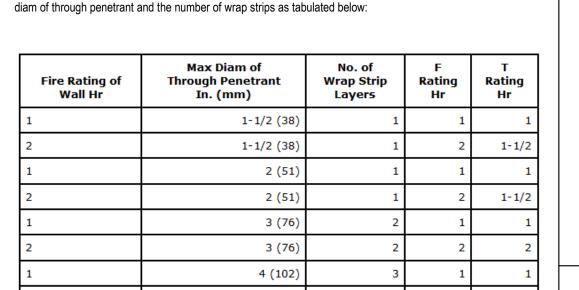
5. **Fill, Void or Cavity Material*** — **Sealant** — Min 5/8 in.thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be to be forced into intersties within groups of penetrating items to max extent possible and installed such that a min 1/4 in. thick crown is formed around the penetrating items and lapping 1/4 in. beyond the periphery of the opening.

SPECIFIED TECHNOLOGIES INC — SpecSeal Series SSS Sealant or SpecSeal LCI Sealant +Bearing the UL Recognized Component Mark
*Bearing the UL Classification Mark

Last Updated on 2008-12-10



B. **Iron Pipe** — Nom 1 in. diam (or smaller) cast or ductile iron pipe.



System No. W-L-2059

November 26, 2012

F Ratings — 1 and 2 Hr (See Items 2 and 3)

T Ratings — 3/4, 1, 1-1/2 and 2 Hr (See Items 2 and 3)

L Rating At Ambient — 1 CFM/sq ft

1. Wall Assembly — The 1 or 2 h fire rated gypsum board/stud wall assembly shall be constructed of the

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of

nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm)

board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the

B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum

individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5 in.

A. Polyvinyl Chloride (PVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 80 solid or cellular

core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. When

Schedule 80 PVC pipe is used, the F and T Ratings are 1 hr. When Scheduled 80 PVC pipe is used in closed (process or supply) piping systems, the F and T Ratings are equal to the assembly rating of the

B. Rigid Nonmetallic Conduit+ — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 80 PVC conduit

C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 CPVC

foamed core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

G. Fiberglass Reinforced Pipe (FRP) Pipe — Nom 4 in. (102 mm) diam (or smaller) glass fiber reinforced

thermosetting resin pipe for use in closed (process or control) or vented (drain, waste or vent) piping systems.

A. Fill, Void or Cavity Material* — Sealant — Fill material forced into annular space to max extent possible.

material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips or nom 1/4 in. (6 mm) thick

intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. (38 mm) wide strips. The layers

of wrap strips are individually wrapped around the through-penetrant with ends butted and held in place with

Except as noted in Item 2, the F and T Rating of the firestop system is dependent upon the fire rating of wall,

SPECIFIED TECHNOLOGIES INC — SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI

B. Fill, Void or Cavity Material — Wrap Strip — Nom 1/8 or 3/16 in. (3.2 or 4.8 mm) thick intumescent

H. High Density Polyethylene (HDPE) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 HDPE pipe

E. Fire Retardant Polypropylene (FRPP) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 FRPP

F. Polyvinylidene Fluoride (PVDF) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVDF pipe for

D. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or

installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70). When Schedule 80 PVC

2. **Through-Penetrants** — One nonmetallic pipe or conduit to be centered within the firestop system. The

annular space shall be max 1/4 in. (6 mm). Pipe or conduit to be rigidly supported on both sides of the wall

in the UL Fire Resistance Directory and shall include the following construction features:

assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. **Firestop System** — The firestop system shall consist of the following:

Caulk shall be installed flush with both surfaces of wall assembly

Sealant, Pensil 300 Sealant or SpecSeal Series SIL300 Sealant

masking tape. Butted ends in successive layers shall be aligned.

wide and spaced max 24 in. (610 mm) OC.

wall in which it is installed.

conduit is used, the F and T Ratings are 1 hr.

When FRP pipe is used, T Rating is 3/4 hr.

*Bearing the UL Classification Mark

for use in closed (process or supply) piping systems

pipe for use in closed (process or supply) piping systems.

materials and in the manner described in the individual U300, U400 and V400 Series Wall and Partition Designs

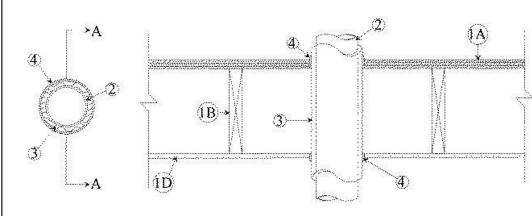
Section A-A

SPECIFIED TECHNOLOGIES INC — SpecSeal BLU Wrap Strip, SpecSeal BLU2 Wrap Strip or SpecSeal RED C. Steel Collar — Collar fabricated from coils of precut 0.016 in. (0.4 mm) thick (30 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be min 1-1/2 in. (38 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs for securement to the concrete floor or wall. Retainer tabs, 3/4 in. (19 mm) wide tapering down to 1/4 in. (6 mm) wide and located opposite the anchor tabs, are folded 90 degree toward pipe surface to maintain the annular space around the pipe and to retain the wrap strips. Steel collar wrapped around wrap strips and pipe with a 1 in. (25 mm) wide overlap along its perimeter joint and secured together by means of a min 1/2 in. (13 mm) wide by 0.028 in. (0.7 mm) thick stainless steel hose clamp installed at mid-depth of the steel collar. As an alternate to the steel hose clamp, the steel collar may be secured together by means of three No. 8 by 1/4 in. (6 mm) long steel sheet metal screws when more than one layer of wrap strip is used. Wrap strip/collar assembly is slid along the through-penetrant until abuts the surface of the wall. Collar secured to wall by 1/8 in. (3.2 mm) diam by 1-3/4 in. (44 mm) long steel molly bolts in conjunction with 1-1/4 in. (32 mm) diam steel fender washers. The number of molly bolts used is dependent upon the nom diam of the through penetrant. Two molly bolts, symmetrically located, are required for nom 1-1/2 in. (38 mm) and 2 in. (51 mm) diam through penetrants. Three molly bolts, symmetrically located, are required for nom 2-1/2 in. (64 mm) and 3 in. (76 mm) diam through penetrants. Four molly bolts, symmetrically located, are required for nom 3-1/2 in. (89 mm) and 4 in. (102 mm) diam through penetrants. Steel collars are installed on each side of wall. D. Firestop Device* — (Optional, Not Shown) - As an alternate to Item 3B and 3C, galv steel collar lined with an intumescent material sized to fit the specific diam of the through-penetrant. Device shall be installed around through-penetrant in accordance with accompanying installation instructions. Device incorporates anchor tabs for securement to each surface of wall assembly by means of 1/8 in. (3 mm) diam by 1-3/4 in. (45 mm) long steel molly bolts in conjunction with 1/4 in. (6 mm) diam by 1-1/2 in. (38 mm) diam steel fender washers. SPECIFIED TECHNOLOGIES INC — SpecSeal Firestop Collar, SpecSeal LCC Collar or SpecSeal SSC Collar . When SpecSeal LCC Collar or SpecSeal SSC Collar are used, the max annular space shall be 1/8 in. (3 mm) for max 2-1/2 in. (64 mm) diam pipe and shall be max 1/4 in. (6 mm) for pipe larger than 2-1/2 in. (64 mm) diam.

Last Updated on 2012-11-26

December 10, 2001 F Rating — 1 Hr T Ratings — 3/4 & 1 Hr

System No. F-C-5007



1. **Floor-Ceiling Assembly** — The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L512, L513 or L514 in the UL Fire Resistance Directory, and shall include the following construction features:

SECTION A-A

A. Flooring System — Lumber or min 1/2 in. plywood subfloor with lumber or min 3/4 in. plywood finish floor, or Floor-Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening is 6 in. B. Wood Joists — Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped.

C. Furring Channels — (Not Shown) — Resilient galv steel furring installed perpendicular to wood joists between wallboard (Item 1D) and wood joists and spaced max 24 in. OC.

D. Gypsum Board* — Nom 4 ft wide by 1/2 or 5/8 in. thick as specified in the individual Floor-Ceiling Design.

Gypsum board attached to wood joists and furring channels as specified in the individual Floor-Ceiling Design. Max

diam of opening is 6 in.

2. **Through Penetrants** — One metallic pipe or tubing installed approximately midway between wood joist and centered within the firestop system. Diam of openings hole-sawed through flooring system and through gypsum board ceiling to be nom 1/4 in. larger than the outside diam of through penetrant. Pipe or tubing to be rigidly supported on both sizes of floor-ceiling assembly. The following types and sizes of metallic pipes or tubing may be

A. **Steel Pipe** — Nom 4 in. diam (or smaller) Schedule 5 (or heavier) steel pipe.

B. **Copper Pipe** — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.

C. **Copper Tubing** — Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing.

The T Rating of the firestop system is dependent upon the type of penetrant used as tabulated below:

Penetrant Type

T Rating Hr

Steel Pipe
1
Copper Pipe
3/4
Copper Tubing
3/4

3. Pipe Covering* — The following types of pipe coverings may be used:

A. Pipe and Equipment Covering — Materials* — Nom 1/2 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. Diam of openings hole-sawed through flooring system and through gypsum board ceiling to be nom 1/4 in.

larger than the outside diam of through-penetrant.

See **Pipe and Equipment Covering** — **Materials** (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

B. **Pipe Covering Materials*** — Nom 1/2 in. thick unfaced mineral fiber pipe insulation sized to the outside diam of pipe or tube. Pipe insulation secured with min 8 AWG steel wire spaced max 12 in. OC. Diam of openings hole-sawed through flooring system and through gypsum board ceiling to be nom 1/4 in. larger than the outside diam of through-penetrant.

IIG MINWOOL L L C — High Temperature Pipe Insulation 1200, High Temperature Pipe Insulation BWT or High Temperature Pipe Insulation Thermaloc

C. Sheathing Material* — (Not Shown) — Used in conjunction with Item 3B. Foil-scrim-kraft or all service jacket material shall be wrapped around the outer circumference of the pipe insulation (Item 3B) with the kraft side

exposed. Longitudinal joints and transverse joints sealed with metal fasteners or with butt tape.

See **Sheathing Materials** (BVDV) category in the Building Materials Directory for names of manufacturers. Any sheathing material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

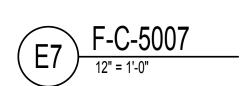
4 **Fill World or Courty Materials** Coults On top of assembly a min 1 1/8 in don't be fill metarial applied within

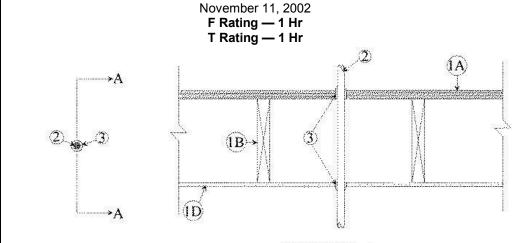
Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

4. Fill, Void or Cavity Material* — Caulk — On top of assembly, a min 1-1/8 in. depth of fill material applied within annulus on top surface of floor. On bottom of assembly, a min 1/2 in. depth of fill material applied within annulus on bottom surface of ceiling. Additional fill material to be installed such that a min 1/2 in. thick crown is formed around the through penetrant on both sides of floor-ceiling assembly.

A/D FIRE PROTECTION SYSTEMS INC — A/D FireBarrier Silicone
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2001-12-10





System No. F-C-3014

SECTION A-A

 Floor-Ceiling Assembly — The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L512, L513 or L514 in the UL Fire Resistance Directory, and shall include the following construction features:
 A. Flooring System — Lumber or min 1/2 in. plywood subfloor with lumber or min 3/4 in. plywood

finish floor, or Floor-Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of

opening is 2 in.

B. **Wood Joists** — Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required with ends firestopped.

C. Furring Channels — (Not Shown) — Resilient galv steel furring installed perpendicular to wood joists between Gypsum board (Item 1D) and wood joists and spaced max 24 in. OC.

D. Gypsum Board* — Nom 4 ft wide by 1/2 or 5/8 in. thick as specified in the individual Floor-Ceiling Design. Gypsum board attached to wood joists and furring channels as specified in the individual Floor-Ceiling Design. Max diam of opening is 2 in.

2. Cables — One cable to be installed approximately midway between wood joist and centered within the firestop system. Diam of openings hole-sawed through flooring system and through gypsum wallboard ceiling to be nom 1/4 in. larger than the outside diam of through penetrant. Cable to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of copper conductor cables may be used:

A. 1/C-500 kcmil (or smaller) cable with cross-linked polyethylene insulation and jacket.
B. Max 100 pair No. 24 AWG cable (or smaller) with polyvinyl chloride (PVC) insulation and jacket.
C. Type RG/U coaxial cable with fluorinated ethylene propylene insulation and jacket.
D. Max 2/C — No. 12 AWG (or smaller) cable with (PVC) insulation and jacket.
E. Max 3/C with ground — No. 10 AWG (or smaller) Type NM nonmetallic sheathed cable.
F. Max 3/C — No. 4/0 AWG (or smaller) aluminum conductor service entrance cable with PVC

insulation and jacket.

2A. **Cables (Not Shown)** — As an alternate to Item 2, a max of seven cables bundled together and centered within the firestop system. Diam of openings hole-sawed through flooring system and through gypsum board ceiling to be nom 1/4 in. larger than the outside diam of cable bundle. Cables to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of copper

conductor cables may be used:

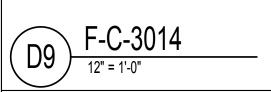
A. Max 4 pair No. 24 AWG cable (or smaller) with polyvinyl chloride (PVC) insulation and jacket.

B. Type RG/U coaxial cable with fluorinated ethylene propylene insulation and jacket.

3. Fill, Void or Cavity Material* — Caulk — On top of assembly, a min 1-1/8 in. depth of fill material applied within annulus on top surface of floor. On bottom of assembly, a min 1/2 in. depth of fill material applied within annulus on bottom surface of ceiling. Fill material to be forced into interstices of cable bundle to max extent possible on both sides Additional fill material to be installed such that a min 1/2 in. thick crown is formed around the through penetrant on both sides of floor-ceiling assembly.

A/D FIRE PROTECTION SYSTEMS INC — A/D FireBarrier Silicone

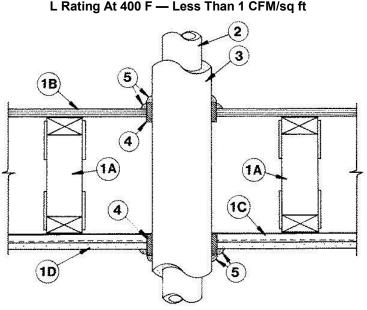
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Last Updated on 2002-11-11

System No. F-C-5002

May 19, 2005
F Rating — 1 Hr
T Rating — 1 Hr
L Rating At Ambient — 7 CFM/sq ft
L Rating At 400 F — Less Than 1 CFM/sq ft



Floor Assembly — The fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500-Series Designs in the UL Fire Resistance Directory and shall include the following construction features:
 A. Trusses — Min 12 in. (305 mm) deep parallel chord trusses fabricated from nom 2 by 4 in. (51 by 102 mm)

lumber in conjunction with galv steel truss plates or **Structural Wood Members*** with bridging as required.

B. **Flooring** — Nom 3/4 in. (19 mm) thick plywood flooring with or without **Floor Topping Mixture***. Max diam of hole-sawed opening in flooring is 7 in. (178 mm).

C. **Furring Channels** — Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of

C. Furring Channels — Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of trusses.

D. **Gypsum Board*** — Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick, screw-attached to furring channels. Max diam of hole-sawed opening in gypsum board ceiling is 7 in. (178 mm).

2. **Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe or nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper pipe. Pipe to be installed approximately midway between trusses and centered in circular cutouts in flooring (Item 1B) and gypsum board ceiling (Item 1D). Diam of circular cutouts in flooring and gypsum wallboard ceiling to be 1/2 to 3/4 in. (13 to 19 mm) larger than outside diam of pipe covering (Item 3) or tube insulation (Item 3A) on pipe. Pipe to be rigidly supported on both sides of Floor-Ceiling assembly.

3. **Pipe Covering*** — Nom 1 in. (25 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt strip tape supplied

See **Pipe and Equipment Covering** — **Materials*** (BRGU) category in Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

3A. **Tube Insulation** — **Plastics+** — As an alternate to the glass fiber pipe covering (Item 3), nom 1/2 or 5/8 in. (13 or 16 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing with skin may be used.

See **Plastics (QMFZ2)** category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

4. **Fill, Void or Cavity Materials*** — **Wrap Strip** — Nom 1/4 in. (6 mm) thick intumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. (51 mm) wide strips. Nom 2 in. (51 mm) wide strip tightly wrapped around pipe covering or tube insulation (foil side exposed), secured with two steel tie wires and slid into hole-sawed opening in flooring (Item 1B) and in gypsum wallboard ceiling (Item 1D). Bottom edge of wrap strip to project 9/16 to 11/16 in. (14 to 18 mm) below bottom surface of flooring and below bottom (ceiling) surface of gypsum wallboard.

3M COMPANY — Types FS-195, FS-195+
5. Fill, Void or Cavity Materials* — Caulk or Sealant — Nom 1/4 in. (6 mm) thickness of caulk to be applied to the exposed edge of the wrap strip layer (top of flooring and bottom of gypsum board ceiling). Generous application of caulk to be applied to fill all gaps at the wrap strip/flooring and wrap strip/gypsum board ceiling interfaces.

3M COMPANY — CP 25WB+, IC 15WB+, FireDam 150+ caulk or FB-3000 WT sealant * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

02

Last Updated on 2005-05-19

1 11/22/19 SCHEMATIC DESIGN
2 12/06/19 DESIGN DEVELOPMENT
3 02/28/20 PERMIT REVIEW SET

REVISION HISTORY
No. Date Description

PERMIT REVIEW STAMP

ISSUE HISTORY

Date



2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com BR569

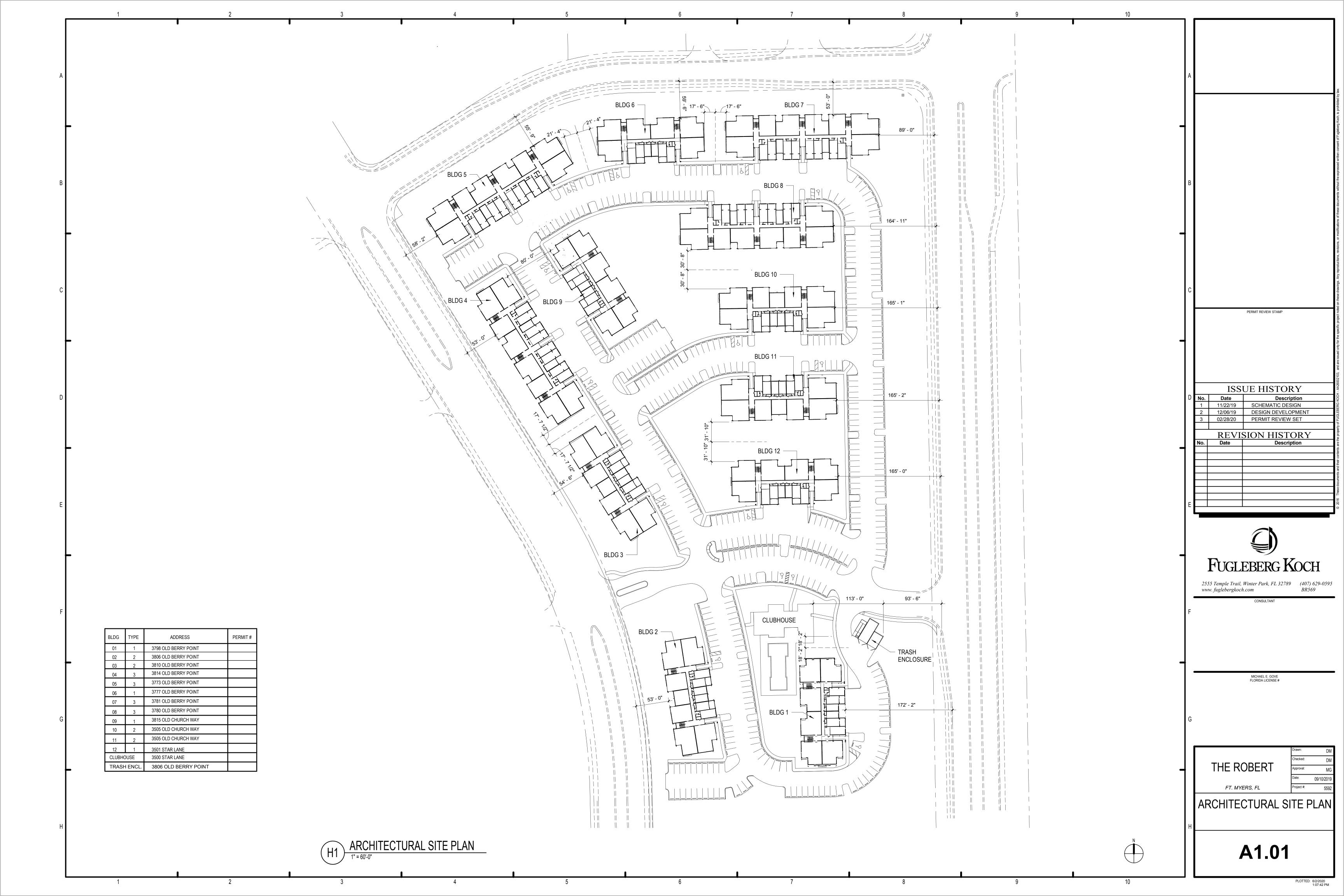
MICHAEL E. GOVE

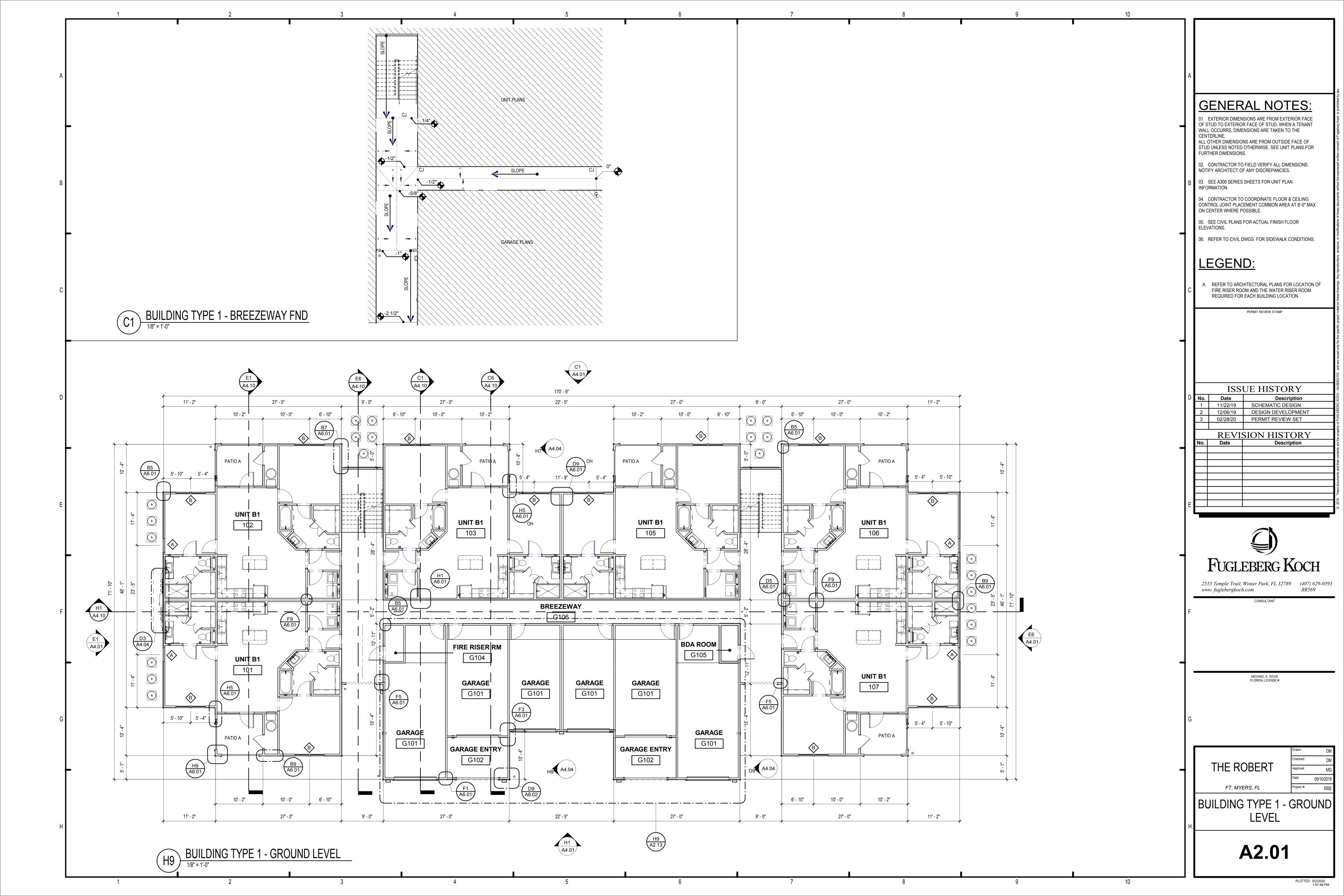
| Drawn: DM | Checked: DM | Checked: DM | Checked: DM | Date: 09/10/2019 | Project #: 559/2

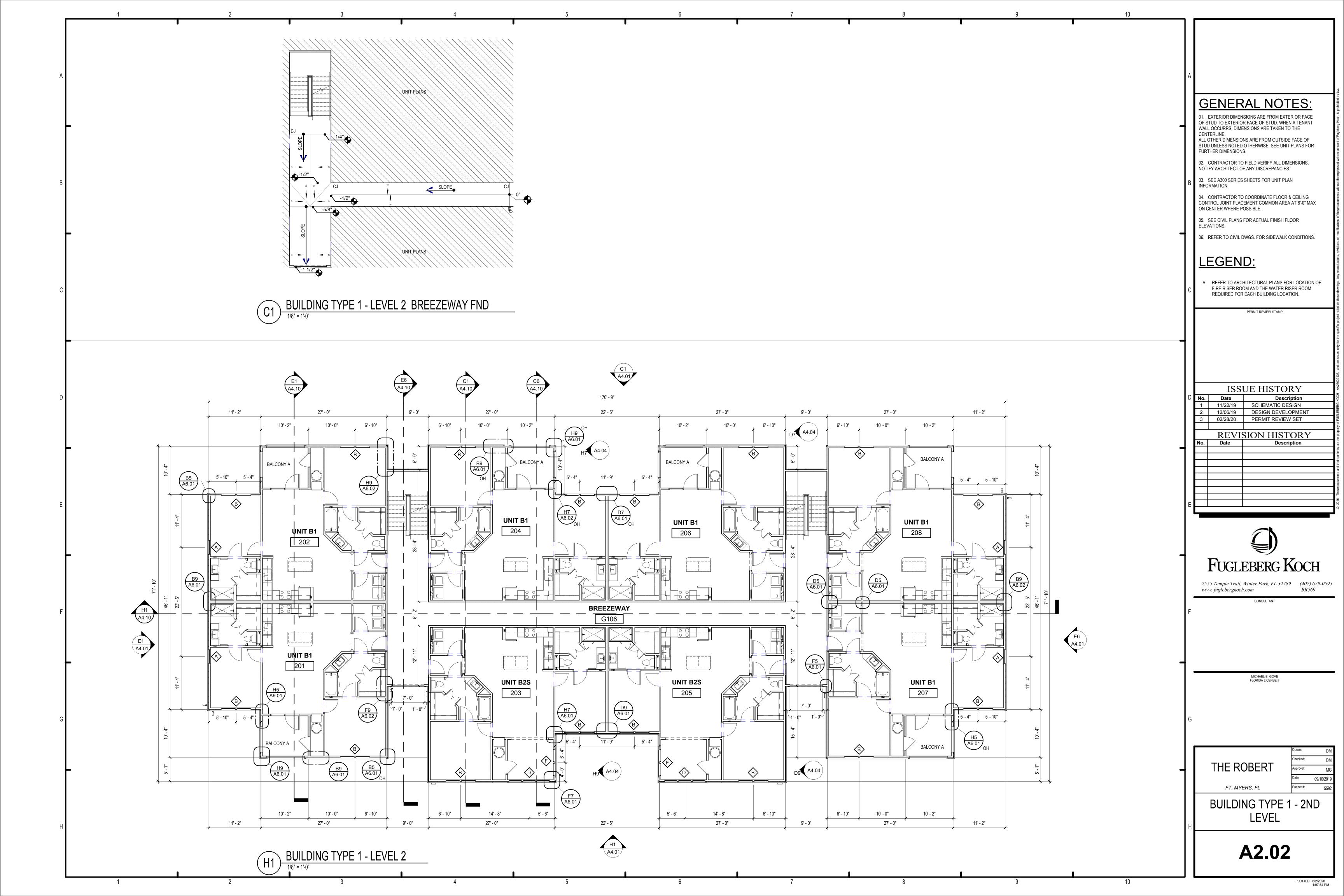
UL REFERENCE DIRECTORY
- PENETRATIONS

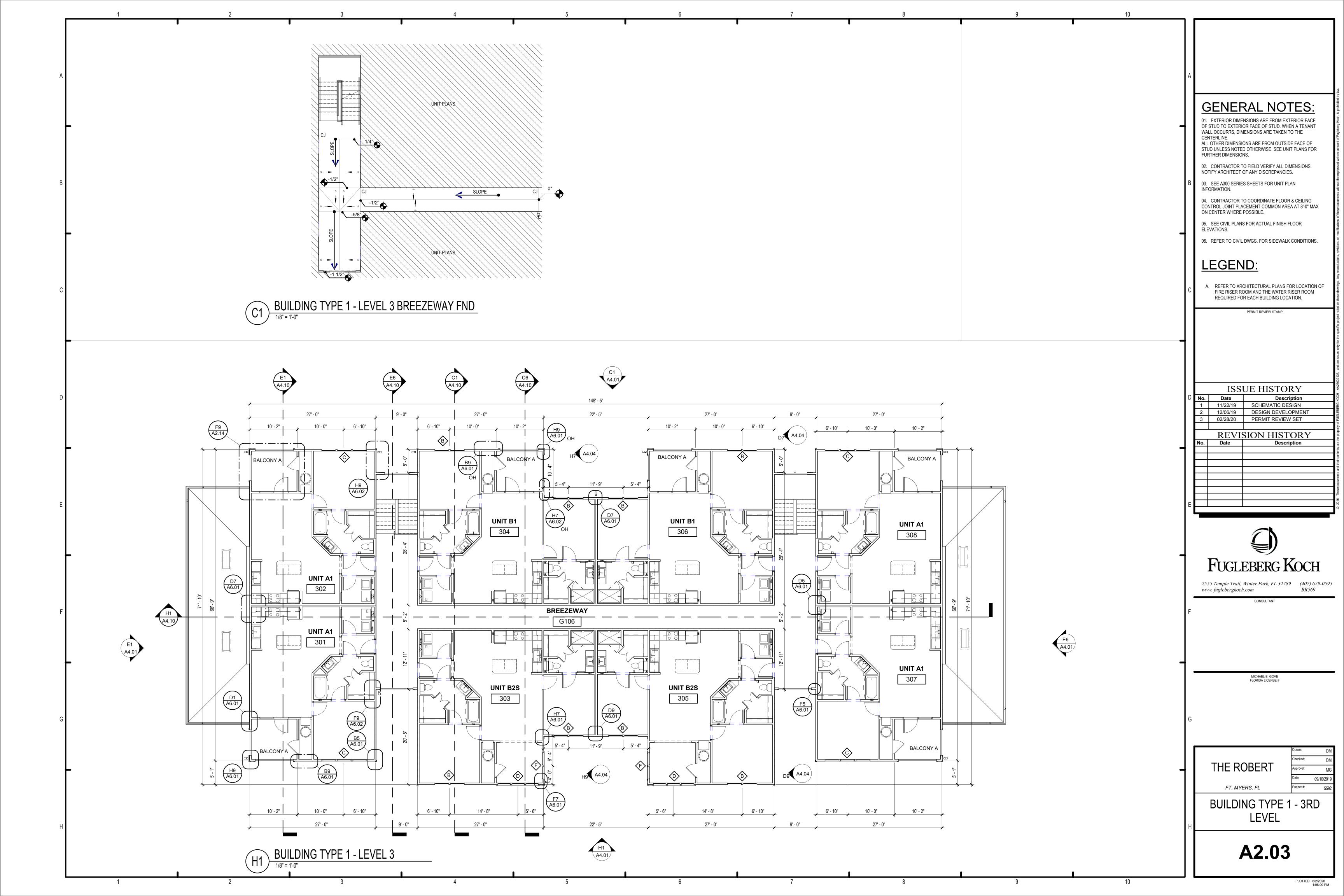
A0.37

PLOTTED: 6/2/2









ATTIC VENT CALCULATIONS - AREA 1A						
	REQUIRED	PROVIDED				
TOTAL ROOF AREA PER FBC 2017 (1/300) REQ. VENTILATED AREA	= 900 Sq.Ft. x 0.0033 2.97 Sq.Ft.					
TOTAL SOFFIT LIN. FT. OPENING NET VENTILATION		78 Lin.Ft x 0.03 Sq.Ft				
NET FREE AREA	1.49 Sq.Ft.	2.34 Sq.Ft				
TOTAL RIDGE VENT LIN. FT. OPENING NET VENTILATION		12 Lin.Ft x 0.125 Sq.Ft				
NET FREE AREA	1.49 Sq.Ft.	1.50 Sq.Ft				
TOTAL VENTILATED AREA	2.97 Sq.Ft.	3.84 Sq.Ft				

ATTIC VENT CALCULATIONS - AREA 1B							
	REQUIRED	PROVIDED					
TOTAL ROOF AREA PER FBC 2017 (1/300) REQ. VENTILATED AREA	= 1417 Sq.Ft. x 0.0033 4.68 Sq.Ft.						
TOTAL SOFFIT LIN. FT. OPENING NET VENTILATION + 10'-0" TAMYLN		75 Lin.Ft. x 0.03 Sq.Ft.					
NET FREE AREA	2.34 Sq.Ft.	2.25 Sq.Ft.					
TOTAL RIDGE VENT LIN. FT. OPENING NET VENTILATION		20 Lin.Ft. x 0.125 Sq.Ft.					
NET FREE AREA	2.34 Sq.Ft.	2.50 Sq.Ft.					
TOTAL VENTILATED AREA	4.68 Sq.Ft.	4.75 Sq.Ft.					

* TAMLYN ADDED ANOTHER .62 SQ. FT. IN FREE AIR SPACE.

,	VENTILATION SCHEDULE							
ROOF VENT	MFGR. & MODEL No.	FREE AREA / L.F.						
SOFFIT VENT AT EAVE	HARDIE SOFFIT PANEL	0.03 SQ. FT.						
SOFFIT VENT AT EAVE	TAMLYN VENTED SOFFIT	0.062 SQ. FT.						
RIDGE VENT	CERTAINTEED	0.125 SQ. FT.						
OFF RIDGE VENT	4'-0" OFF RIDGE SHINGLE "FLAMCO"	0.96 SQ. FT.						
	6'-0" OFF RIDGE SHINGLE "FLAMCO"	1.46 SQ. FT.						

ATTIC VENT CALCULATIONS - AREA 1C							
	REQUIRED	PROVIDED					
TOTAL ROOF AREA PER FBC 2017 (1/300) REQ. VENTILATED AREA	= 1514 Sq.Ft. x 0.0033 5.00 Sq.Ft.						
TOTAL SOFFIT LIN. FT. OPENING NET VENTILATION + 10'-0" TAMYLN		80 Lin.Ft. x 0.03 Sq.Ft.					
NET FREE AREA TOTAL RIDGE VENT LIN. FT. OPENING NET VENTILATION	2.50 Sq.Ft.	2.4 Sq.Ft. 20 Lin.Ft. x 0.125 Sq.Ft.					
NET FREE AREA	2.50 Sq.Ft.	2.50 Sq.Ft.					
TOTAL VENTILATED AREA	5.00 Sq.Ft.	4.90 Sq.Ft.					

TAMLYN ADDED ANOTHER .62 SQ. FT. IN FREE AIR SPACE.

ATTIC VENT CALCULATIONS - AREA 1D						
	REQUIRED	PROVIDED				
TOTAL ROOF AREA PER FBC 2017 (1/300) REQ. VENTILATED AREA	= 257 Sq.Ft. x 0.0033 0.85 Sq.Ft.					
TOTAL SOFFIT LIN. FT. OPENING NET VENTILATION		68 Lin.Ft x 0.03 Sq.Ft				
NET FREE AREA	0.42 Sq.Ft.	2.04 Sq.Ft				
TOTAL RIDGE VENT LIN. FT. OPENING NET VENTILATION 4'-0" OFF RIDGE VENT		1 Lin.F1 x 0.96 Sq.F1				
NET FREE AREA	0.42 Sq.Ft.	0.96 Sq.F				
TOTAL VENTILATED AREA	0.85 Sq.Ft.	3.00 Sq.F				

GENERAL NOTES:

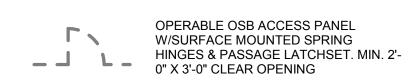
- PAINT ALL ROOF VENTS & PENETRATIONS TO MATCH ROOF SHINGLE COLOR
- 2. COORDINATE DOWNSPOUT DISCHARGE WITH CIVIL DRAWINGS. WHERE NOT TAKEN TO STORM, PROVIDE SPLASH BLOCK.
- 3. DOWNSPOUTS AND GUTTERS SHOWN ARE MIN.

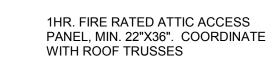
LEGEND:

/ AREA 1D

- AREA 1D

OSB DRAFTSTOPPING - TO UNDERSIDE OF ROOF DECK

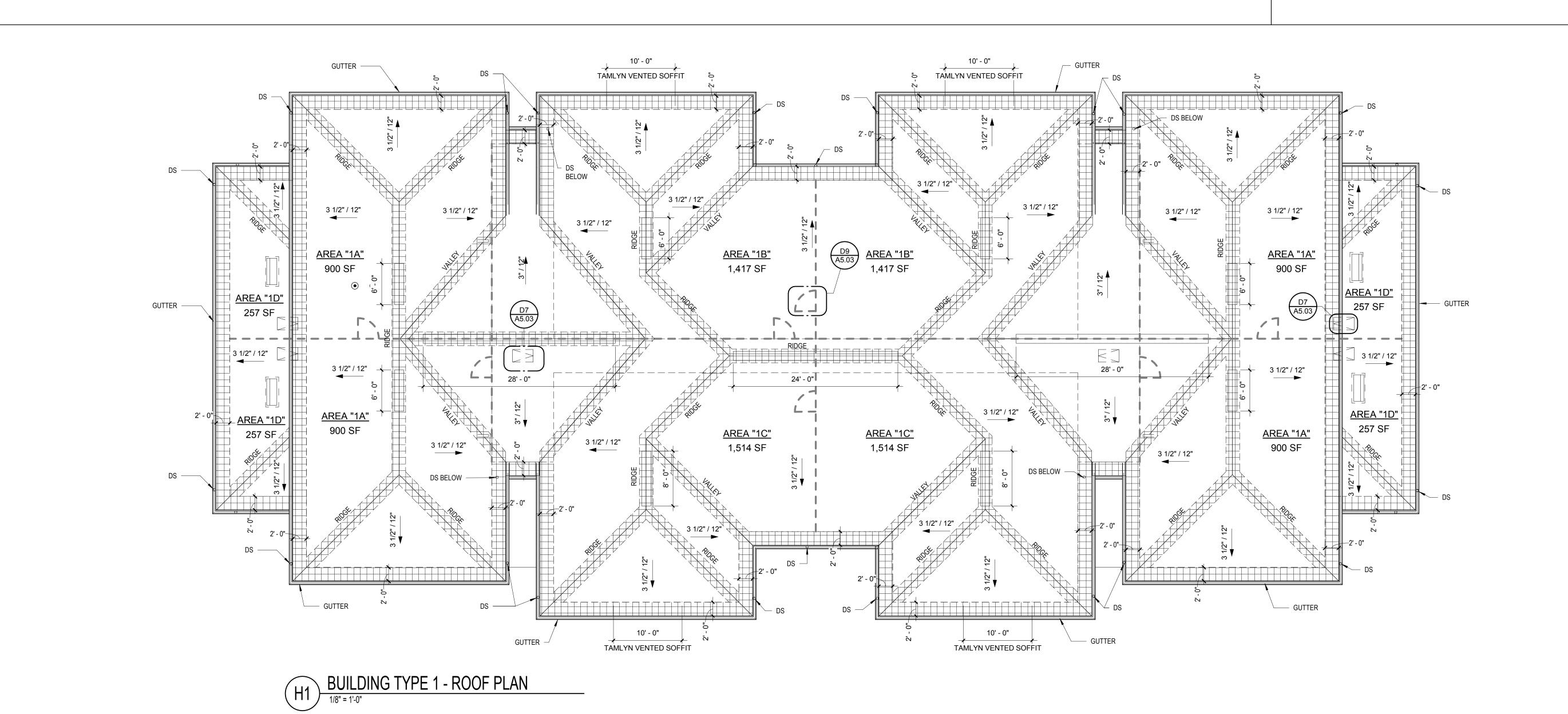








ROOF PLAN NOTES & LEGEND 1/8" = 1'-0"

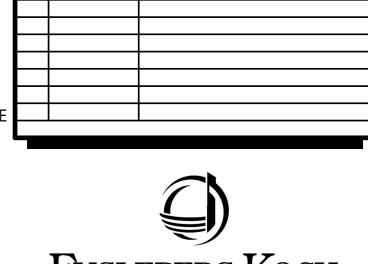


AREA 1A

DRAFTSTOP LEGEND - BLDG 1

AREA 1C

AREA 1A



PERMIT REVIEW STAMP

ISSUE HISTORY

REVISION HISTORY

Description

11/22/19 SCHEMATIC DESIGN 12/06/19 DESIGN DEVELOPMENT

3 02/28/20 PERMIT REVIEW SET

Date

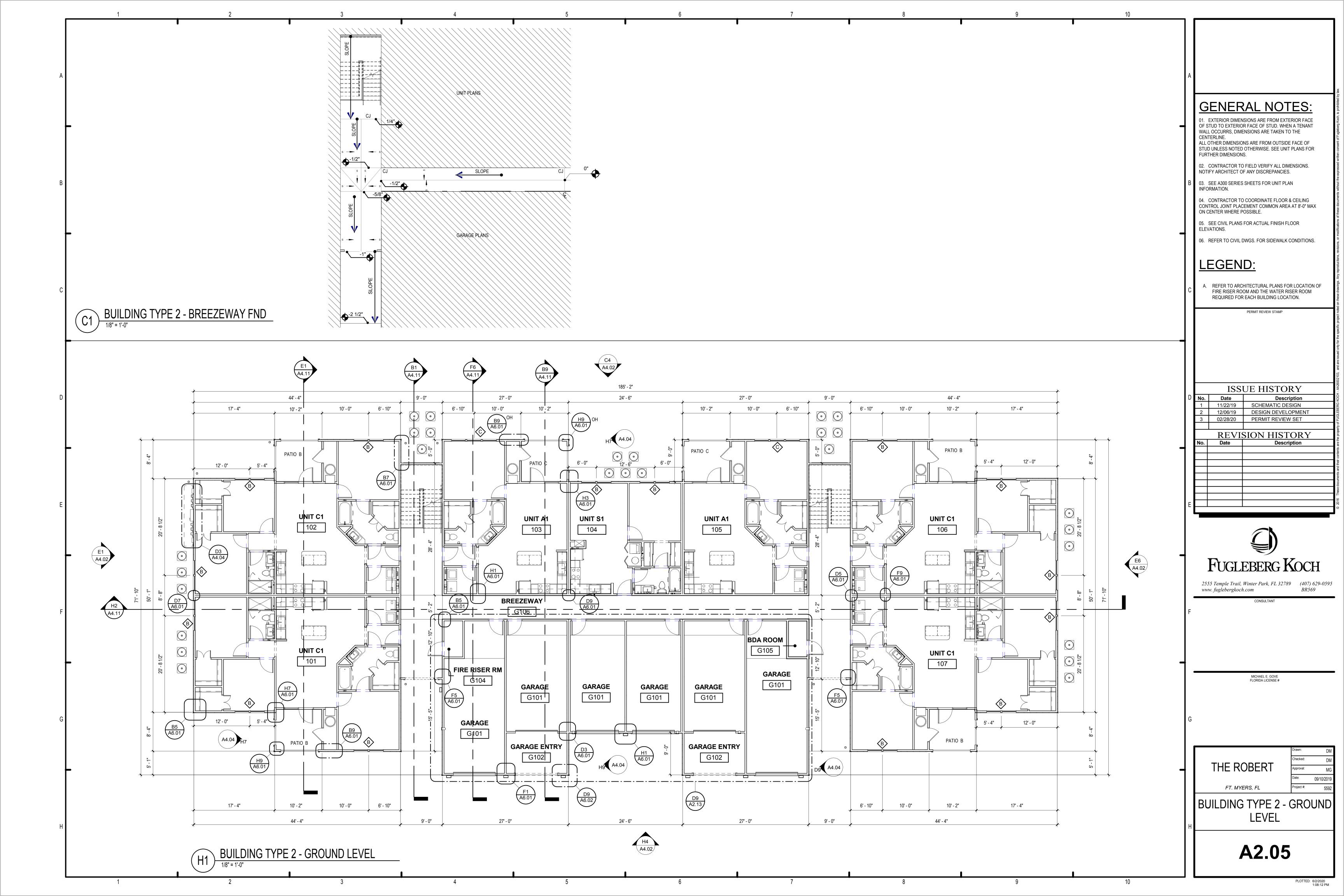
FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com BR569

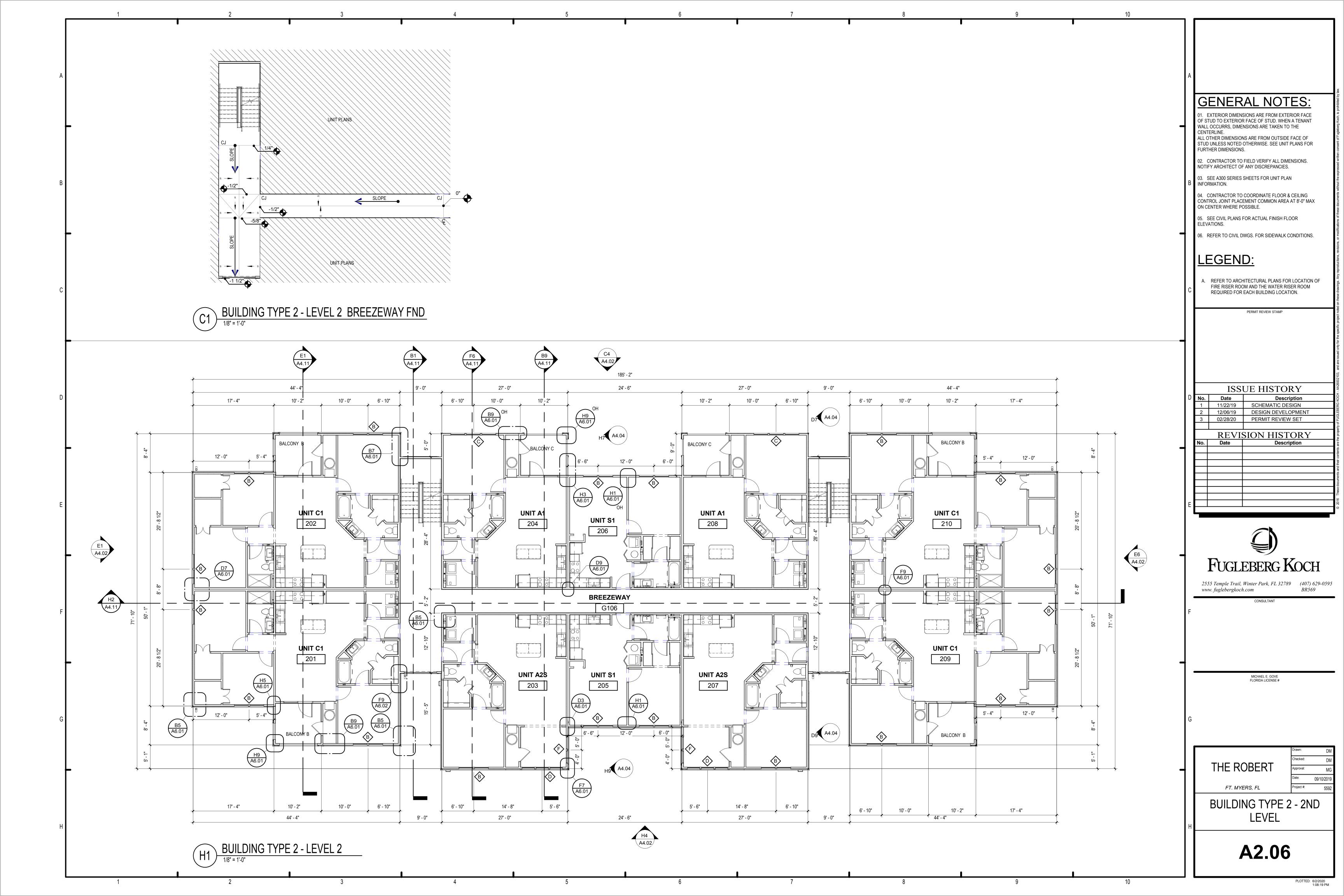
MICHAEL E. GOVE FLORIDA LICENSE #

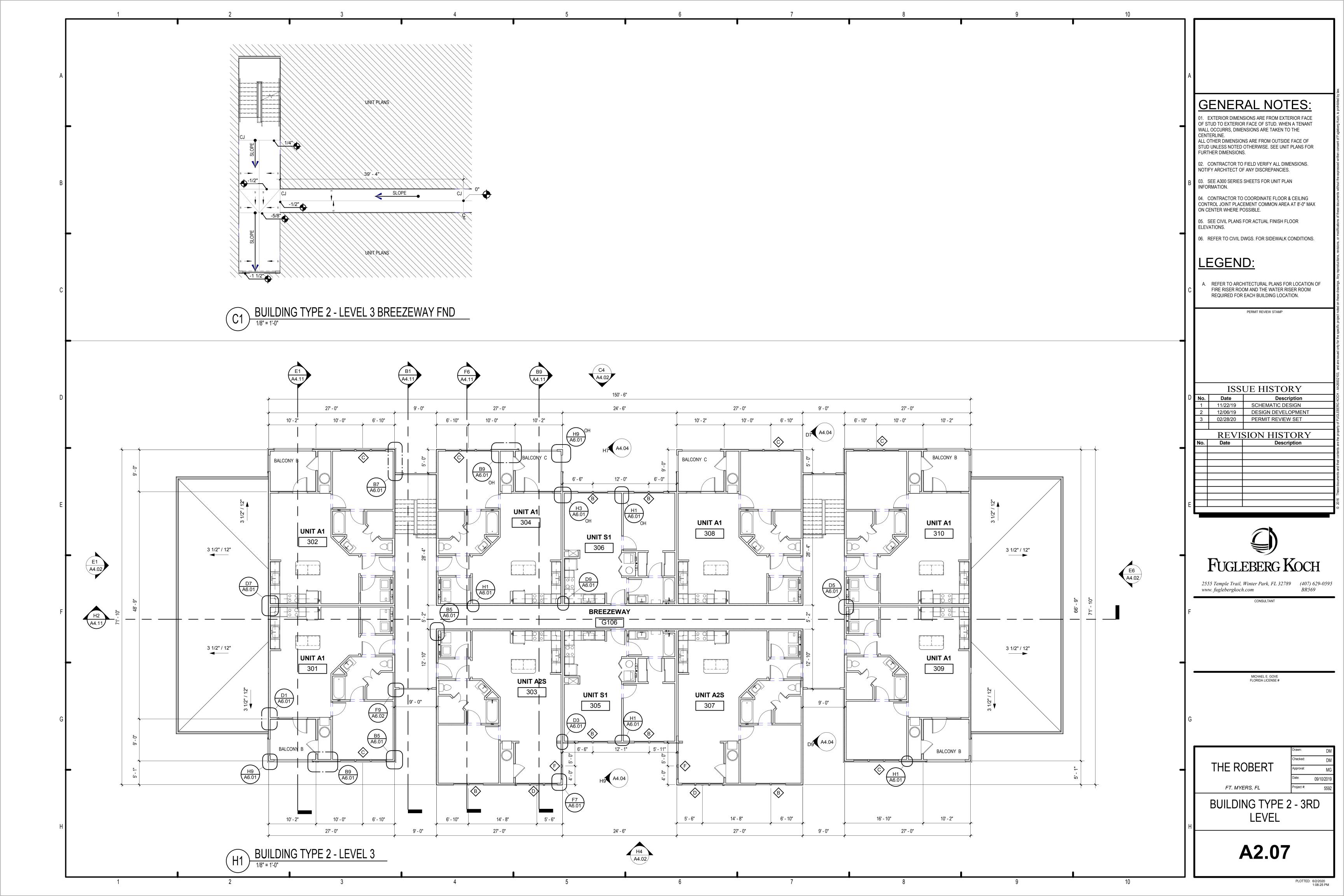
THE ROBERT FT. MYERS, FL

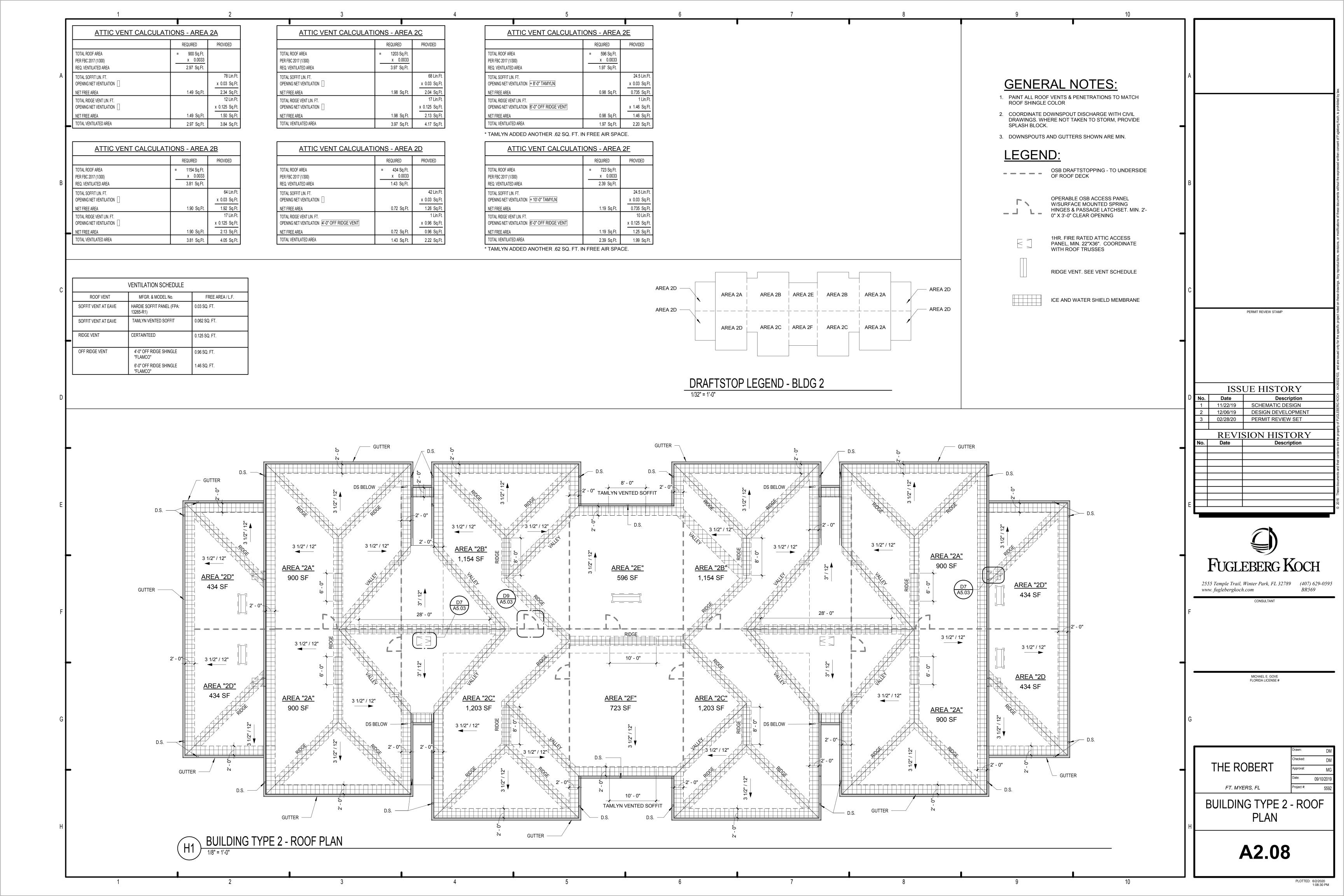
BUILDING TYPE 1 - ROOF PLAN

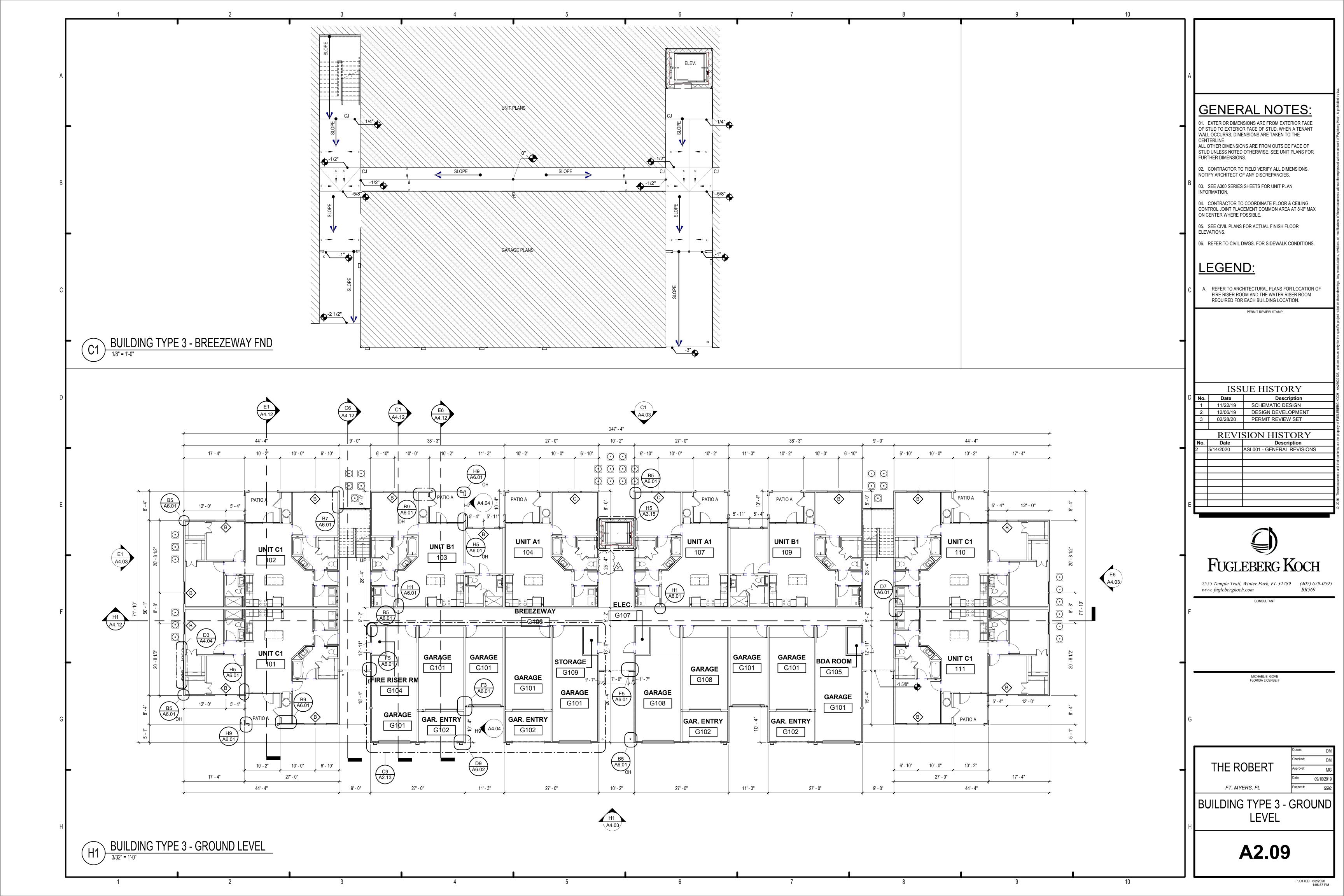
A2.04

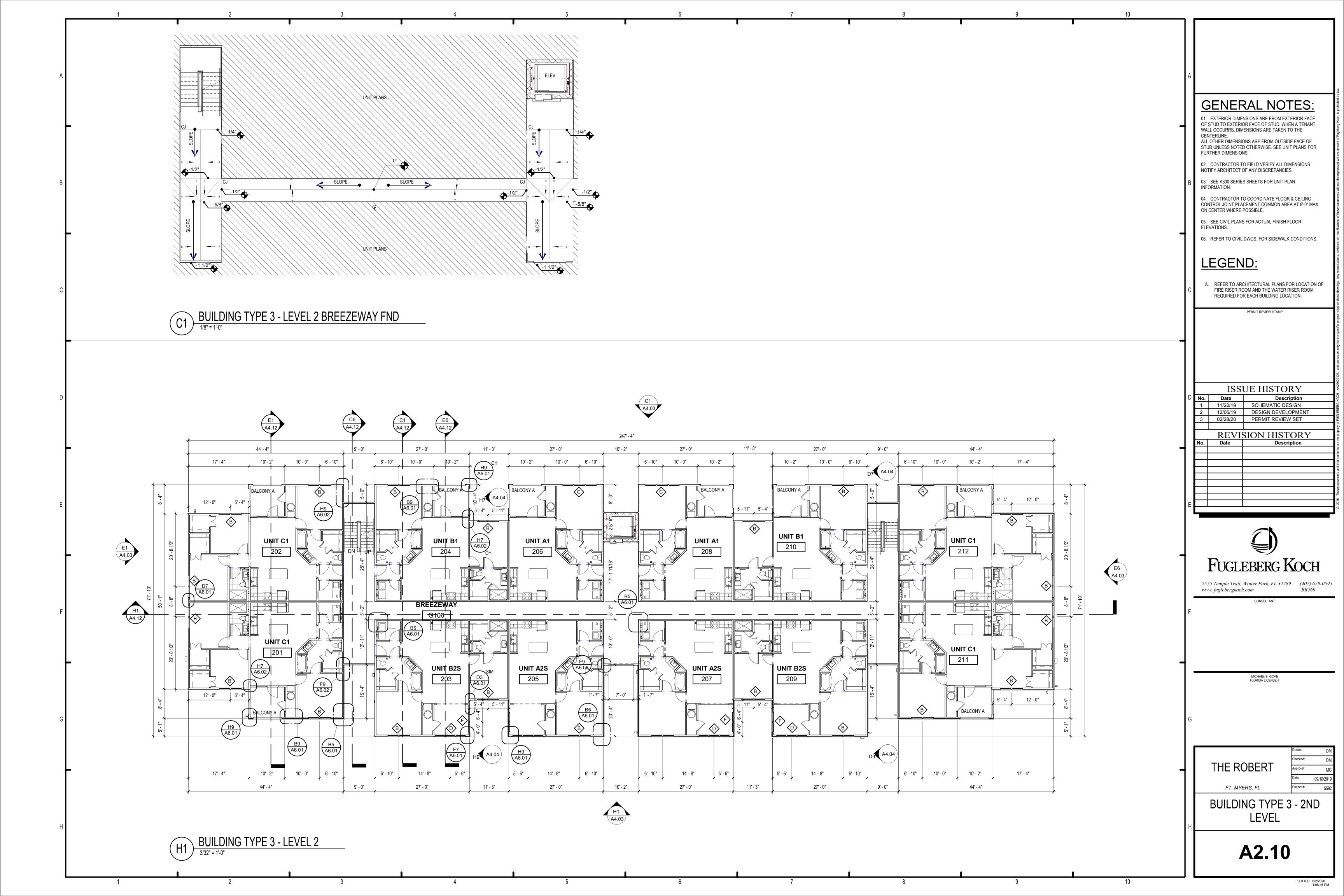


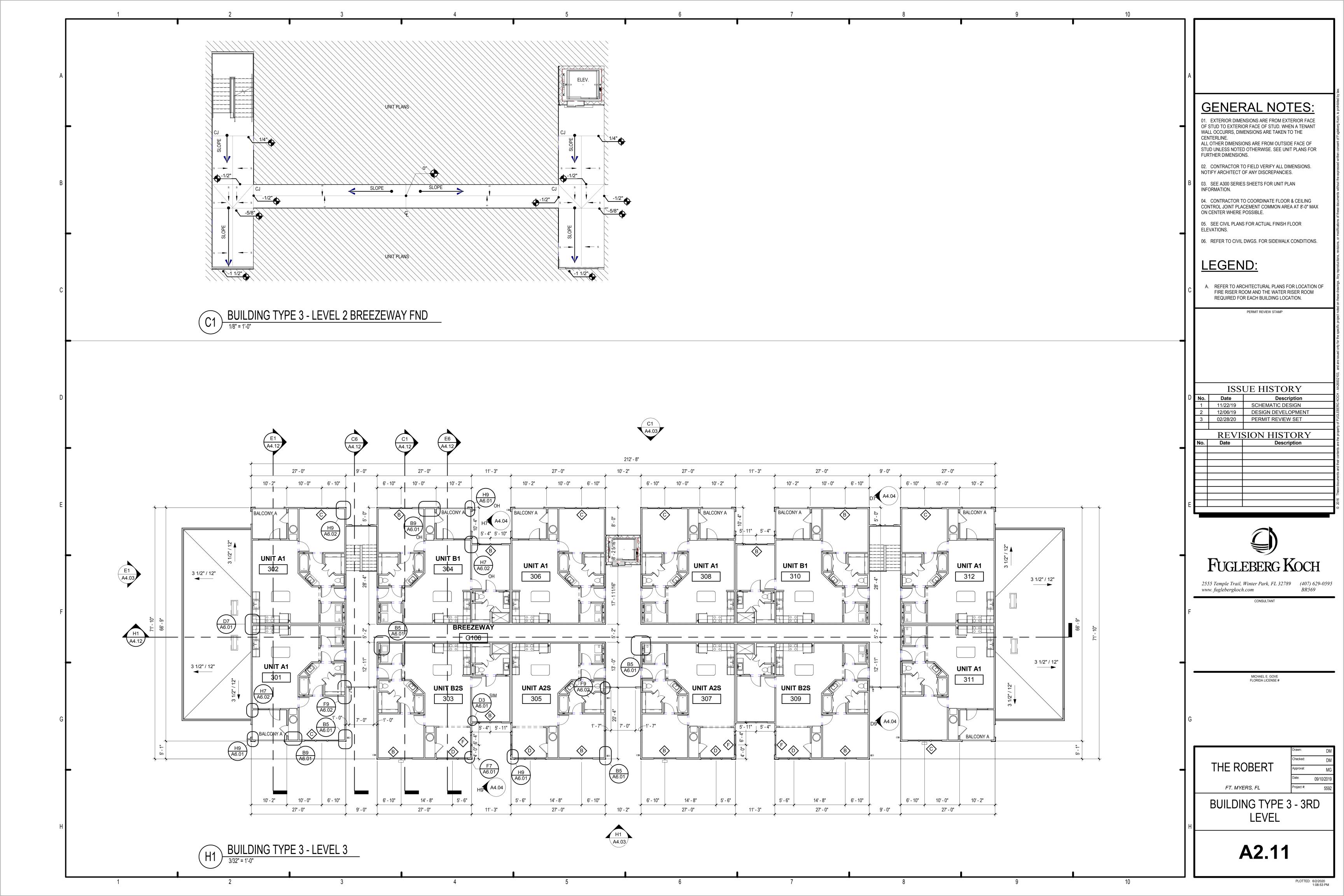


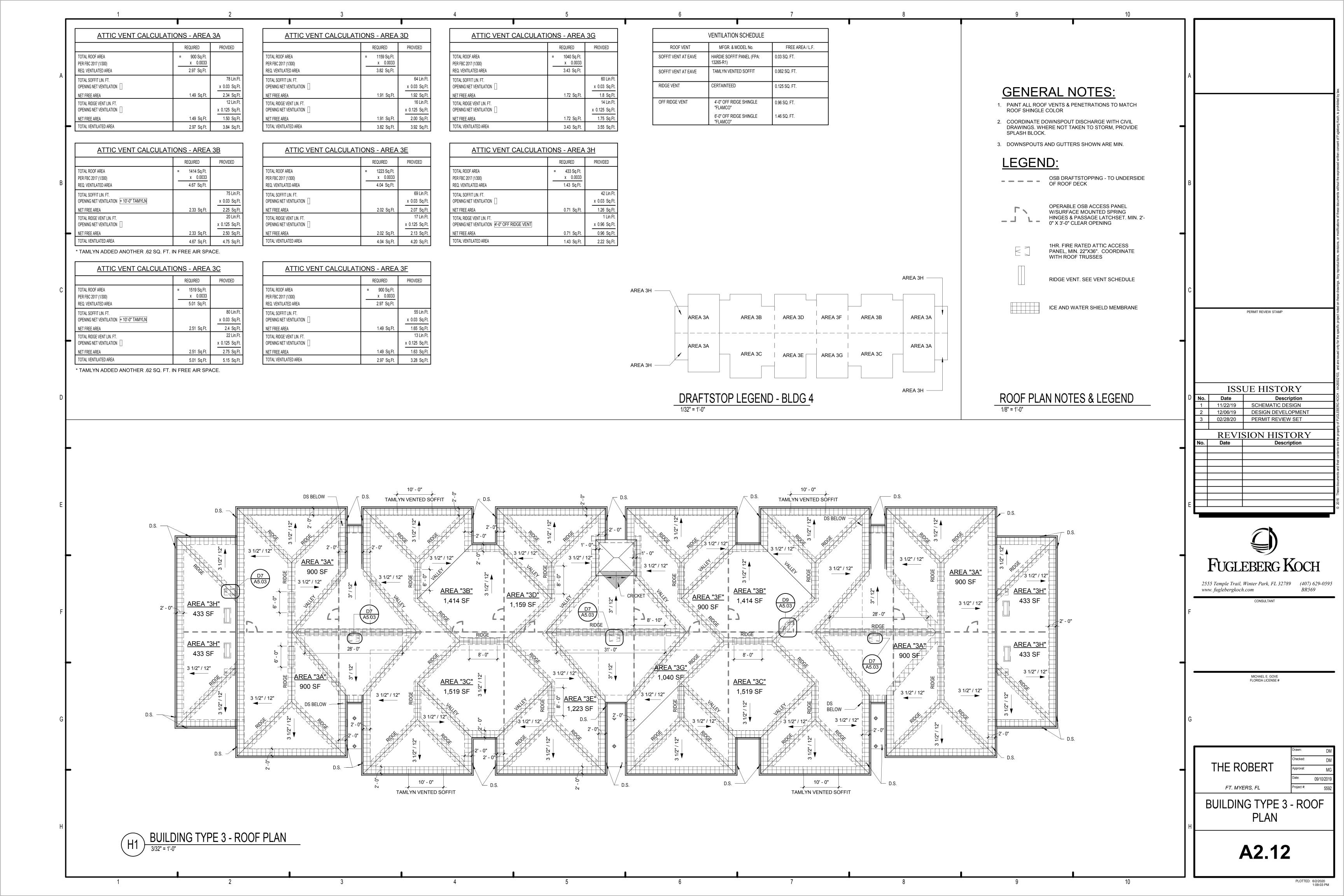


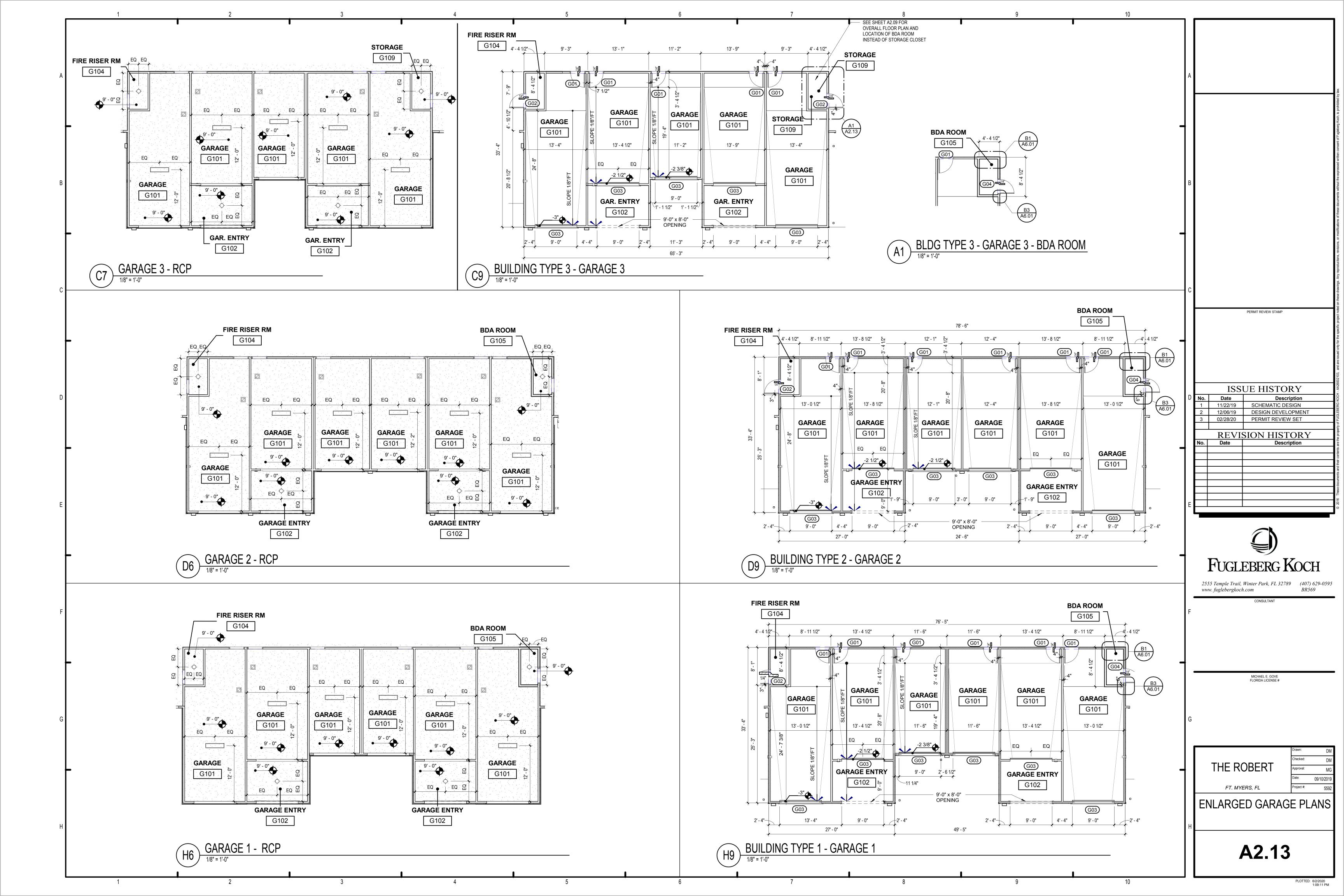


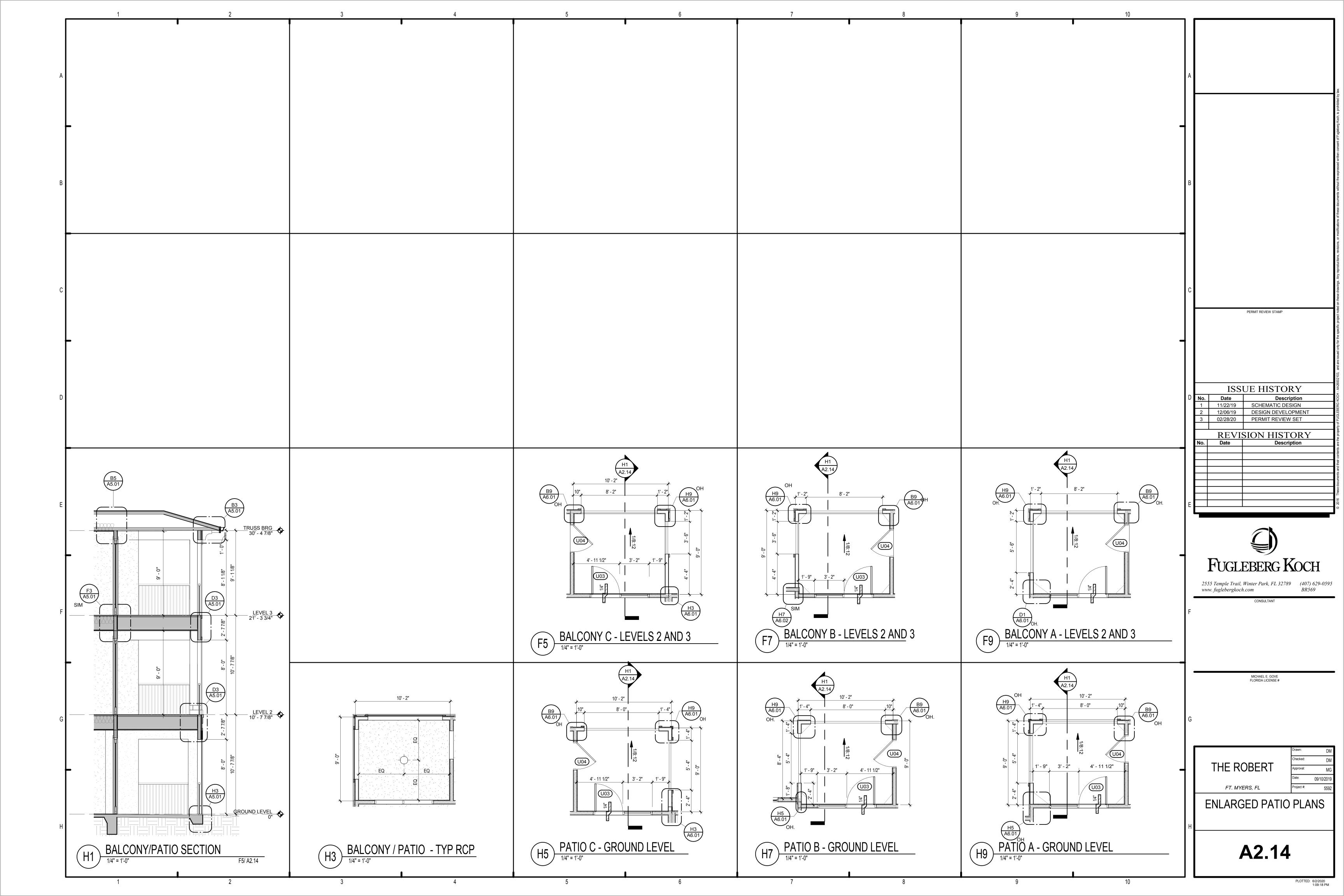


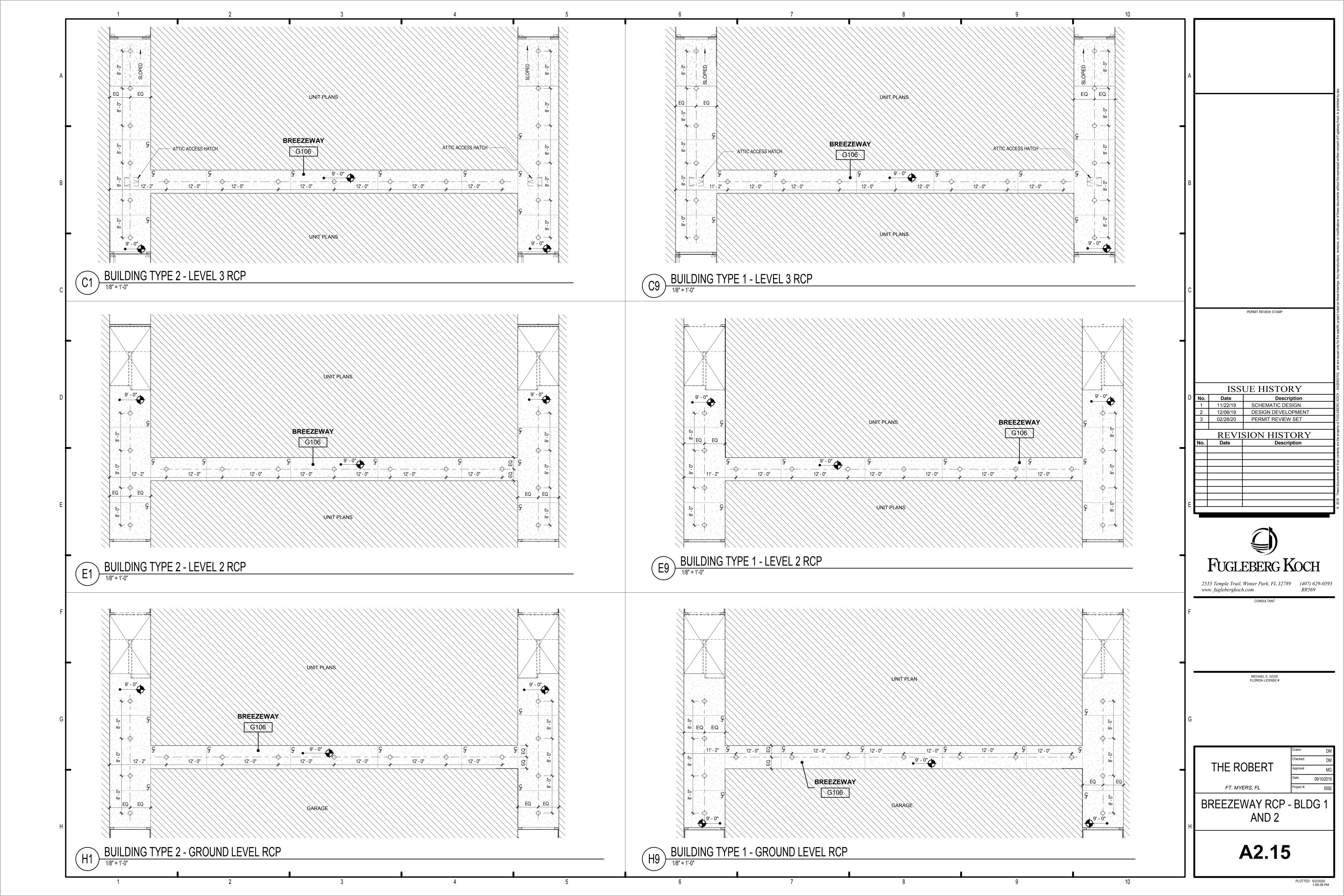


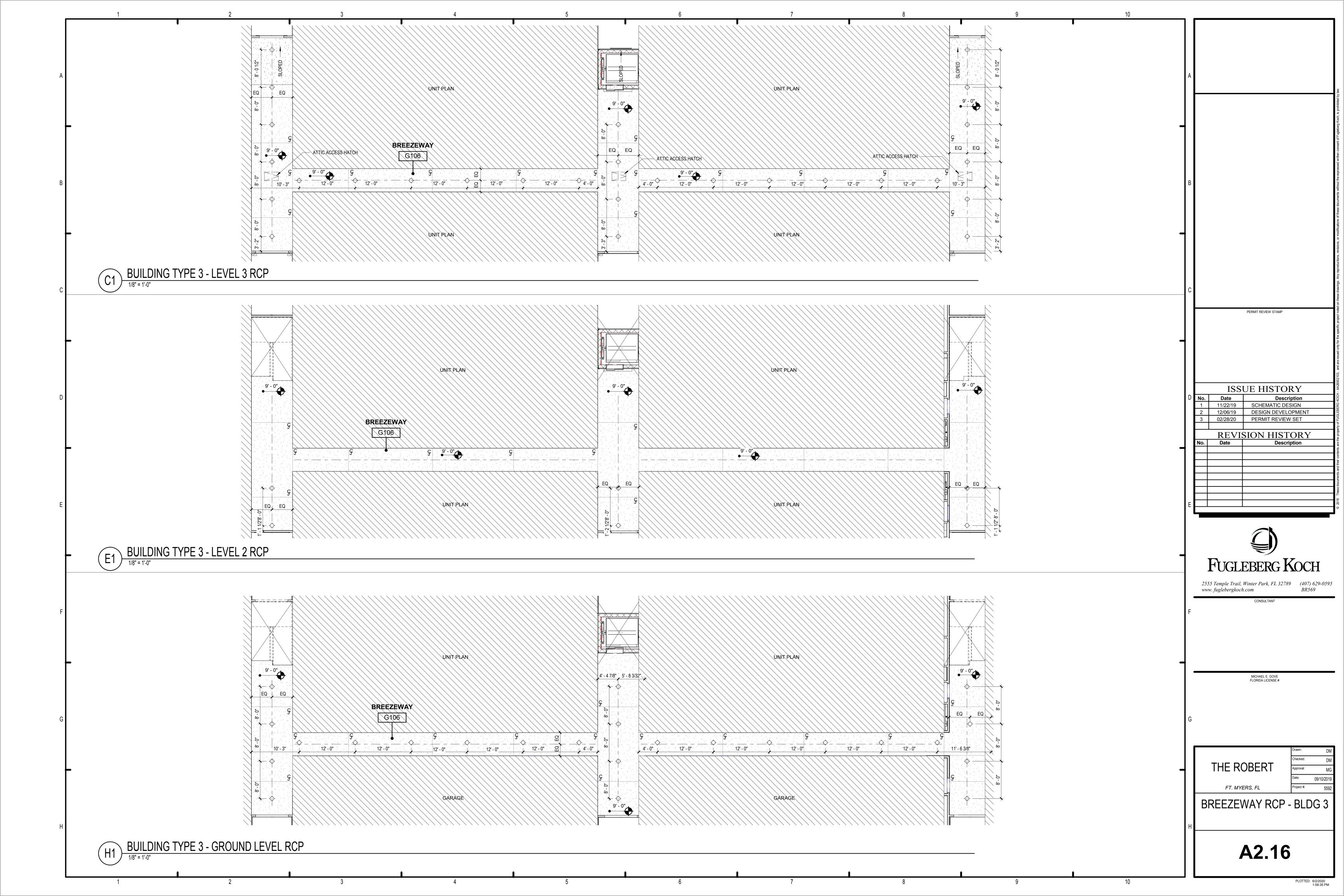


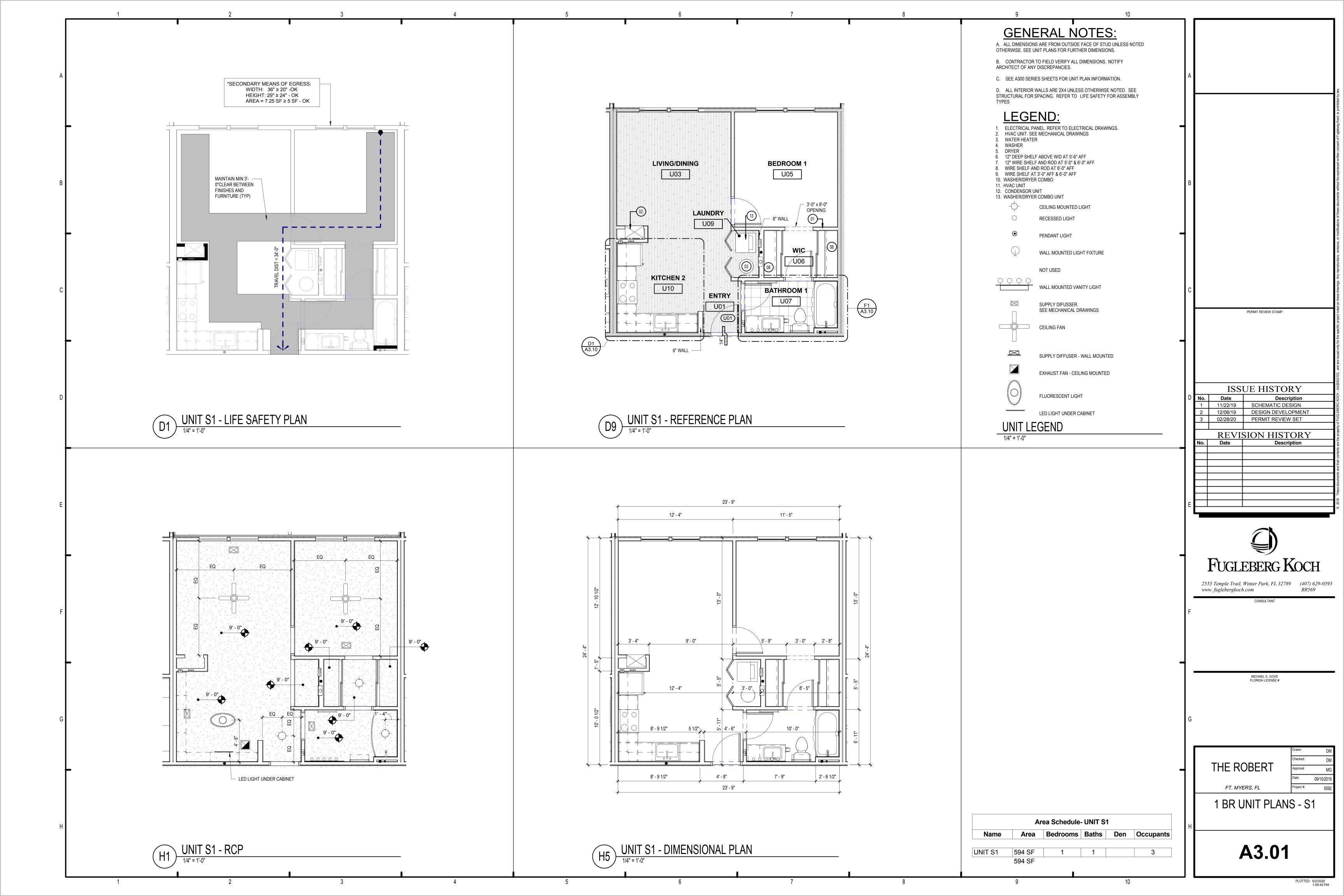


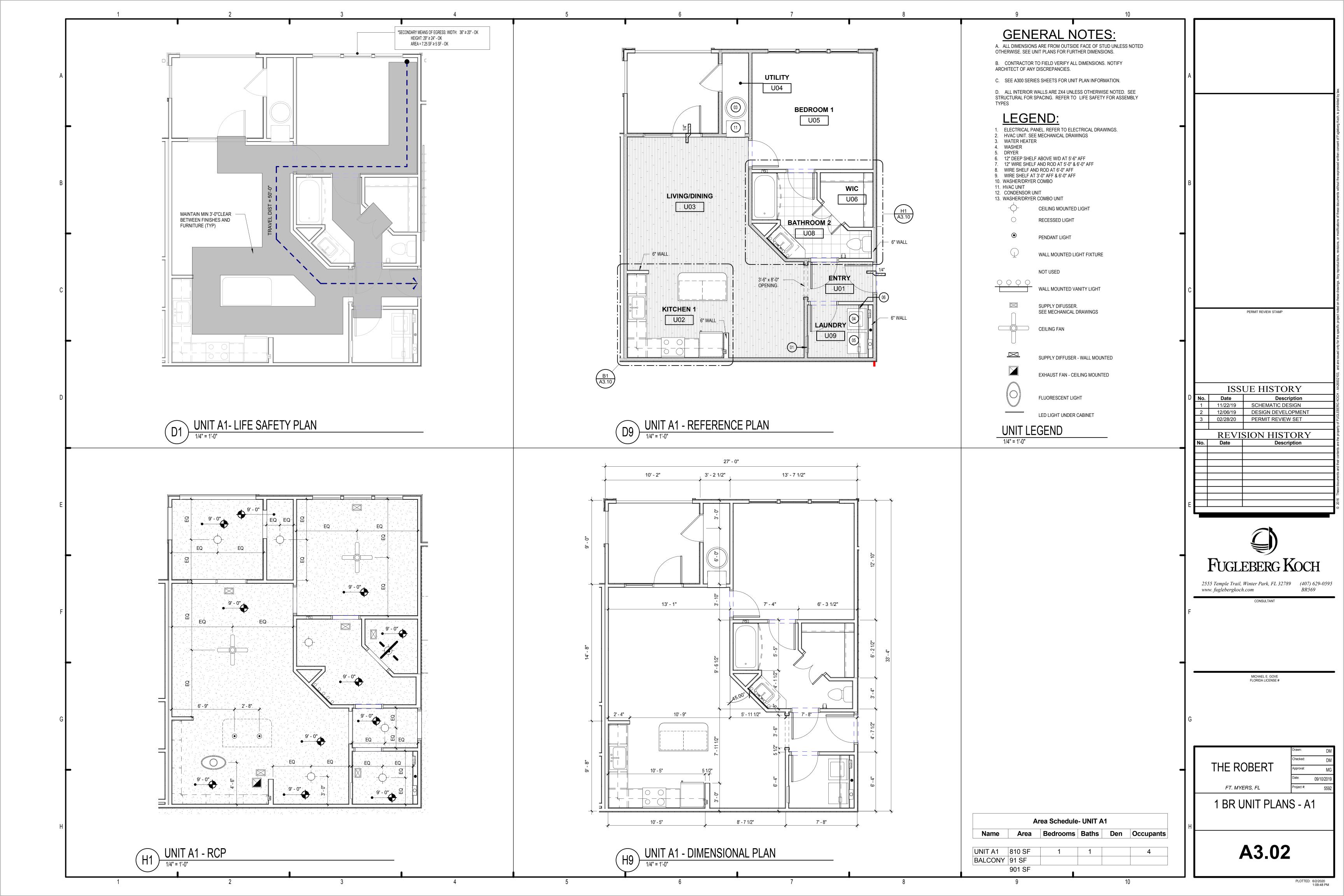


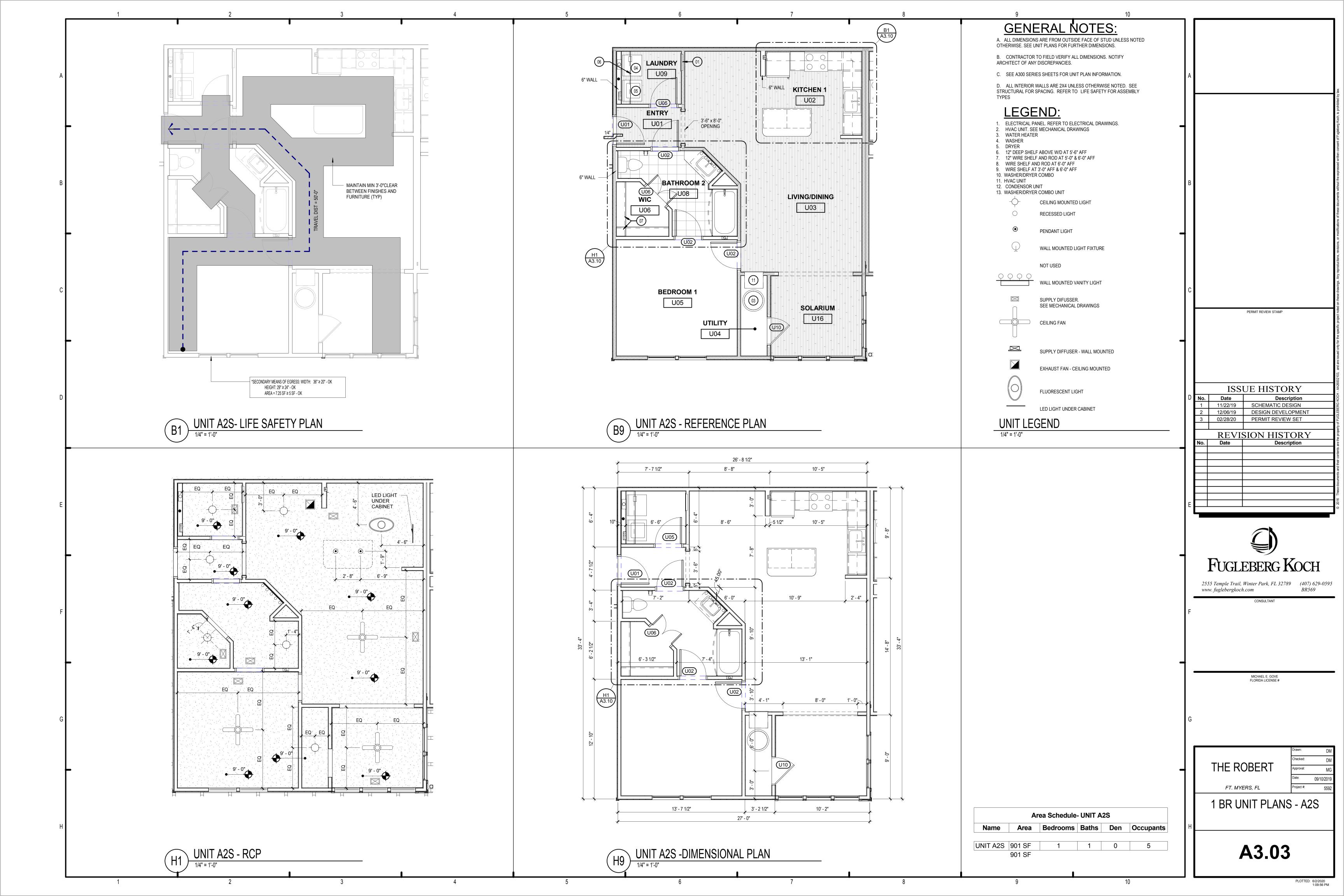


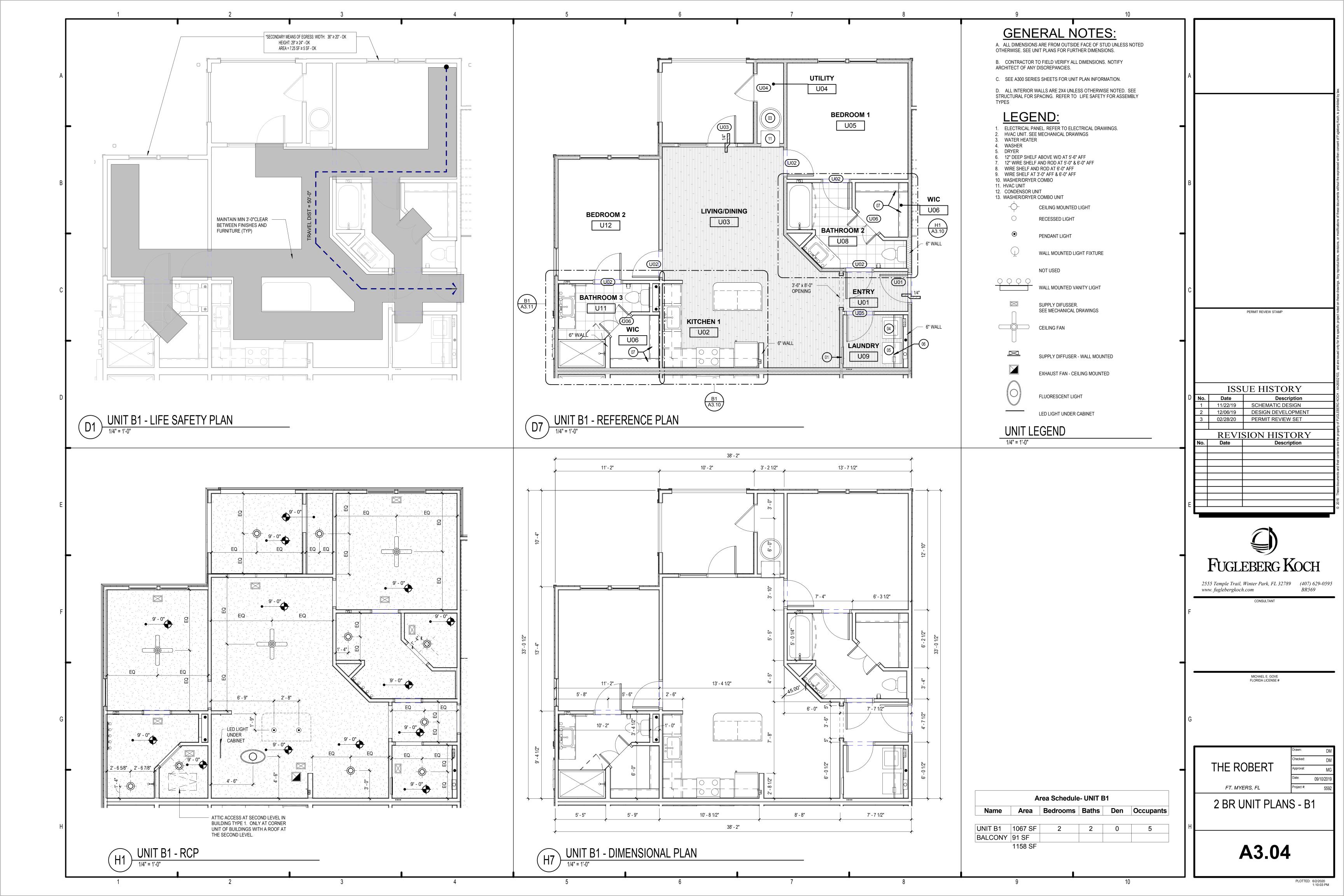


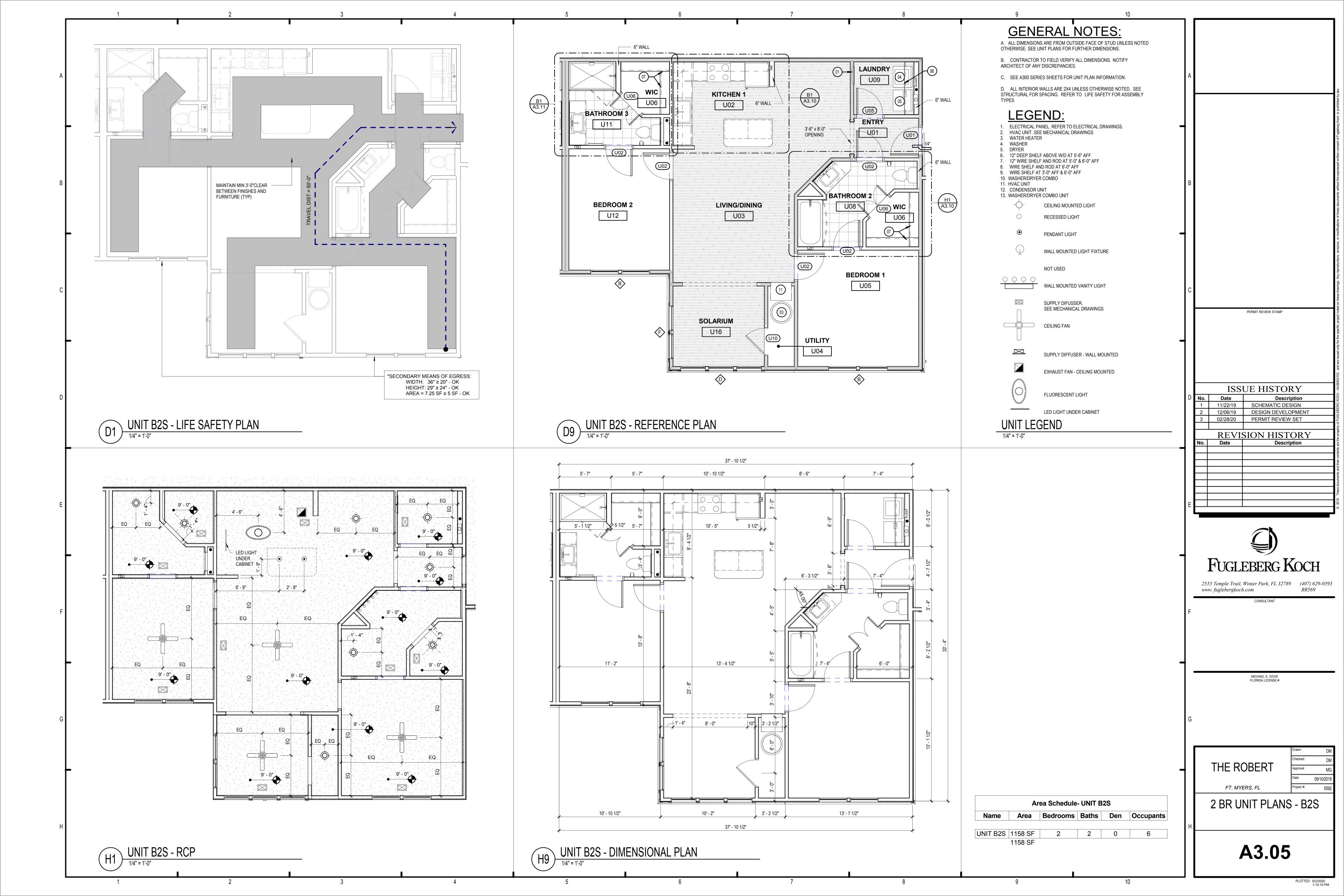


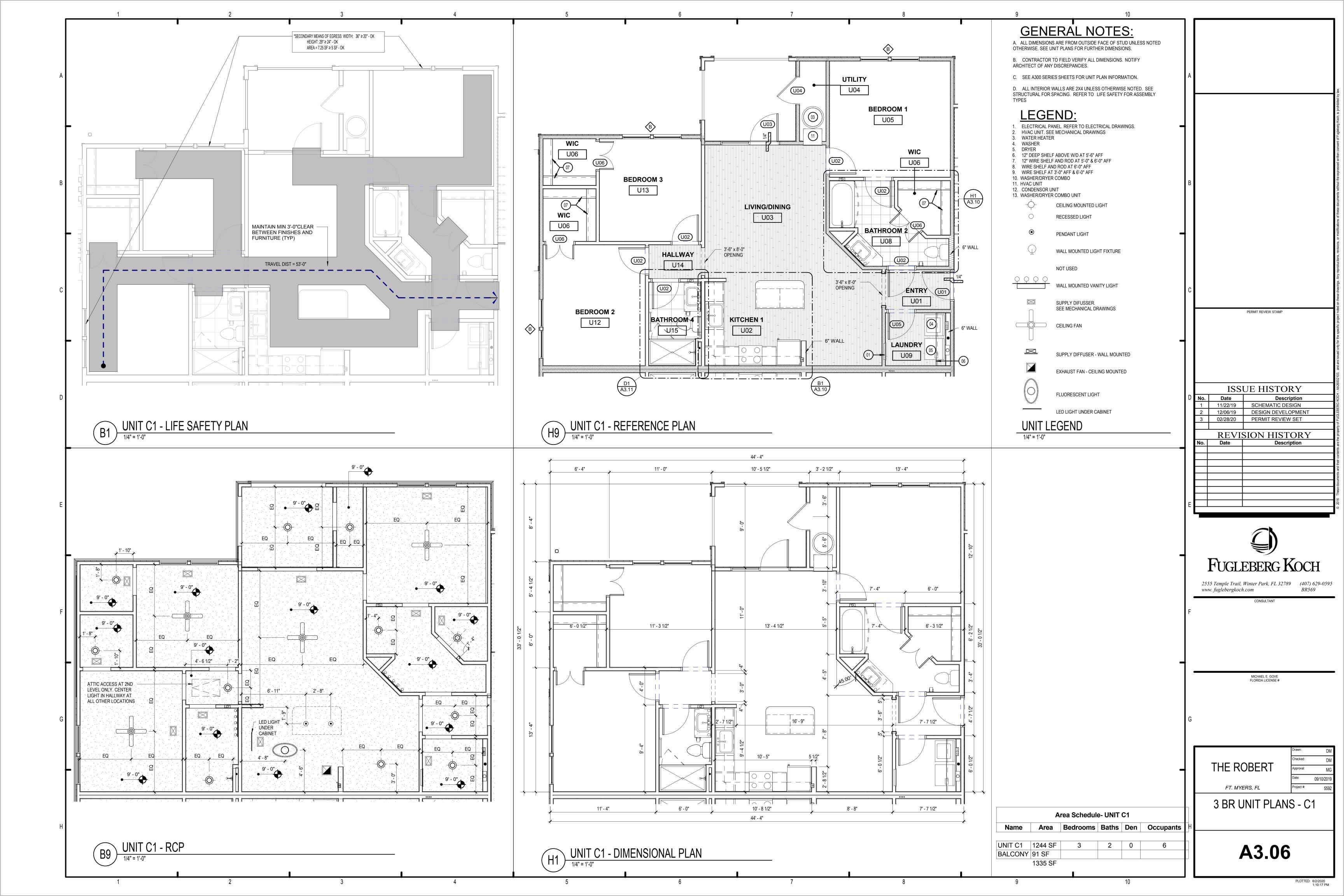


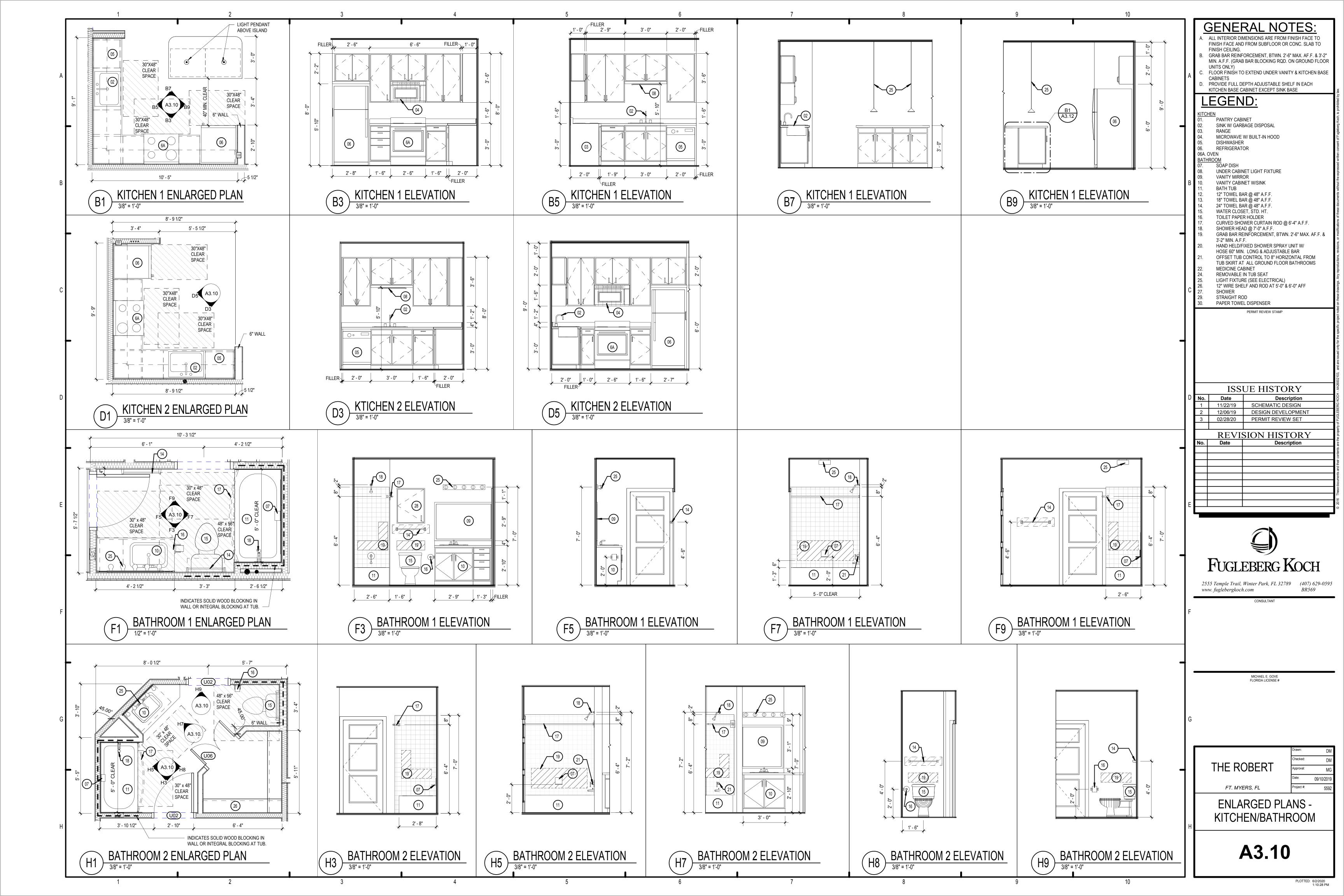


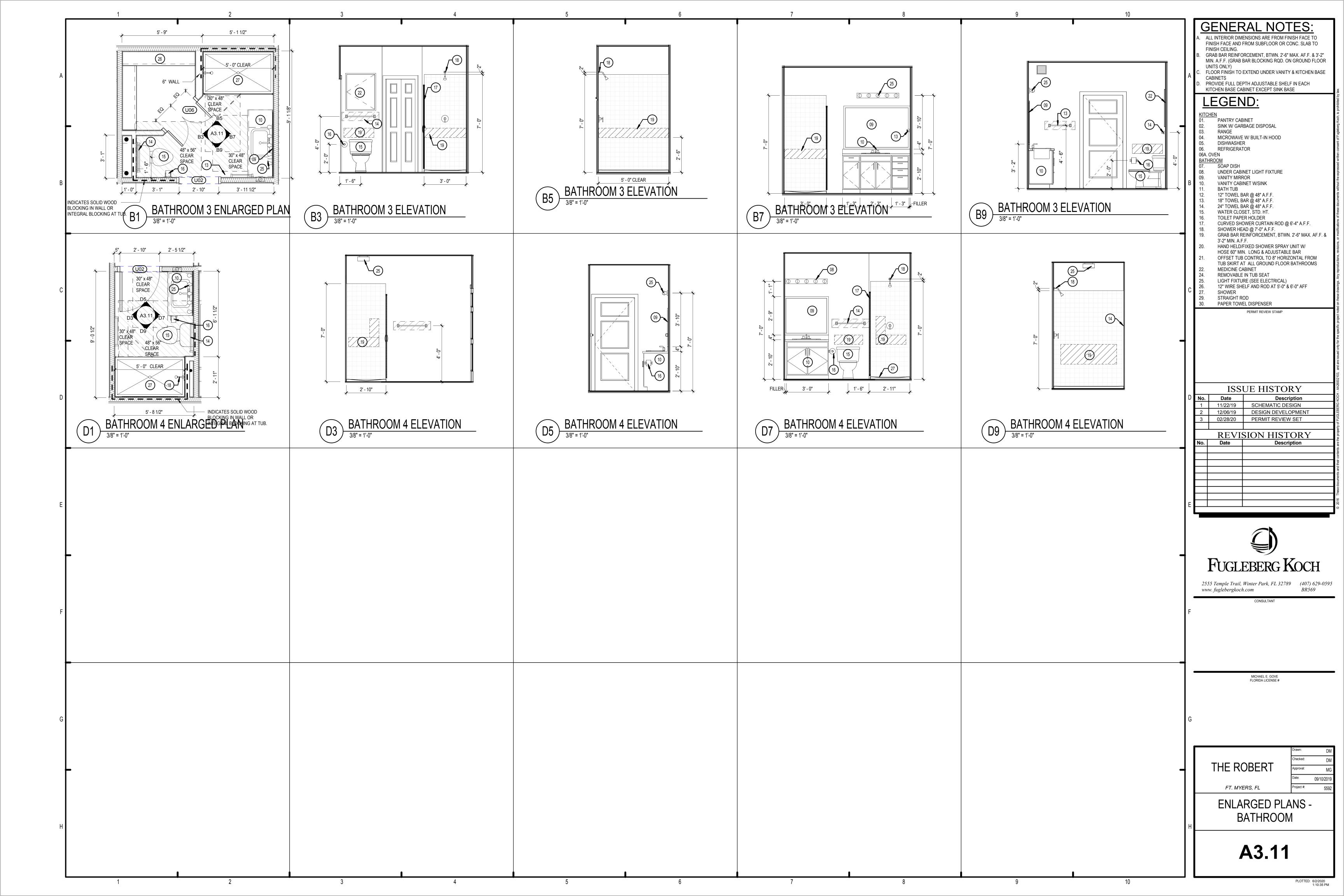


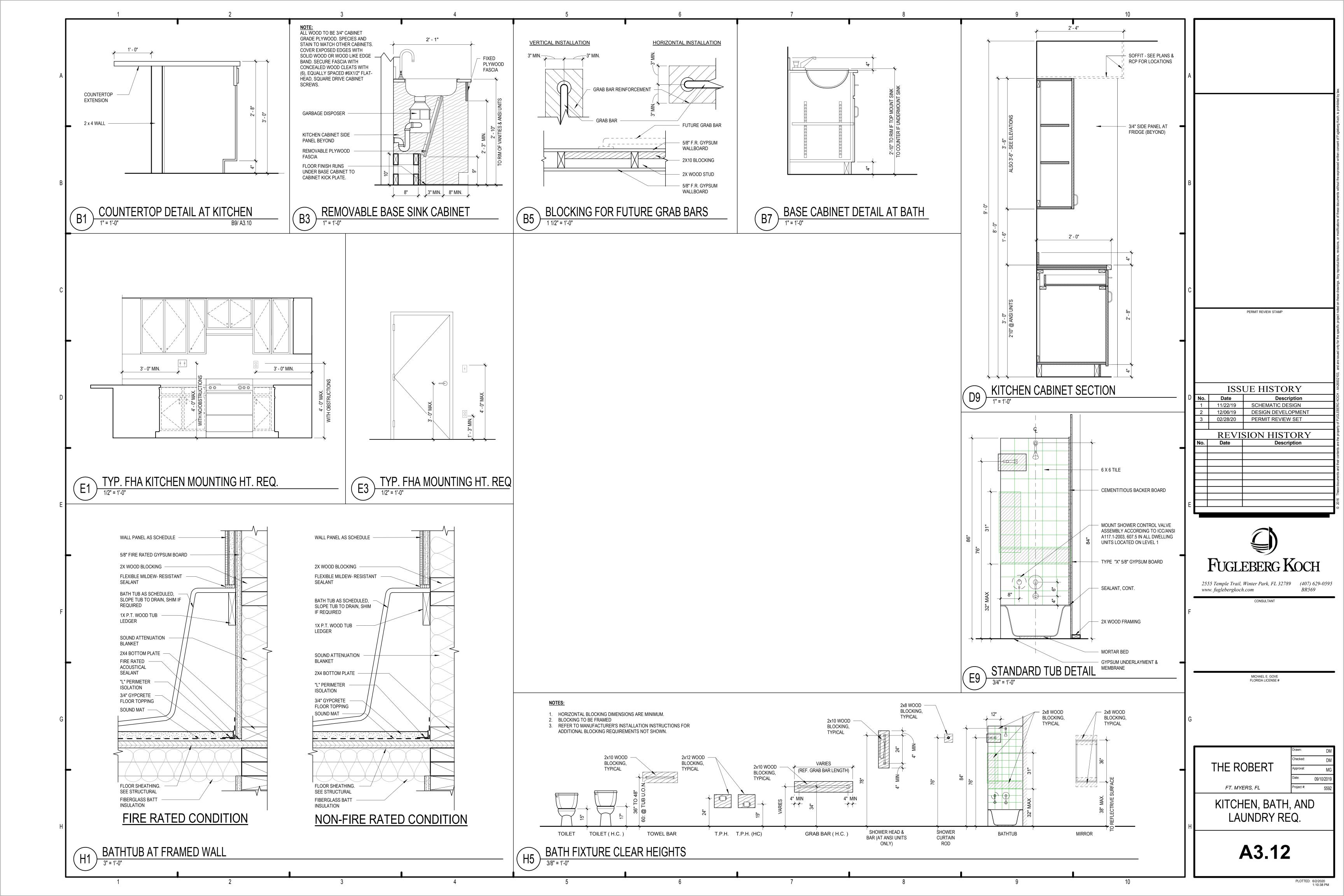






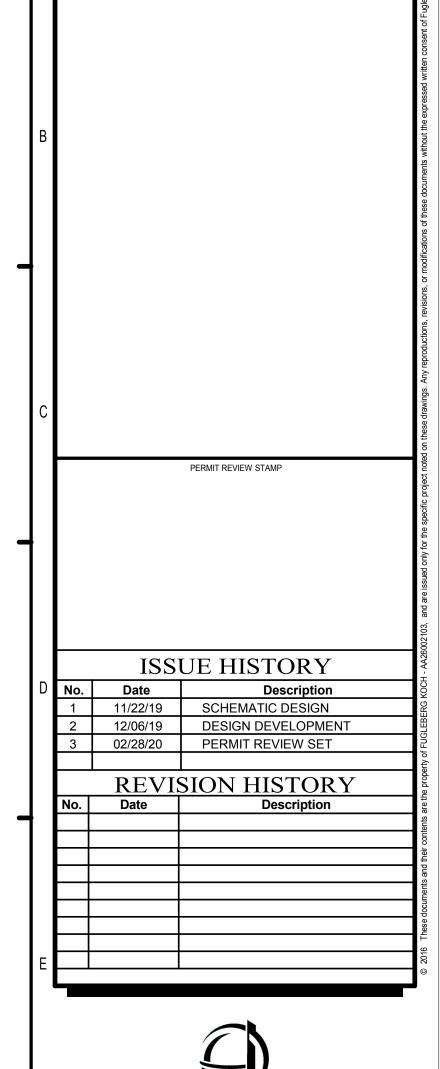






	FINISH SCHEDULE - COMMON AREAS														
						WALLS							CEILING		
		FLOOR	BASE	CROWN	NOR'	NORTH EAST			SOUTH WEST						
MARK	SPACE DESIGNATION	MATERIAL	MATERIAL	MOLDING	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	REMARKS
G101	GARAGE	CONC			GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
G102	GAR. ENTRY	CONC			SIDING	-	SIDING	-	SIDING	-	SIDING	-	GWB	PT	
G102	GARAGE ENTRY	CONC			SIDING	_	SIDING	-	SIDING	_	SIDING	-	SIDING	-	
G103	STORAGE	CONC			GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
G104	FIRE RISER RM	CONC			GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
G105	BDA ROOM	CONC			GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
G106	BREEZEWAY	CONC			SIDING	-	SIDING	-	SIDING	-	SIDING	-	SIDING	-	

								FINISH S	SCHEDULE -	UNITS					
								V	VALLS				CEILI	NG	
		FLOOR	BASE	CROWN	NOR ⁻	ГН	EAS	ST .	SOU	TH	WES	Ť			
MARK	SPACE DESIGNATION	MATERIAL	MATERIAL	MOLDING	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	REMARKS
101	ENTRY														
J02	KITCHEN 1	LVT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J03	LIVING/DINING	LVT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J04	UTILITY	CONC	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J05	BEDROOM 1	CARPET	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J06	WIC	CARPET	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J07	BATHROOM 1	СТ	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J08	BATHROOM 2	СТ	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J09	LAUNDRY	LVT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J10	KITCHEN 2	LVT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J11	BATHROOM 3	CT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J12	BEDROOM 2	CARPET	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J13	BEDROOM 3	CARPET	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J14	HALLWAY	LVT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J15	BATHROOM 4	СТ	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	
J16	SOLARIUM	LVT	WD		GWB	PT	GWB	PT	GWB	PT	GWB	PT	GWB	PT	



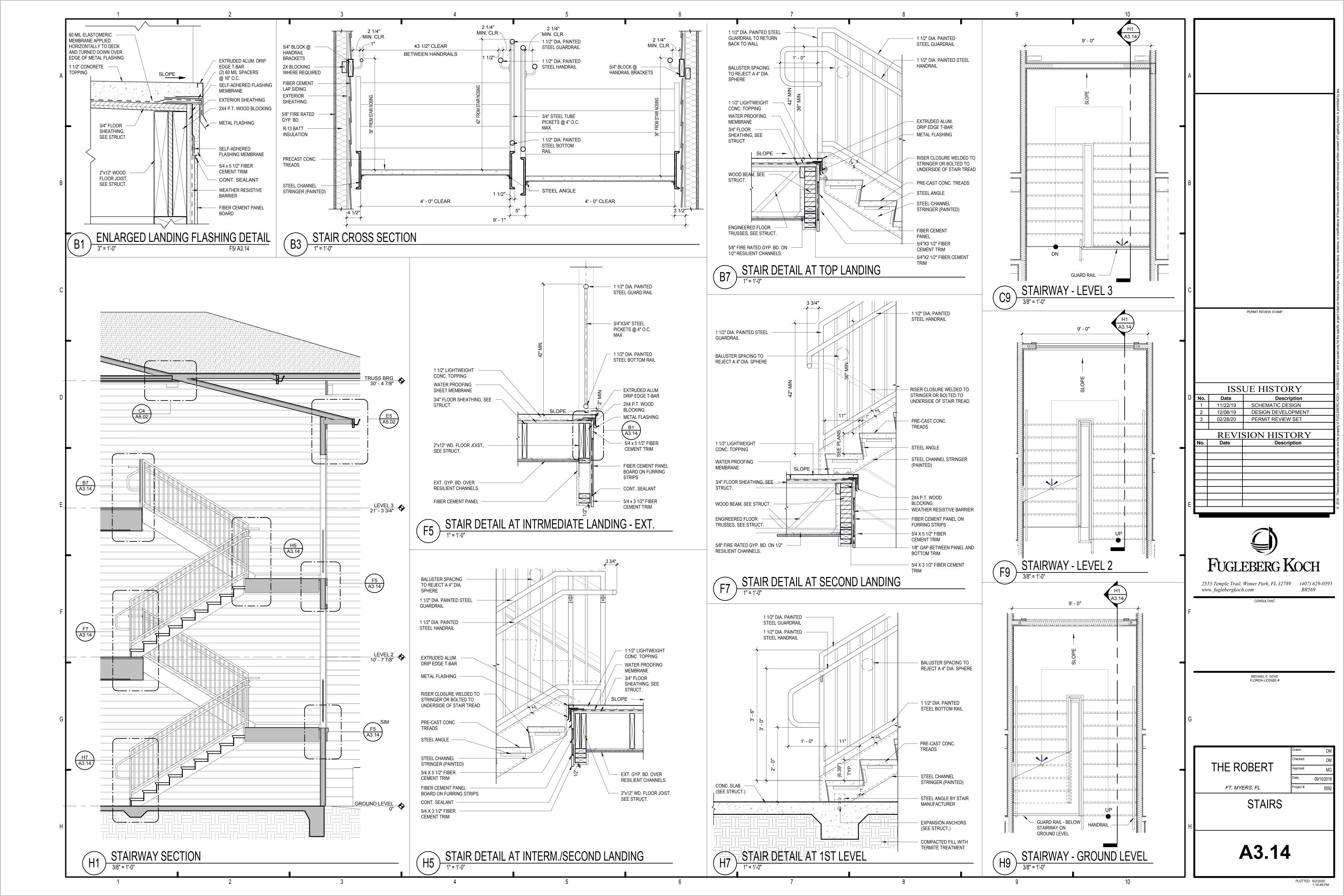
FUGLEBERG KO	人口
2555 Temple Trail, Winter Park, FL 32789 www. fuglebergkoch.com	(407) 629-0595 BR569
CONSULTANT	

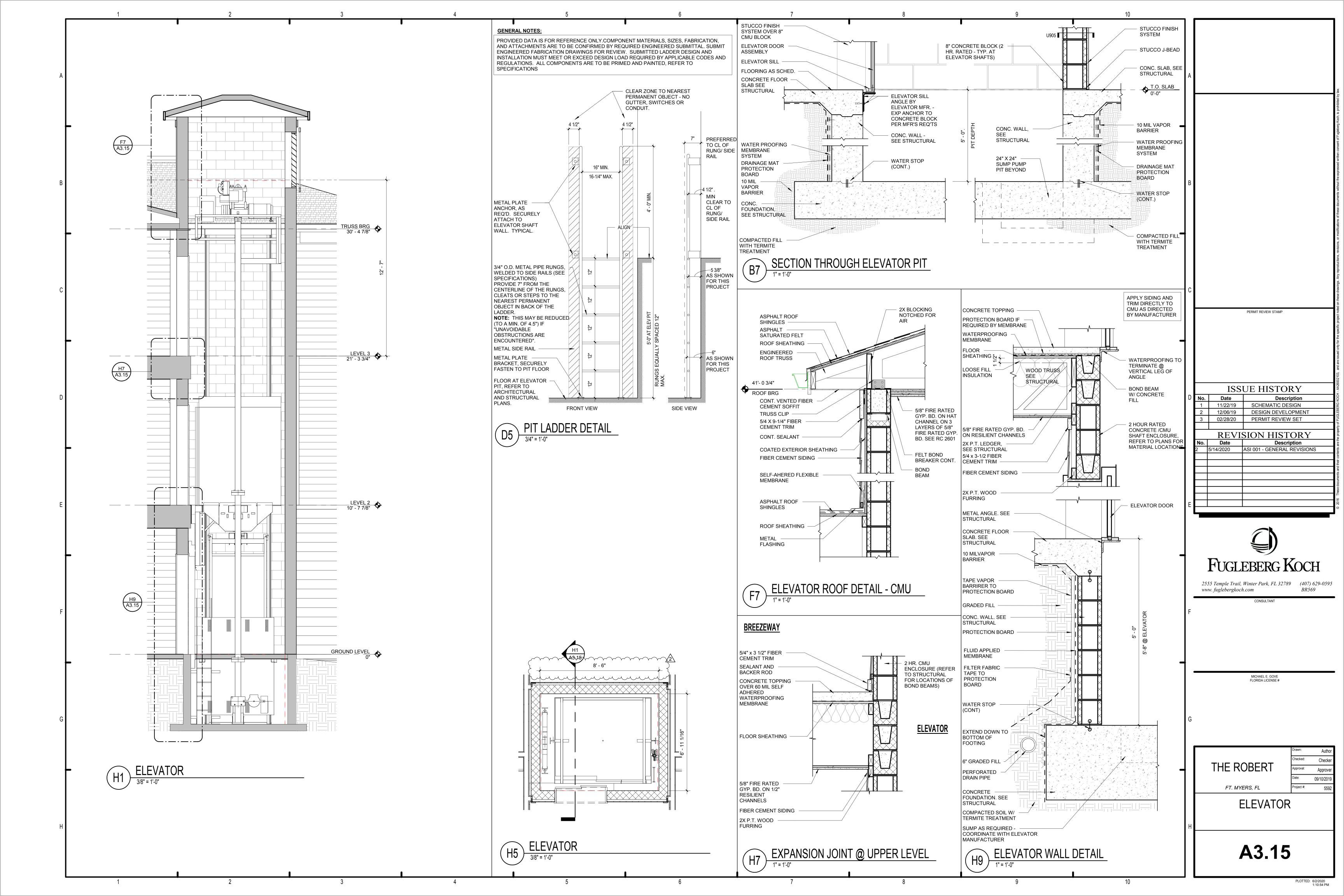
MICHAEL E. GOVE

A3.13

10

PLOTTED: 6/2/2020 1:10:42 F

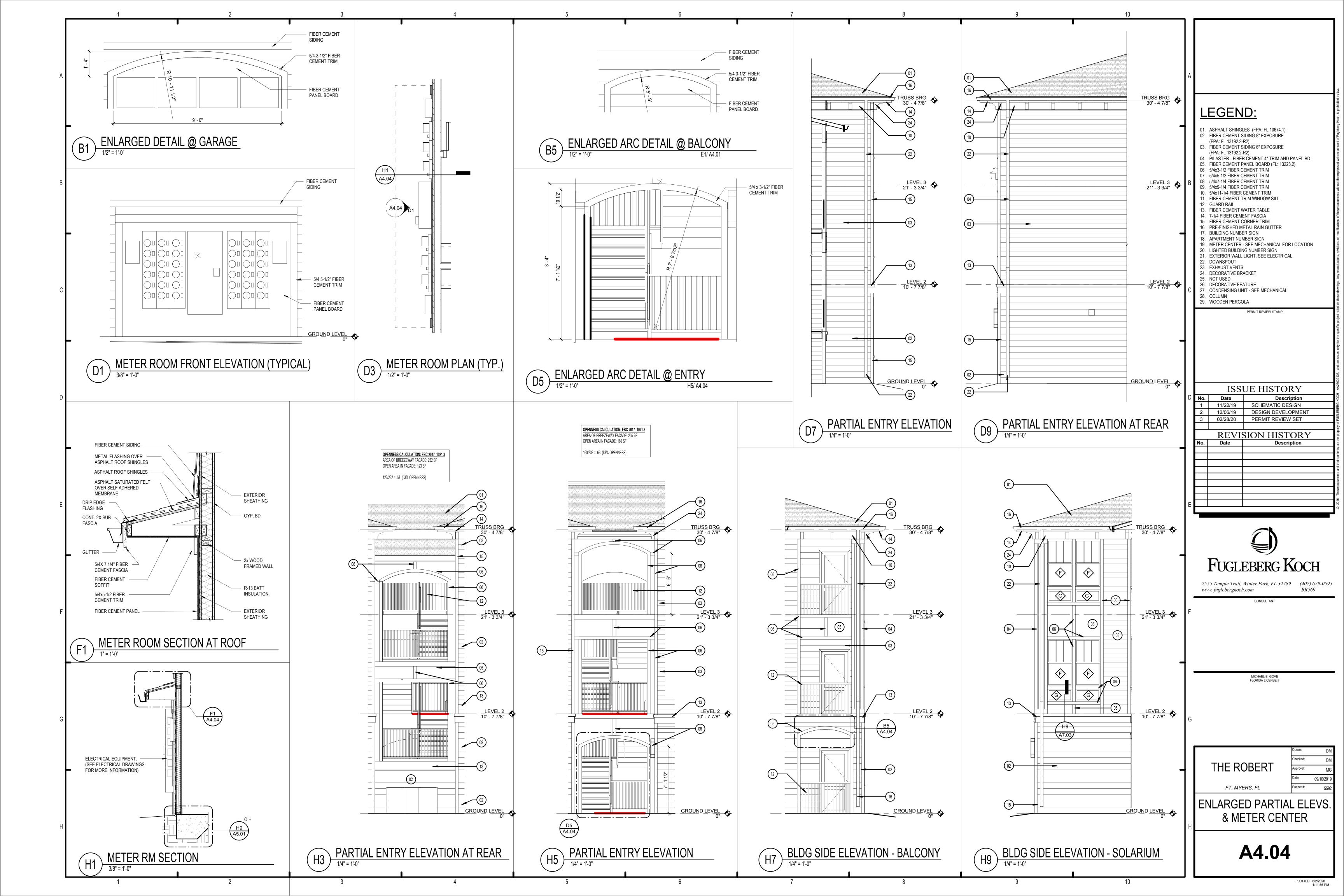


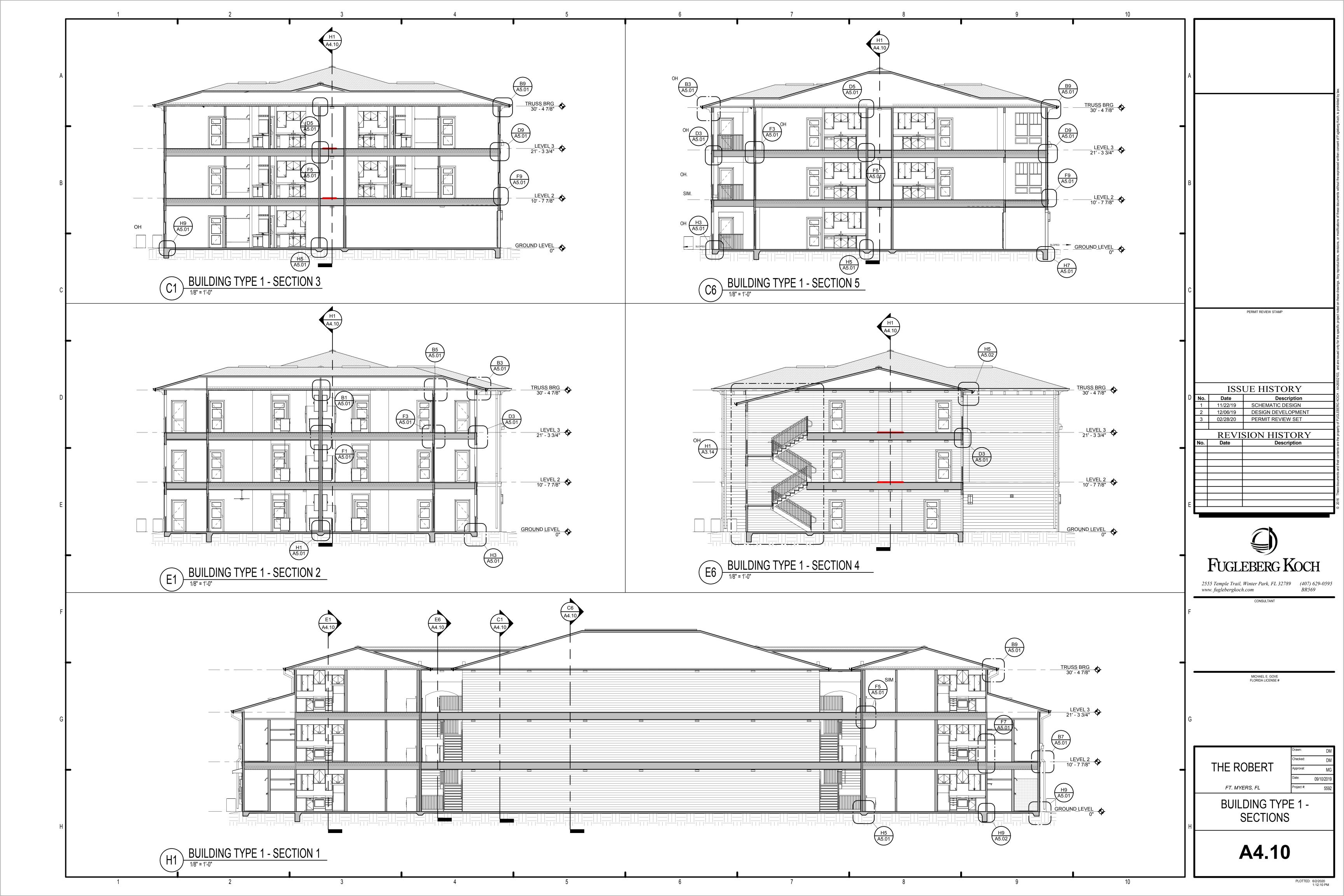


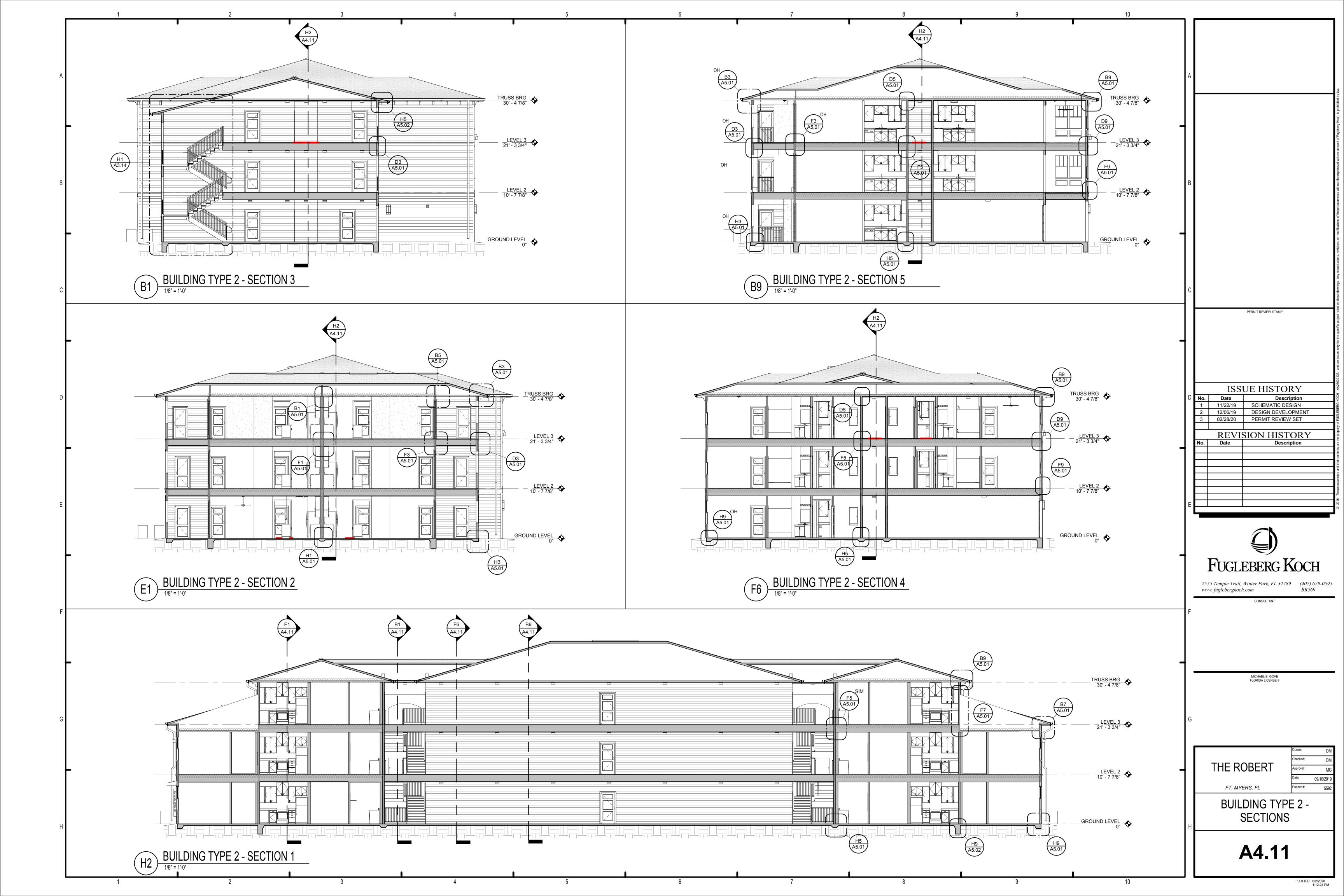


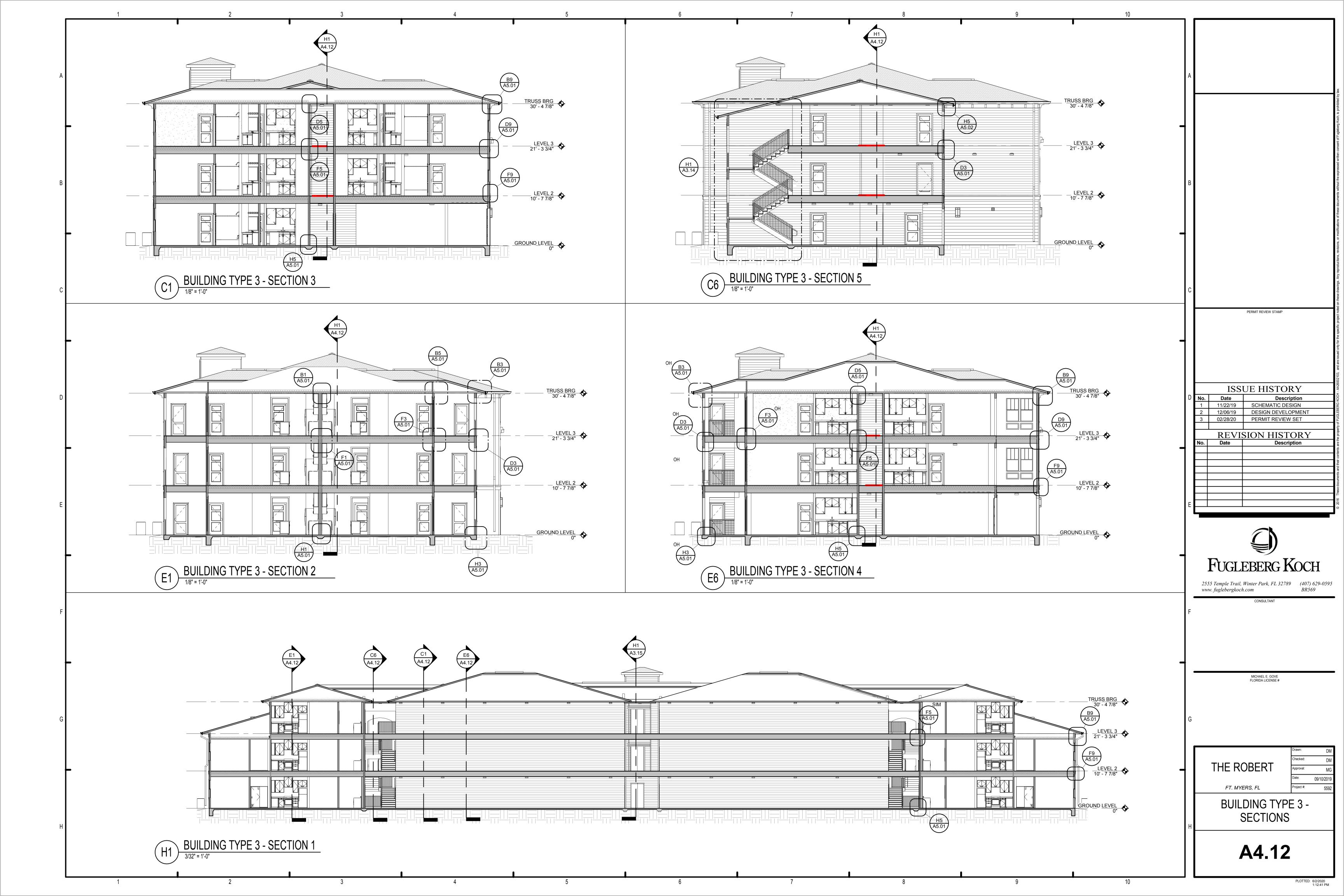


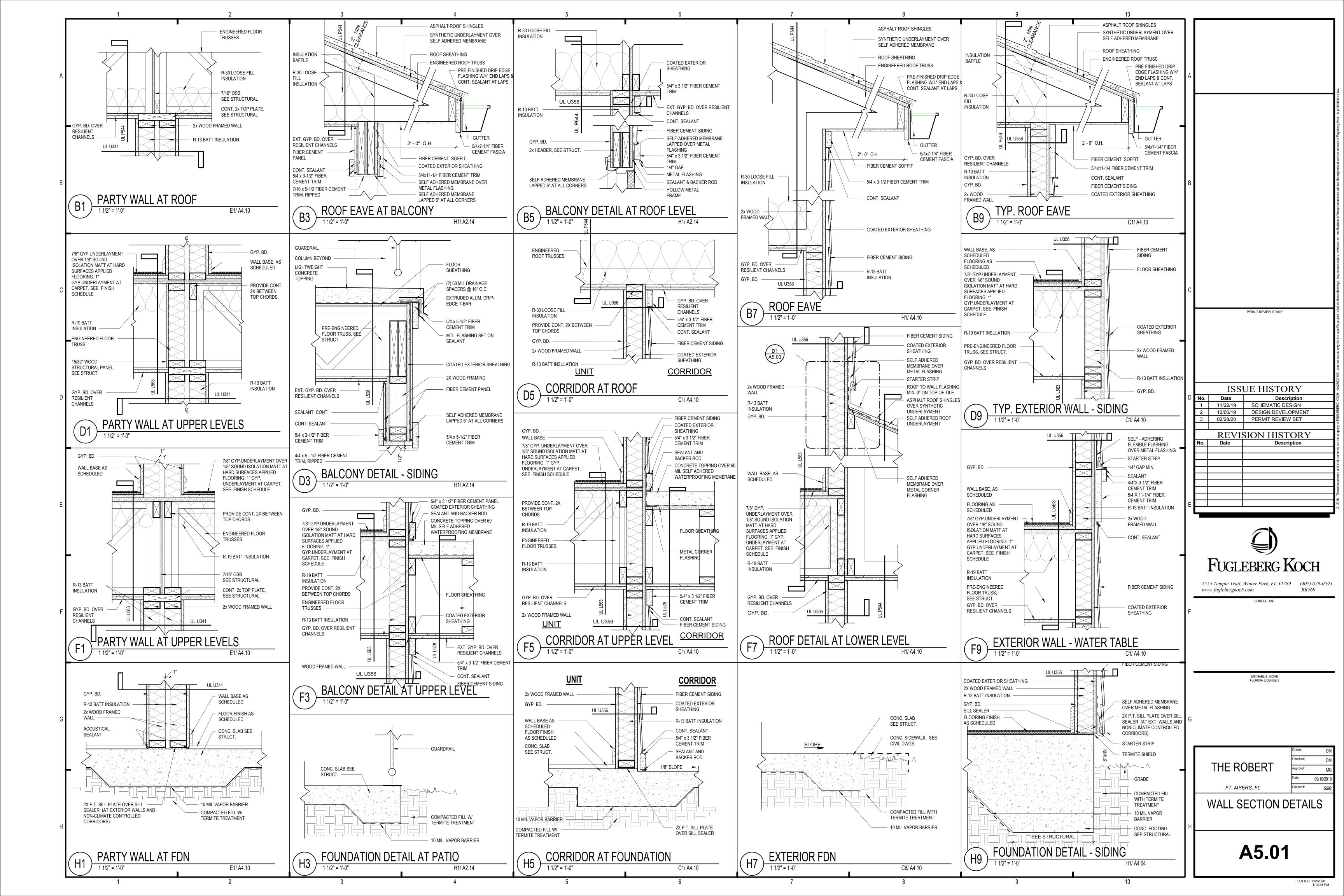


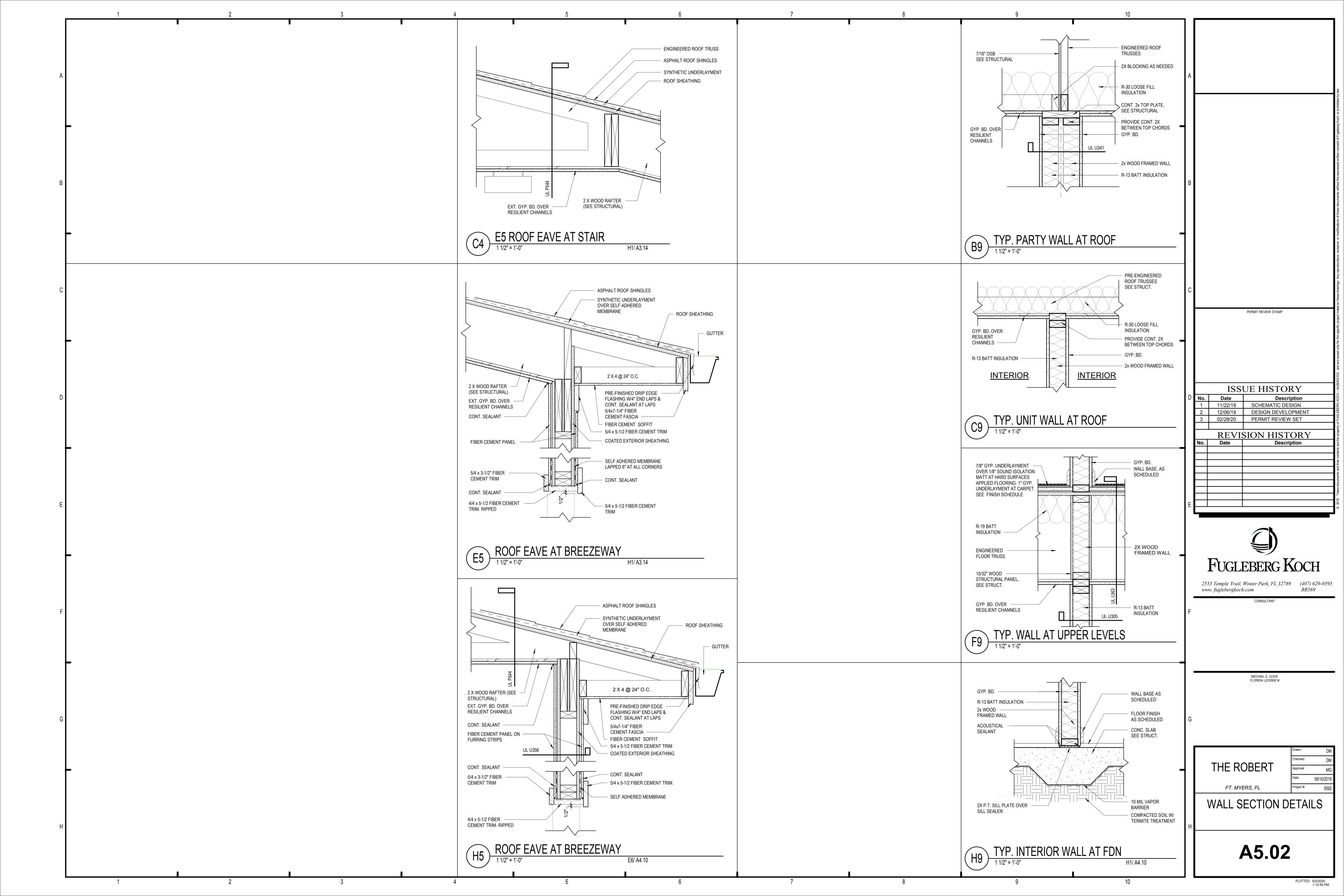


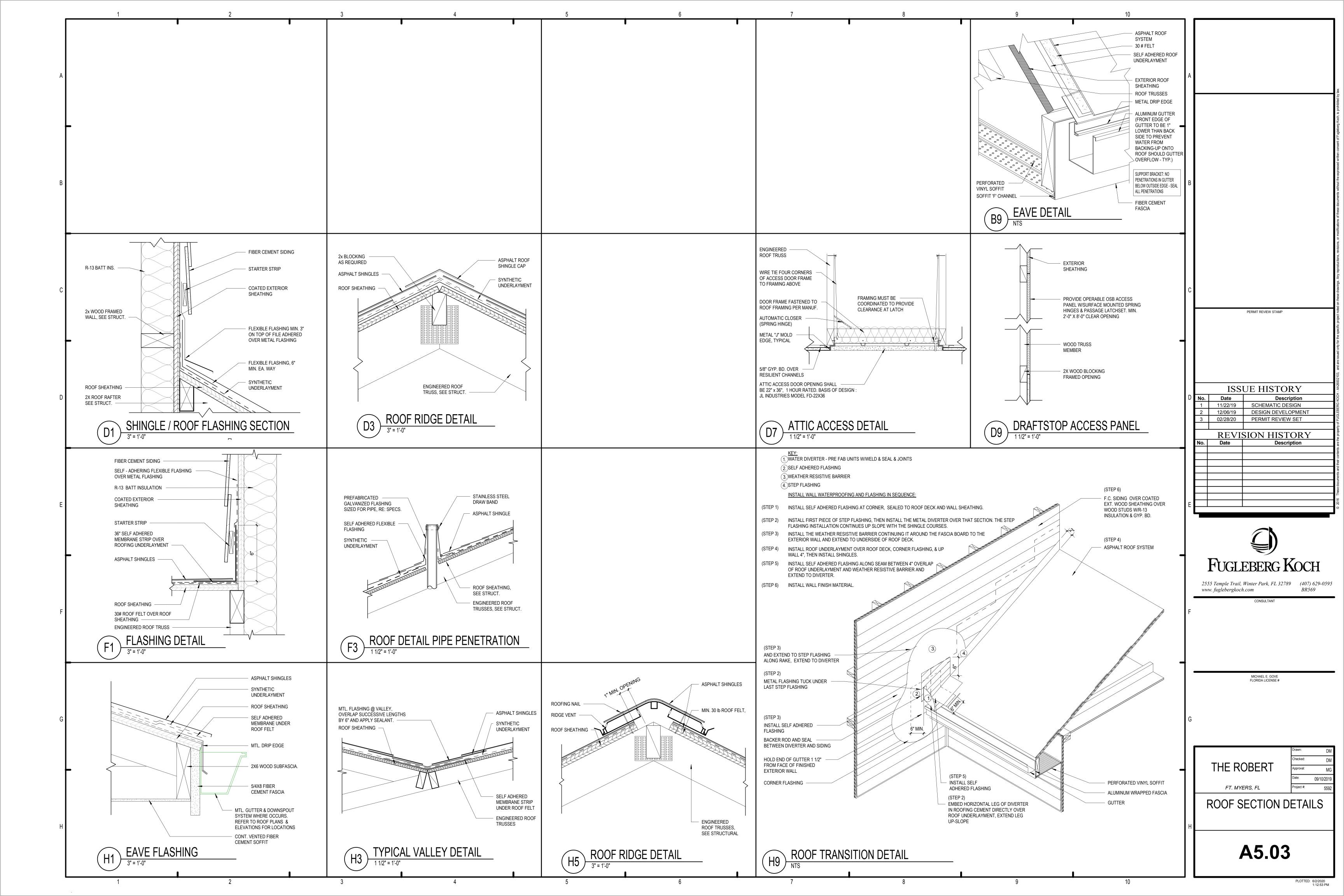


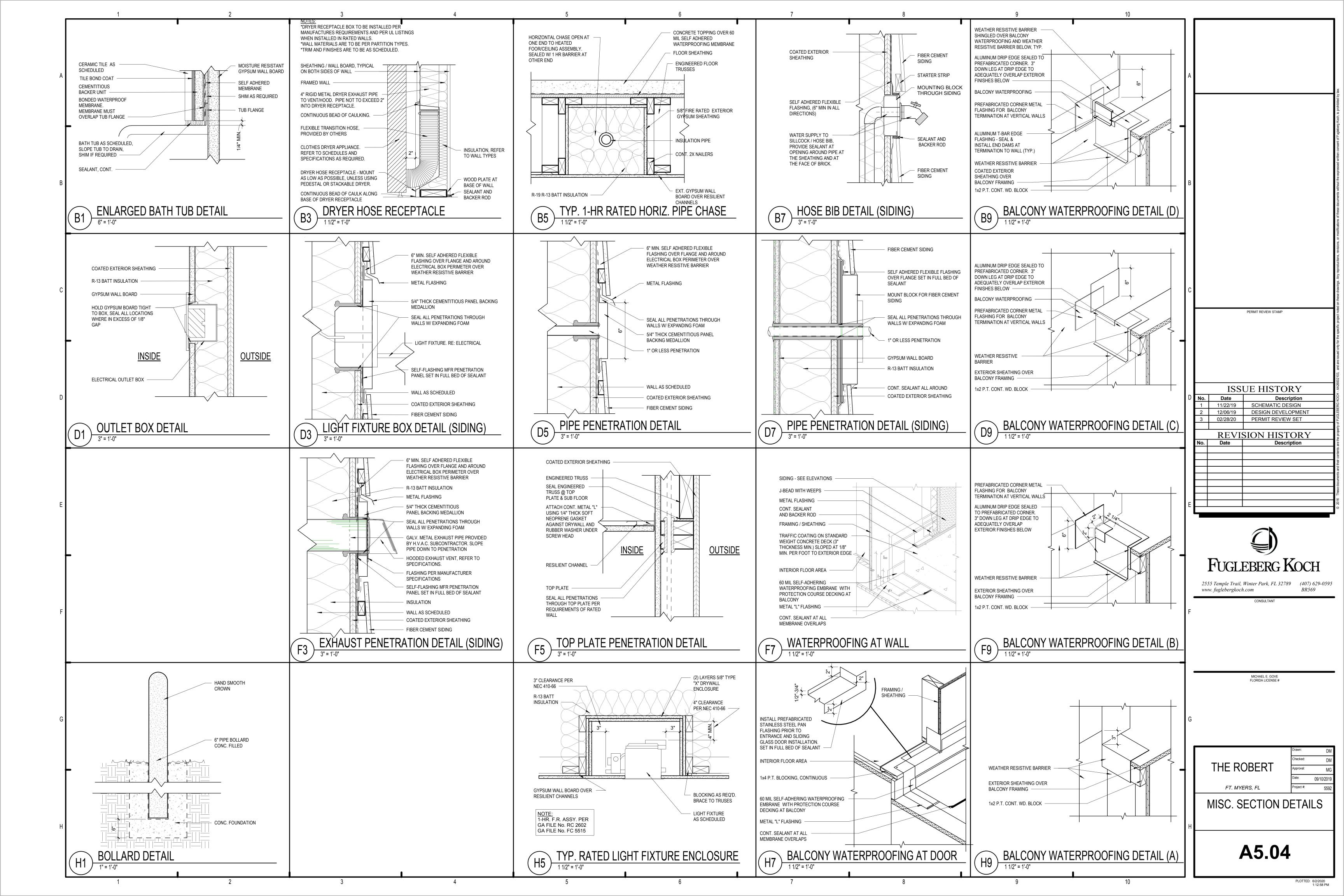


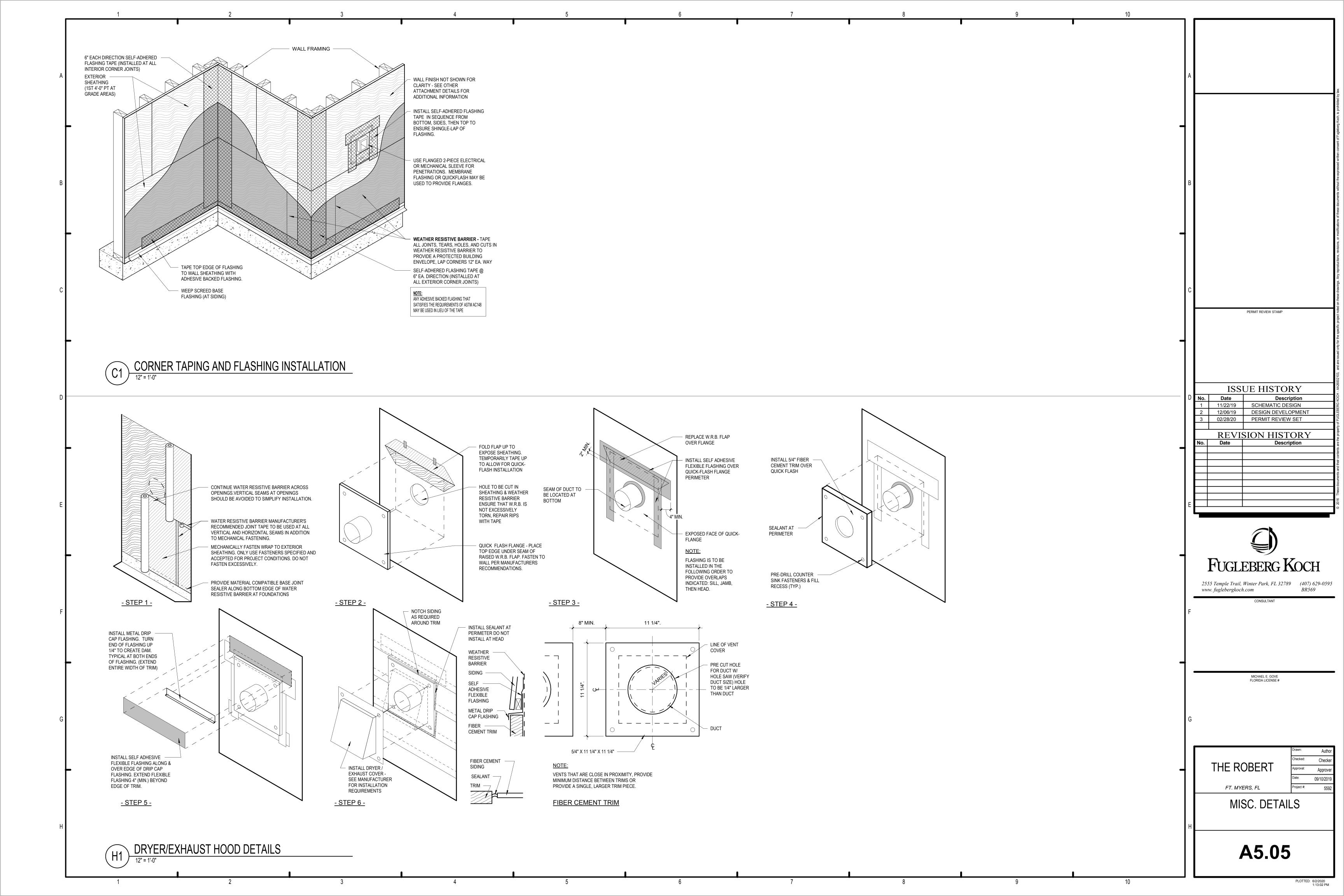


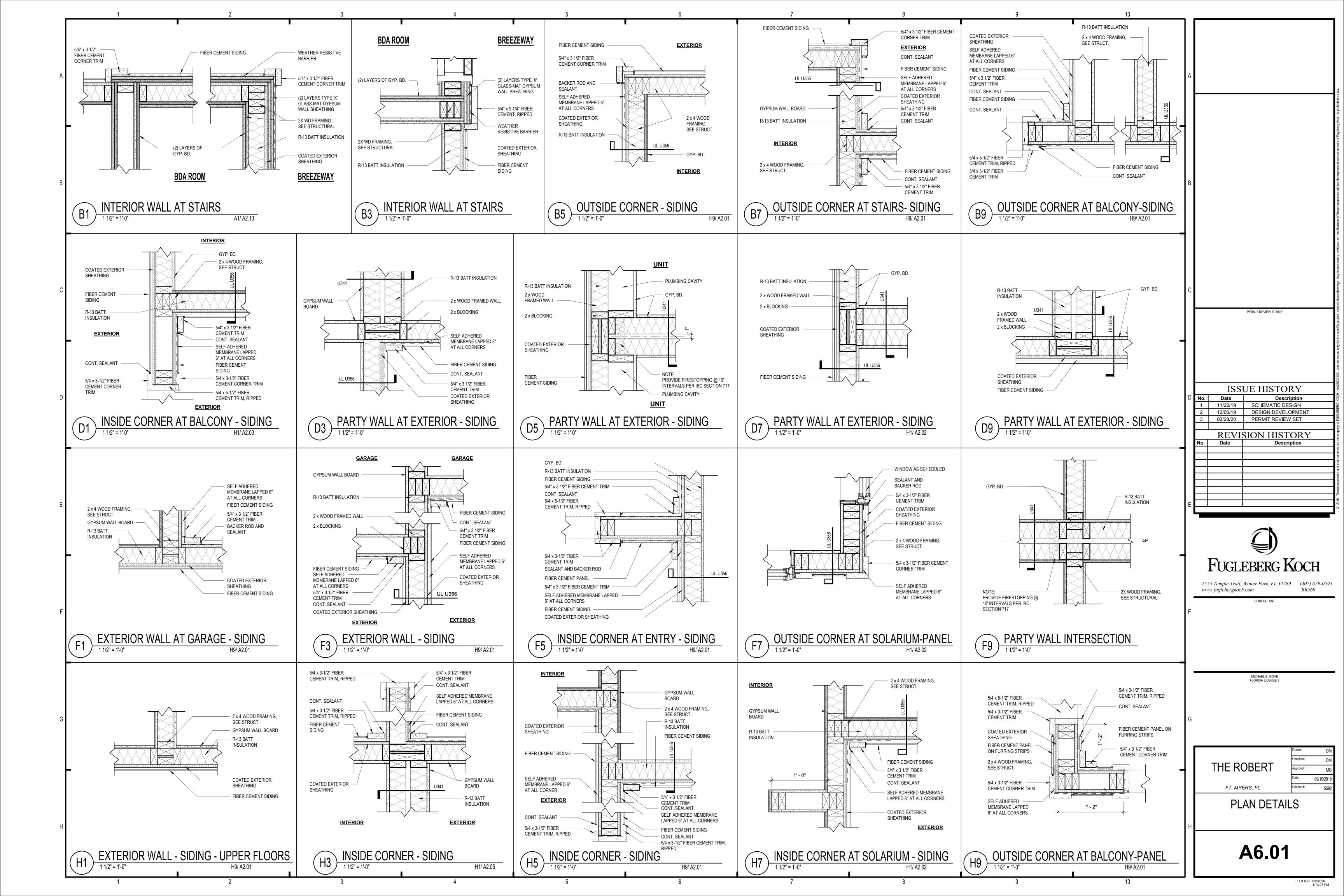


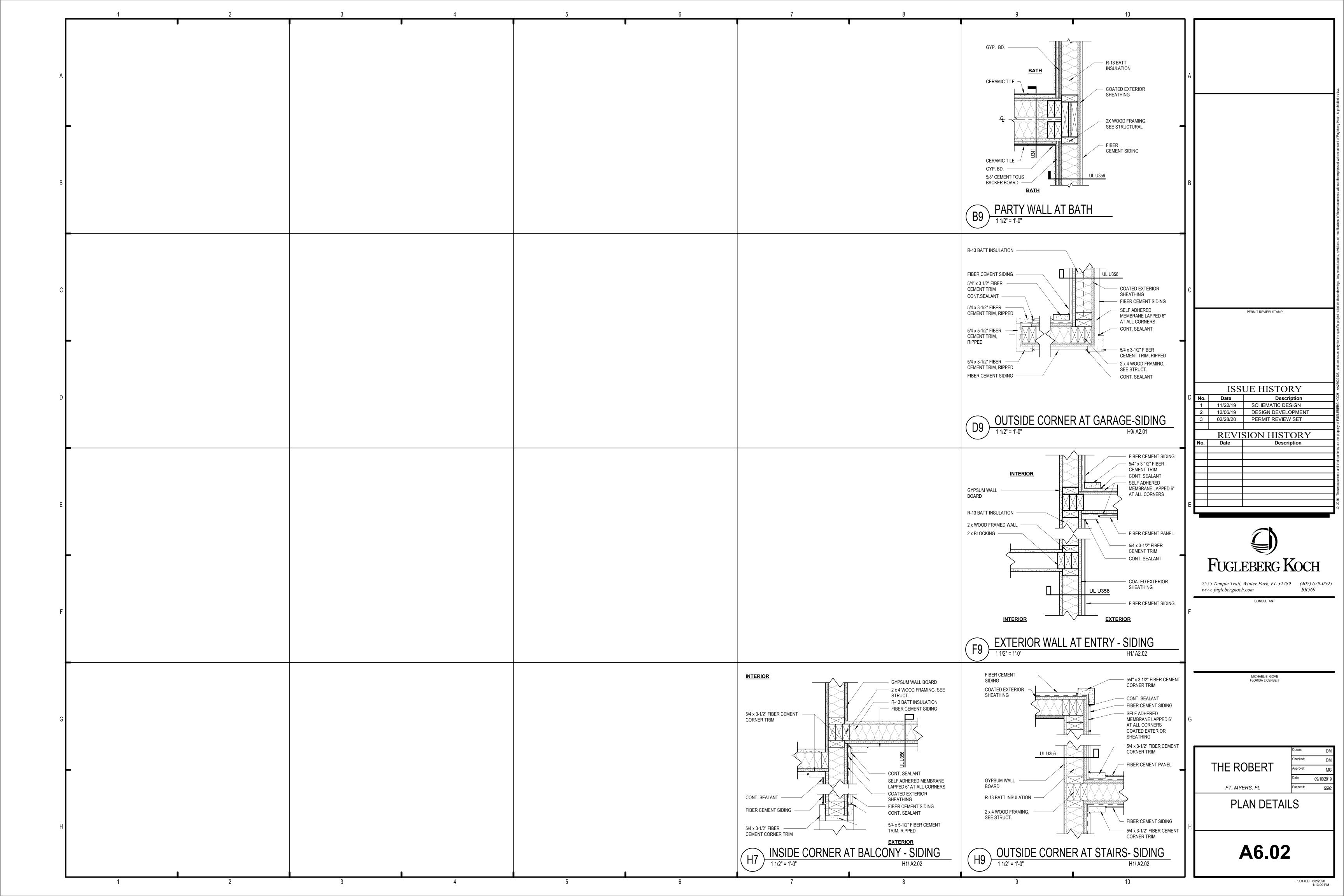


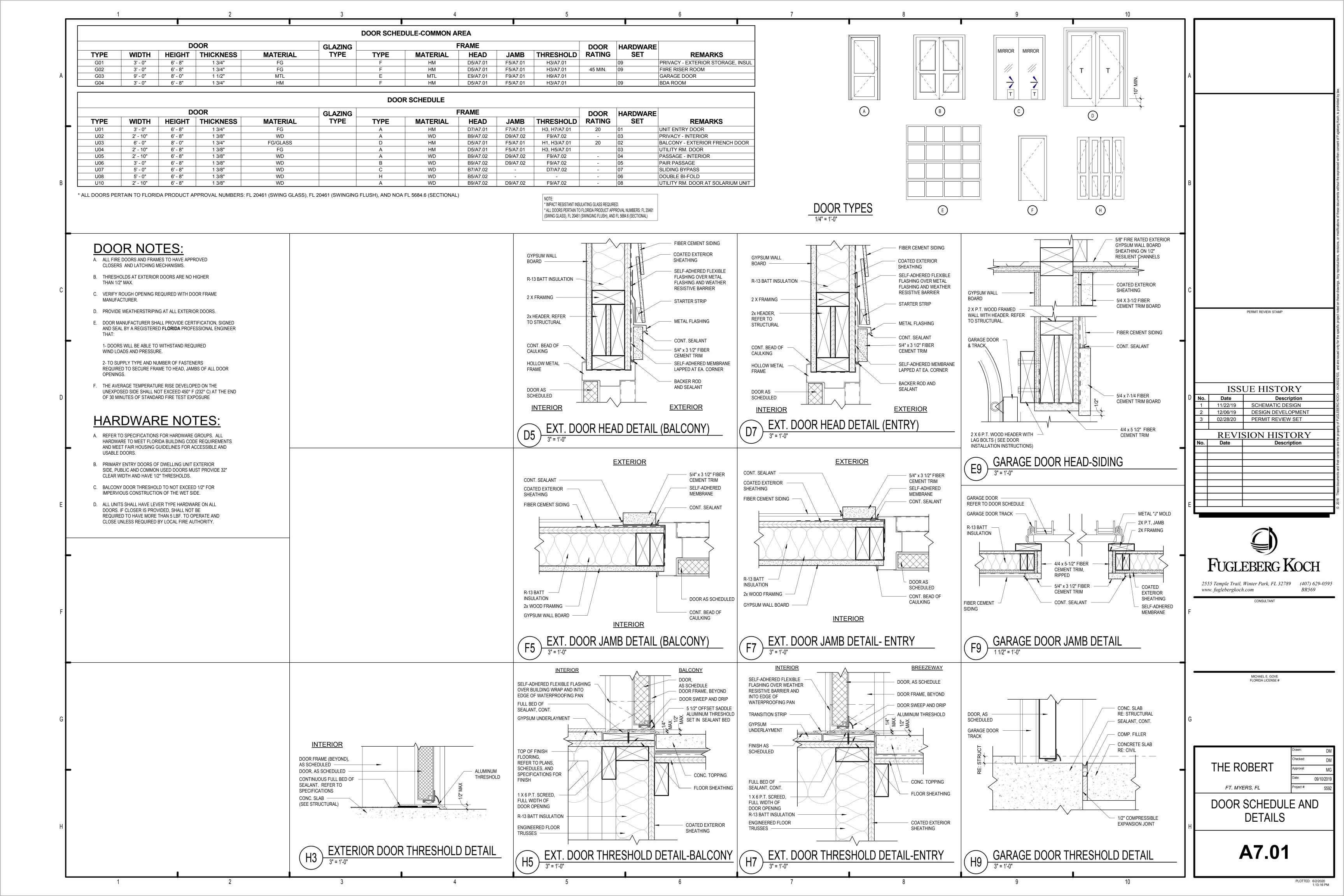


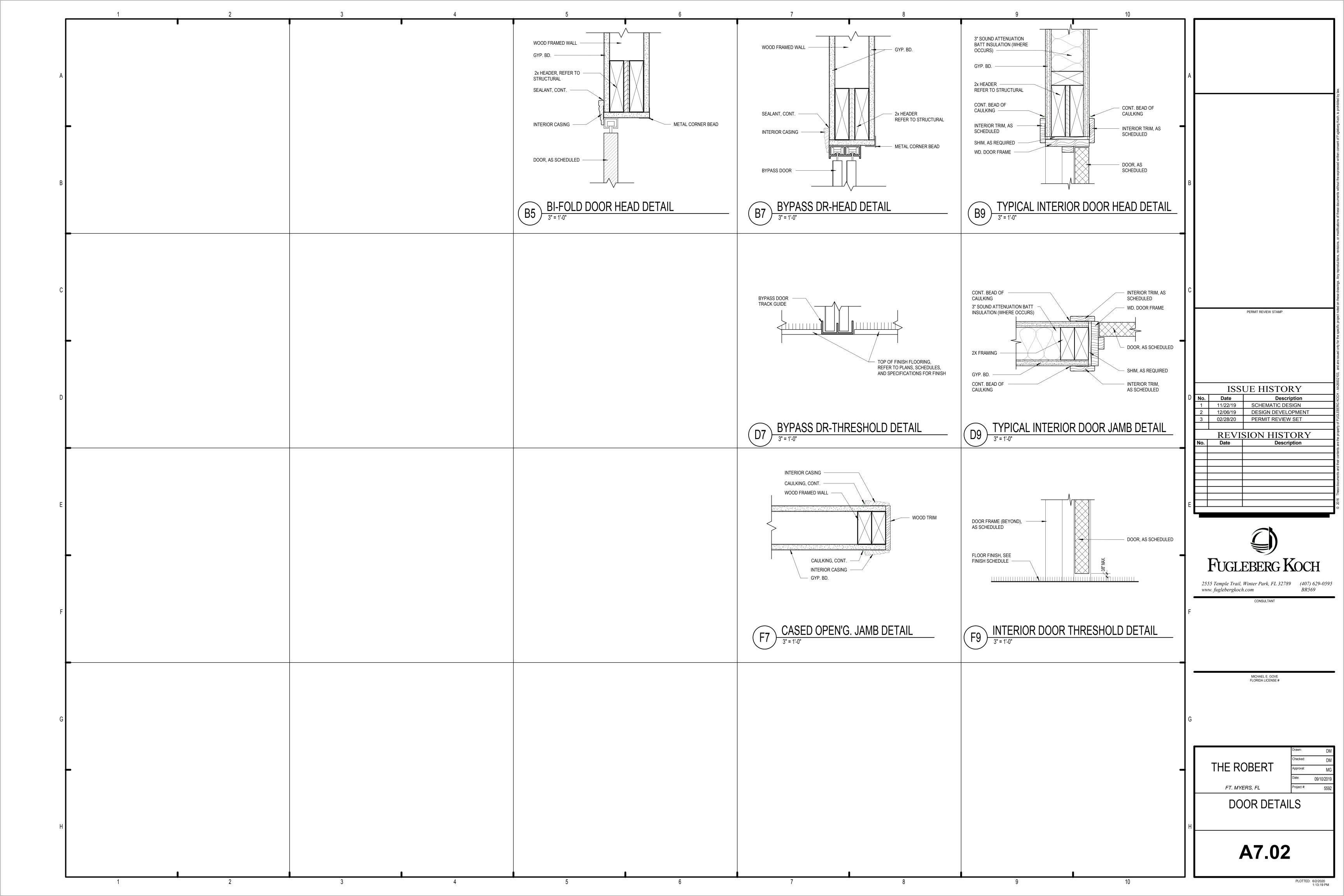


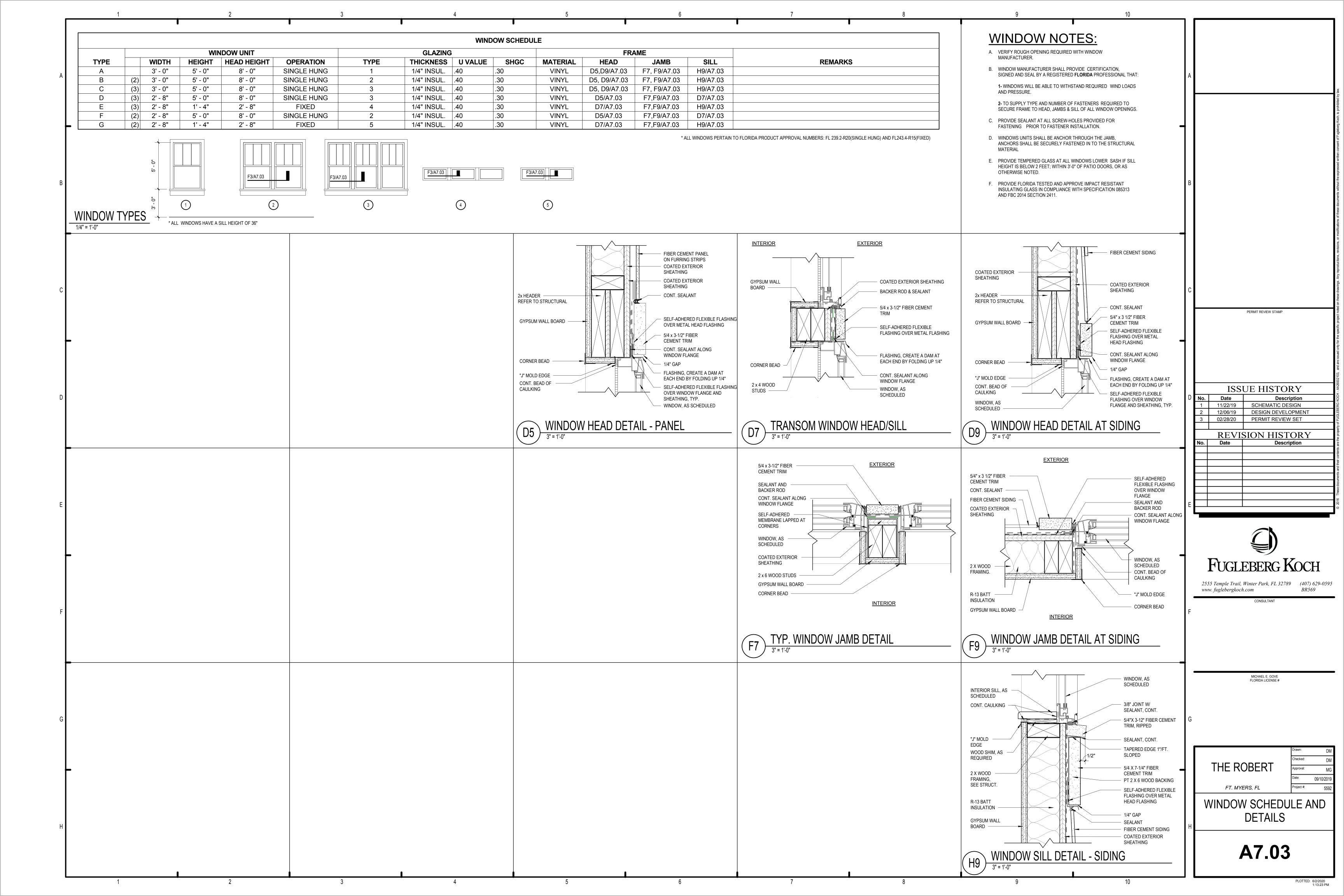


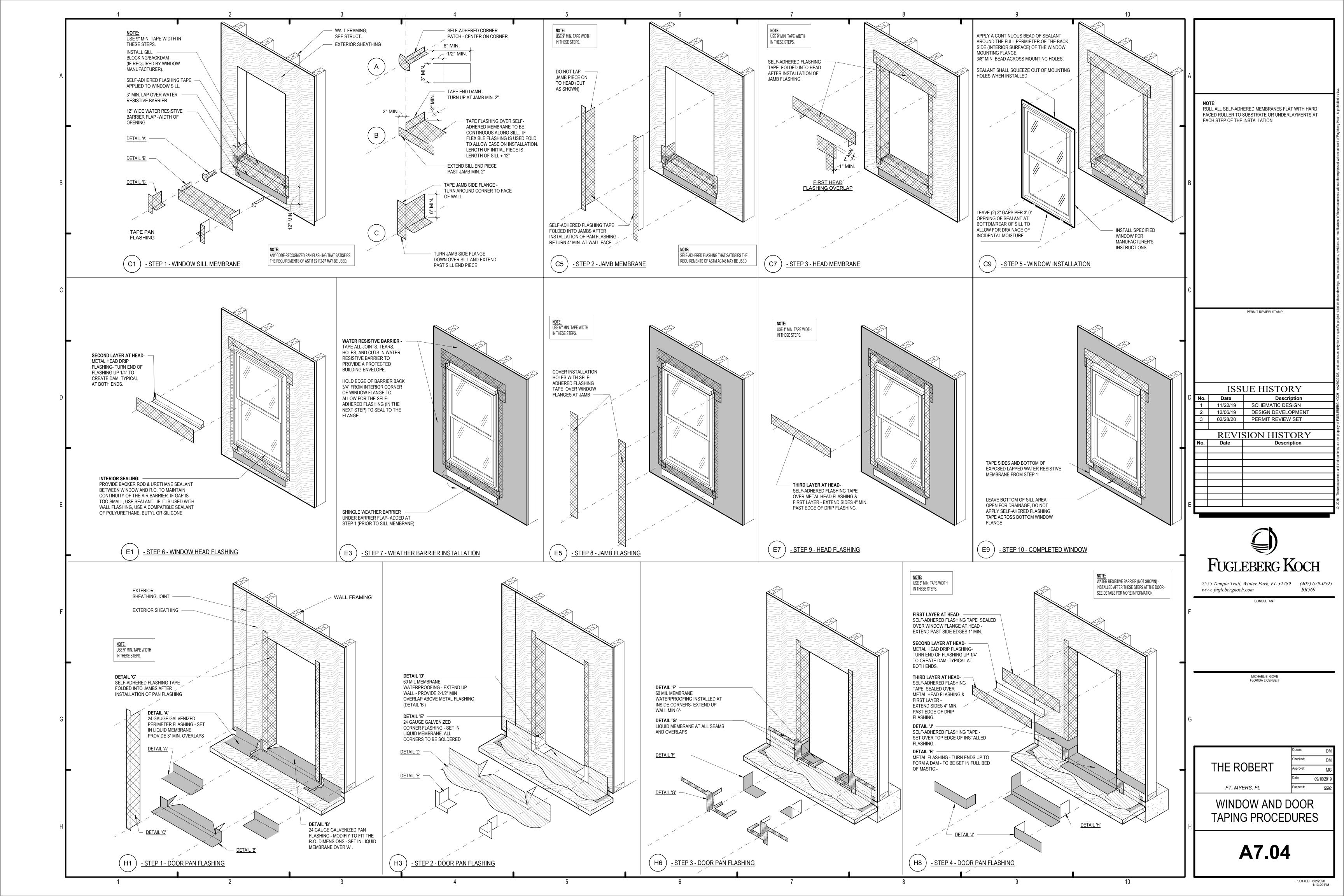


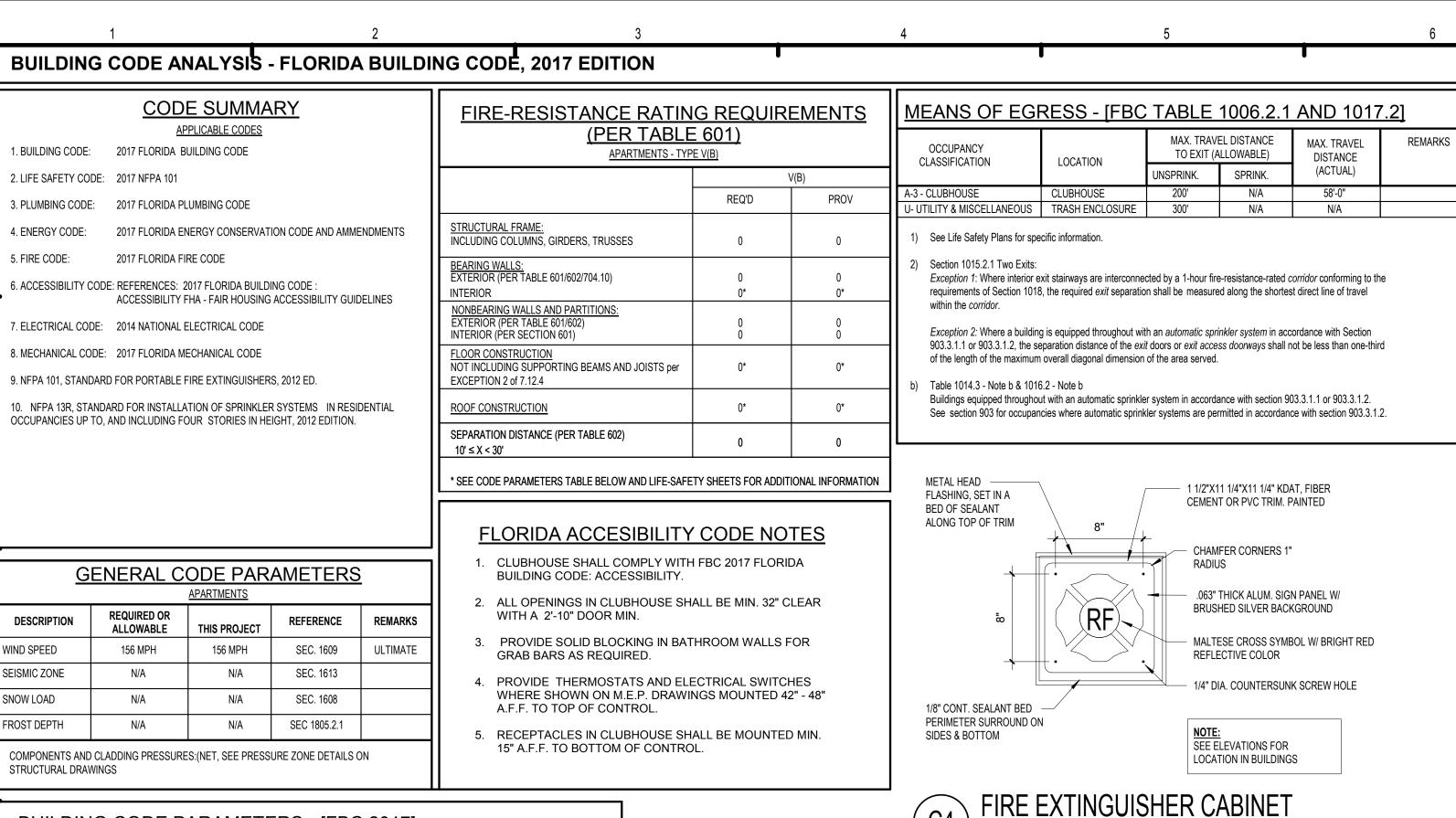












DESCRIPTION		AREA	THIS PF	ROJECT		
DESCRIPTION	REQUIRED (Table 503)	MODIFICATION REQUIREMENT	CLUBHOUSE	TRASH ENCLOSURE	REFERENCE (FBC)	REMARKS
CONSTRUCTION TYPE	TYPE V(B)	TYPE V(B)	TYPE V(B)	TYPE II (B)		
USE / OCCUPANCY			A-3	U	CH. 3 & 4	
FIRE RATING	0 HR	0 HR	0 HR	0 HR	CH. 6	
OCCUPANCY SEPARATION	0 HR	0 HR	0 HR	0 HR	TABLE 508.3.3	
SPRINKLER	-	-	-	-	TABLE 903	
CLUBHOUSE	6,000 SF		4,264 SF		TABLE 506.2	
TRASH/ENCLOSURE	5,500 SF			427 SF	TABLE 506.2	
MEZZ/LOFT INCI.			NO	NO	TABLE 505	
HEIGHT LIMIT (S)	1 STORIES		1 STORIES	1 STORIES	TABLE 504.4	
HEIGHT LIMIT/PROVIDED (FT)	40'-0"		24'-3"	10'-8"	TABLE 504.3	
OCCUPANT LOAD	TABLE 1004.1.1		114 PEOPLE	N/A	TABLE 1004.1.1	
MIN No. OF EXITS	2		7	N/A	TABLE 1006.3.1	
MIN. STAIR WIDTH	44 INCHES		N/A	N/A	S. 1005.1 / 1009.1	

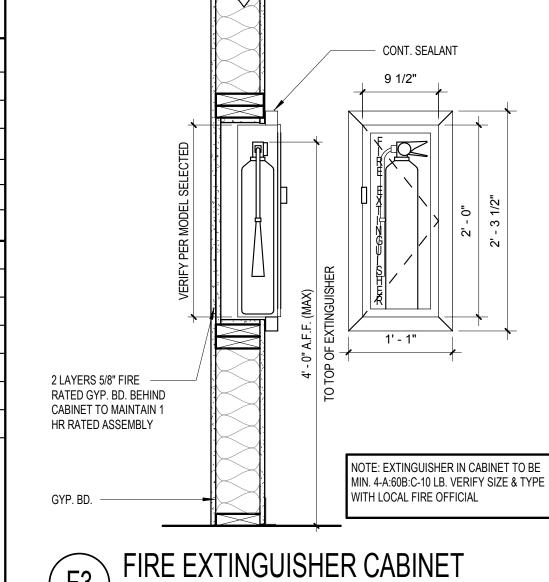


TABLE 402.4.2 AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

COMPONENT	CRITERIA						
Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.						
Ceiling/attic	Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed. Attic access (except unvented attic), knee wall door, or drop down stair is sealed.						
Walls	Corners and headers are insulated. Junction of foundation and sill plate is sealed.						
Windows and doors	Space between window/door jambs and framing is sealed.						
Rim joists	Rim joists are insulated and include an air barrier.						
Floors (including above-garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking. Air barrier is installed at any exposed edge of insulation.						
Crawl space walls	Insulation is permanently attached to walls. Exposed earth in unvented crawl spaces is covered with Class I vapor retarder with overlapping joints taped.						
Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.						
Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation.						
Garage separation	Air sealing is provided between the garage and conditioned spaces.						
Recessed lighting	Recessed light fixtures are air tight, IC rated, and sealed to drywall. Exception-fixtures in conditioned space.						
Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.						
Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.						
Electrical/phone box on exterior walls	Air barrier extends behind boxes or air sealed-type boxes are installed.						
Common wall	Air barrier is installed in common wall between dwelling units.						
HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.						
Fireplace	Fireplace walls include an air barrier.						

[FBC 2017] (AF	PARTMENTS)				
CATEGORY / SUBCATEGORY	MANUFACTURER	PRODUCT DESCRIPTION	DESIGN PRESSURE +/-	APPROVAL NUMBER(S)	EXPIRATION DATE
A. EXTERIOR DOORS					
SWINGING - GLASS	THERMA-TRU CO.	PROFILES	+/- 47	FL 20461 R4	12/31/2021
SWINGING - FLUSH	THERMA-TRU CO.	PROFILES	+/- 47	FL 20461 R4	12/31/2021
SECTIONAL	CLOPAY BLDG PRODUCTS CO.	WINDCODE W8 GARAGE DOOR	+46 / -50	FL 5684.6	12/31/2038
B. WINDOWS					_
SINGLE HUNG	CUSTOM WINDOW SYSTEMS INC.	8100 SINGLE HUNG SH-3050E	+67/-75	FL 5823.1-R8	07/21/2020
FIXED	CUSTOM WINDOW SYSTEMS INC.	8150 PW	+/-80	FL5823 - R8	07/21/2020
C. PANEL WALL					_
SOFFITS	JAMES HARDIE	HARDIE SOFFIT	N/A	NOA 17-0821.21	05/01/2022
SIDING	JAMES HARDIE	HARDIE PLANK SIDING	N/A	NOA 17-0821.21	05/01/2022
SIDING	JAMES HARDIE	HARDIE PANEL SIDING	N/A	NOA 17-0821.21	05/01/2022
D. ROOFING PRODUCTS					_
UNDERLAYMENTS	POLYGLASS	ICE AND WATER SHIELD	N/A	NOA 17-0614.22	09/13/21
ASPHALT SHINGLES	CERTAINTEED	LANDMARK	N/A	NOA 18-1114.02	02/28/2022
UNDERLAYMENTS	INTERWRAP	RHINOROOF	N/A	FL 15216 - R5	12/31/2020
OFF RIDGE VENT	FLAMCO	STANDARD OFF RIDGE VENT	N/A	FL 16918.3	09/09/2026
RIDGE VENT	CERTAINTEED	STANDARD RIDGE VENT - 12" UNFILTERED	N/A	NOA 19-0621.01	09/23/2024

ROOM	AREA	S.F./PERSON	OCCUPANCY
FITNESS	811 S.F.	50 GSF	17
MEDIA ROOM	350 S.F.	NUMBER OF SEATS	8
GATHERING AREA	566 S.F.	15 GSF	38
OUTDOOR LOGIA	615 S.F.	15 GSF	41
TOTAL			78 PERSONS
MANAGER	148 S.F.	100 GSF	2
ASSISTANT MANAGER	148 S.F.	100 GSF	2
RECEPTION	373 S.F.	100 GSF	4
WORK ROOM	103 S.F.	100 GSF	1
TOTAL			9 PERSONS
MECHANICAL	70 S.F.	300 GSF	1
TOTAL			1 PERSON
OTAL OCCUPANTS			114 PERSONS

	011 5.1 .	30 031	"
	350 S.F.	NUMBER OF SEATS	8
REA	566 S.F.	15 GSF	38
GIA	615 S.F.	15 GSF	41
			78 PERSONS
	148 S.F.	100 GSF	2
NAGER	148 S.F.	100 GSF	2
	373 S.F.	100 GSF	4
	103 S.F.	100 GSF	1
			9 PERSONS
	70 S.F.	300 GSF	1
			1 PERSON
PANTS			114 PERSONS

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

(FLORIDA ENERGY CONSERVATION CODE 2017 - CHAPTER 4 (CE)

WALL R-VALUE

OCCUPANCY

CLASSIFICATION

TOTAL OCCUPANTS = 114

* CLUBHOUSE OCCUPANTS = 114

FIXTURES REQUIRED

FIXTURES PROVIDED

20

ATTIC KNEEWALL

N/A

N/A

LOCATION

CLUBHOUSE

* URINAL = .67 IN ASSEMBLY OCCUPANCY PER 419.2

R-VALUE

N/A

N/A

MALE

1 PER 125

VALUE

N/A

N/A

FEMALE

1 PER 65

WATER CLOSETS

(URINALS 419.2)

PLUMBING FIXTURES REQ'D - FBC 2017 TABLE 2902.1

MASS FRAME WALL | FLOOR R- | BASEMENT WALL R- SLAB R-VALUE & CRAWL SPACE WALL

VALUE

LAVATORIES

FEMALE

1 PER 200

MALE

1 PER 200

DEPTH

N/A

DRINKING

FOUNTAIN

1 PER 500

2 1 HI /1 LOW

REQUIRED 1 HOUR FIRE SEPARATION

REQUIRED 2 HOUR FIRE SEPARATION

R-VALUE

N/A

SERVICE SINK

CEILING R-

VALUE

GLAZED FENESTRATION

0.25

0.25

<u>ALLOWABLE</u>

15%

25%

NL

FENESTRATION U- SKYLIGHT U-

FACTOR

0.65

N/A

MAXIMUM AREA OF EXTERIOR WALL OPENINGS:

FACTOR

0.50

0.40

FROM TABLE 705.8 - [FBC 2017: BUILDING]

ASSUMED PROPERTY LINE DISTANCE:

UNPROTECTED, SPRINKLERED (UP, S)

OVER 3 FT TO 5 FT

OVER 5 FT TO 10 FT

OVER 15 FT TO 20 FT

OVER 20 FT TO 25 FT

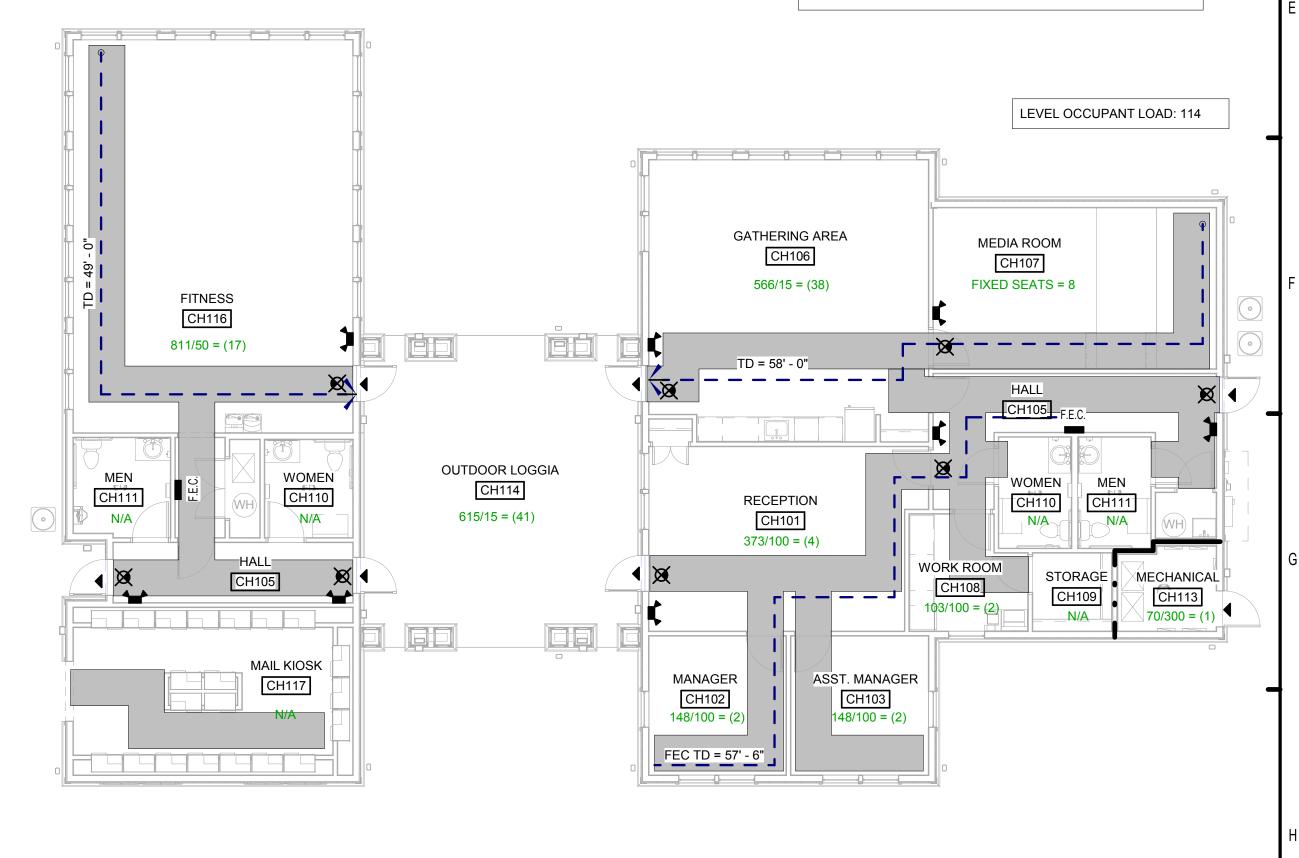
OVER 25 FT TO 30 FT

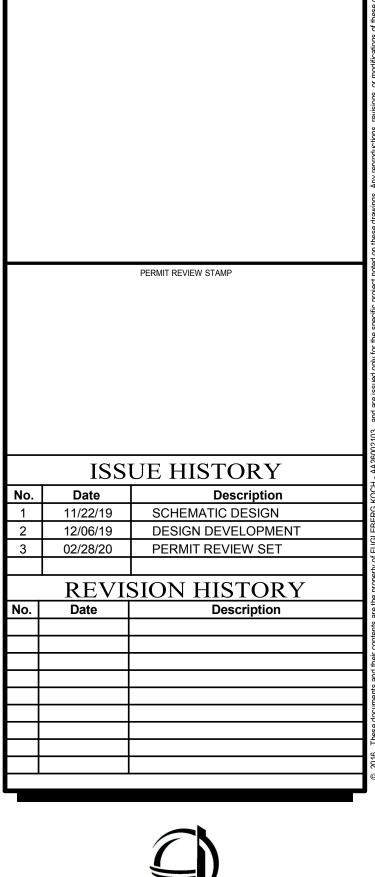
OVER 10 FT TO 15 F

FROM ASSUMED PROPERTY LINE

CLIMATE ZONE

PROVIDED





MICHAEL E. GOVE FLORIDA LICENSE #

FUGLEBERG KOCH

www. fuglebergkoch.com

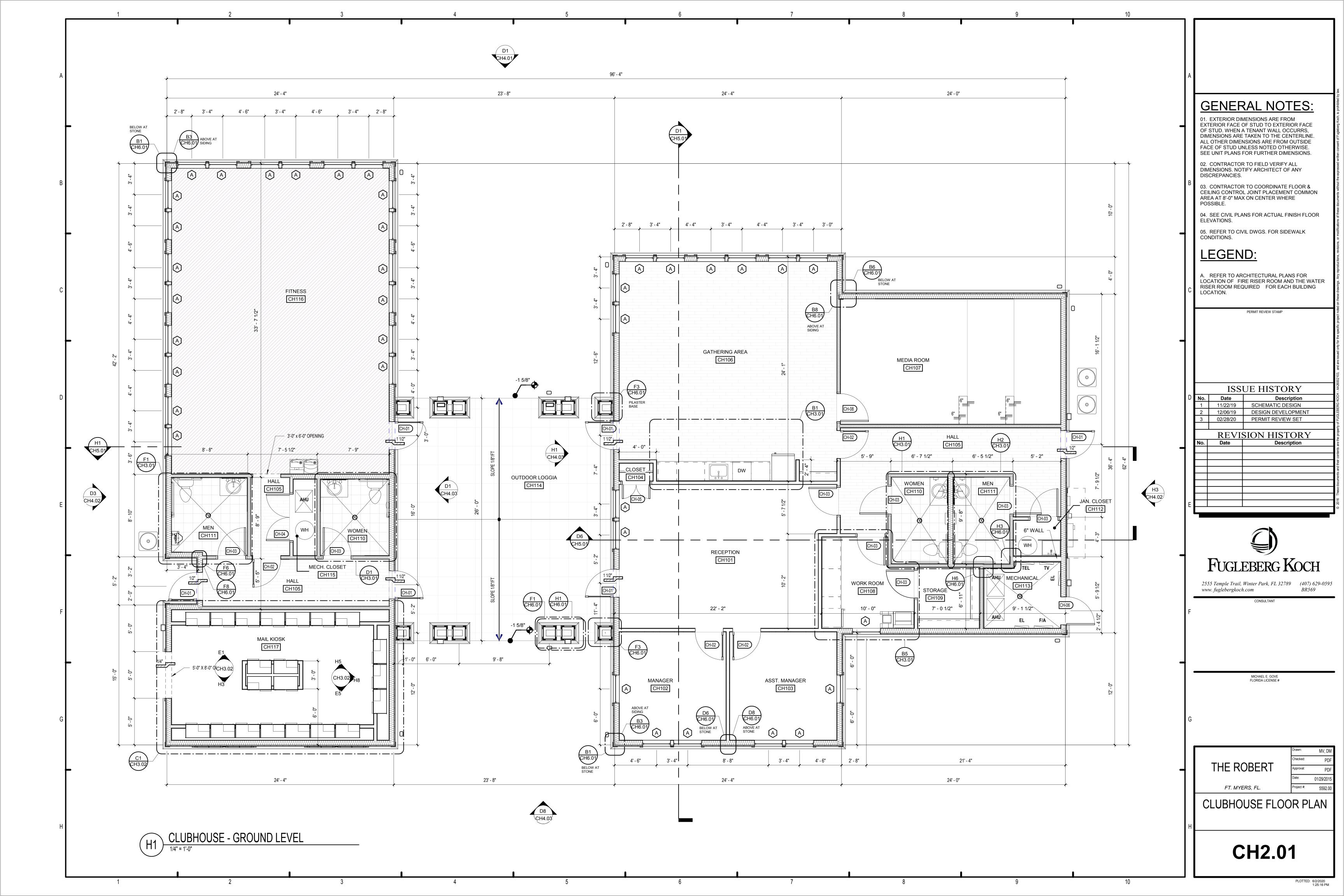
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595

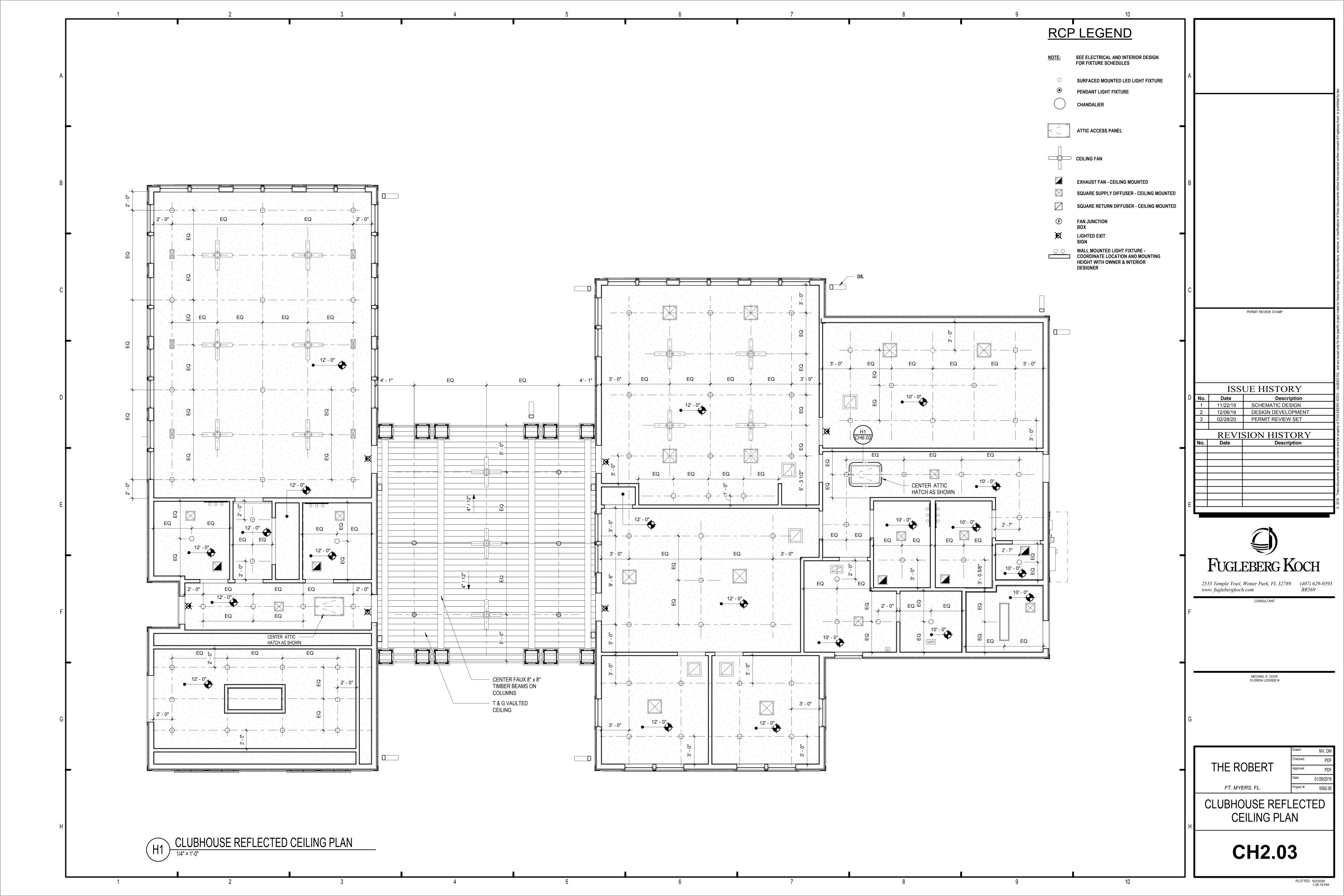
THE ROBERT 01/29/201 FT. MYERS, FL. CLUBHOUSE CODE/ LIFE

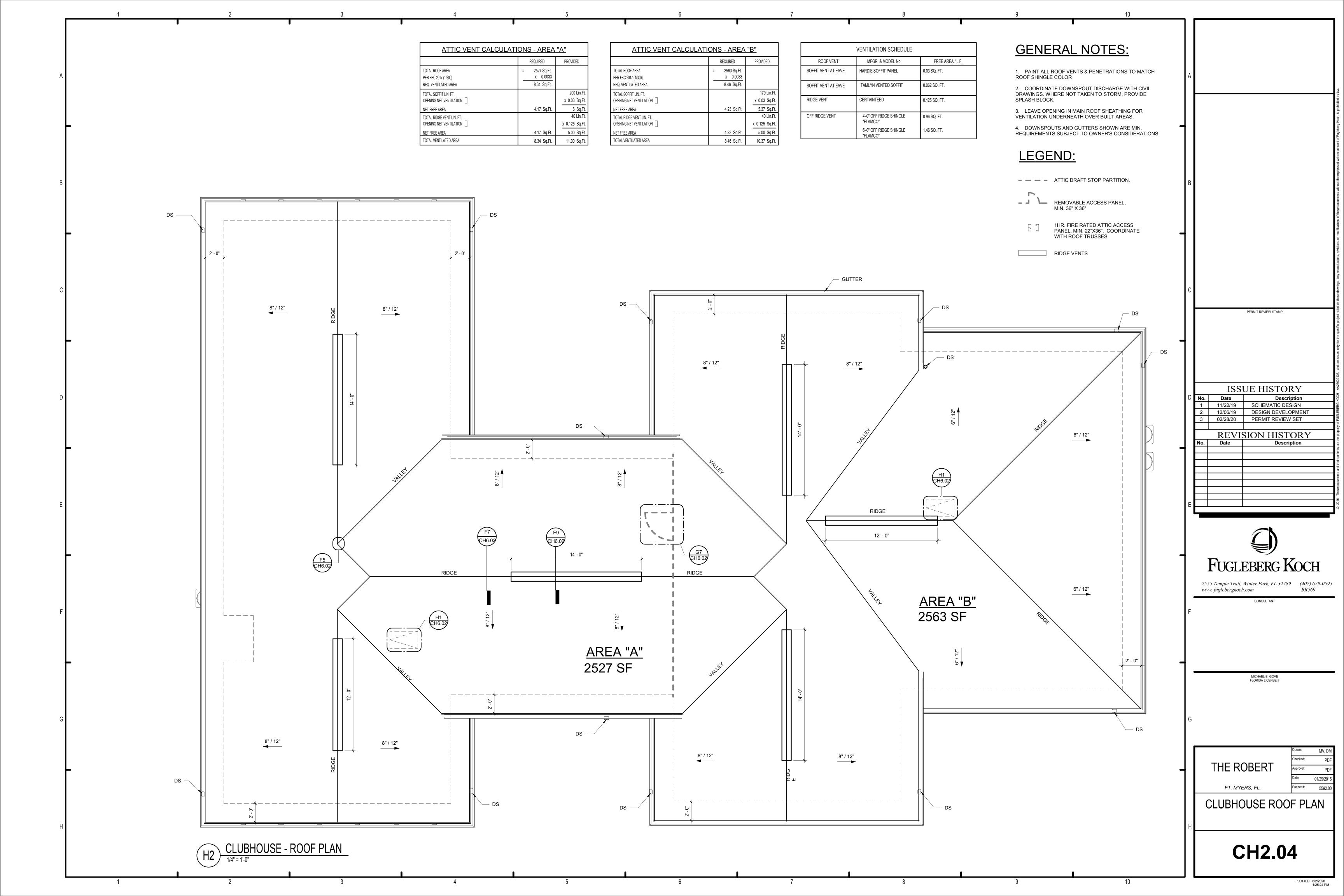
SAFETY PLAN

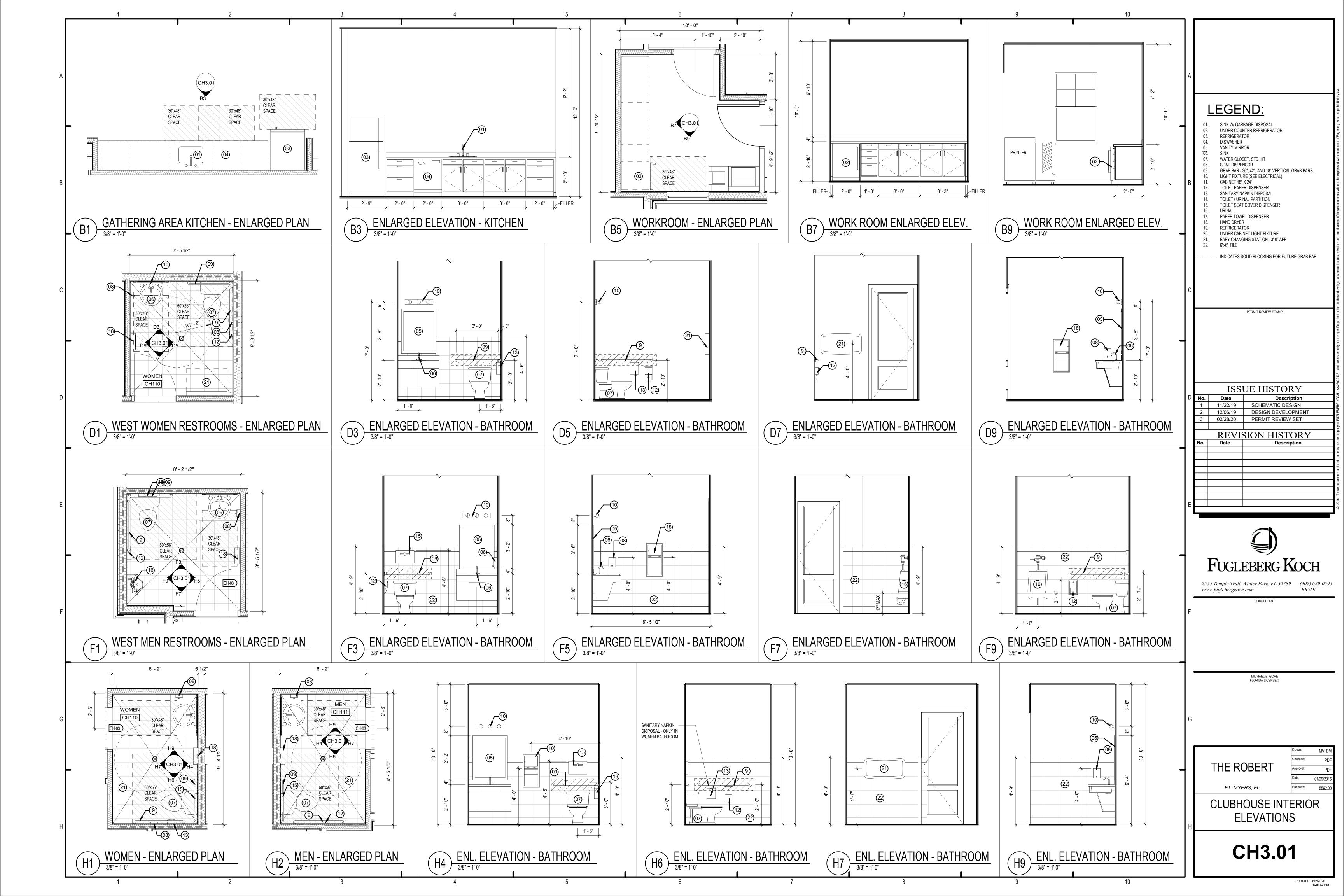
CH0.01

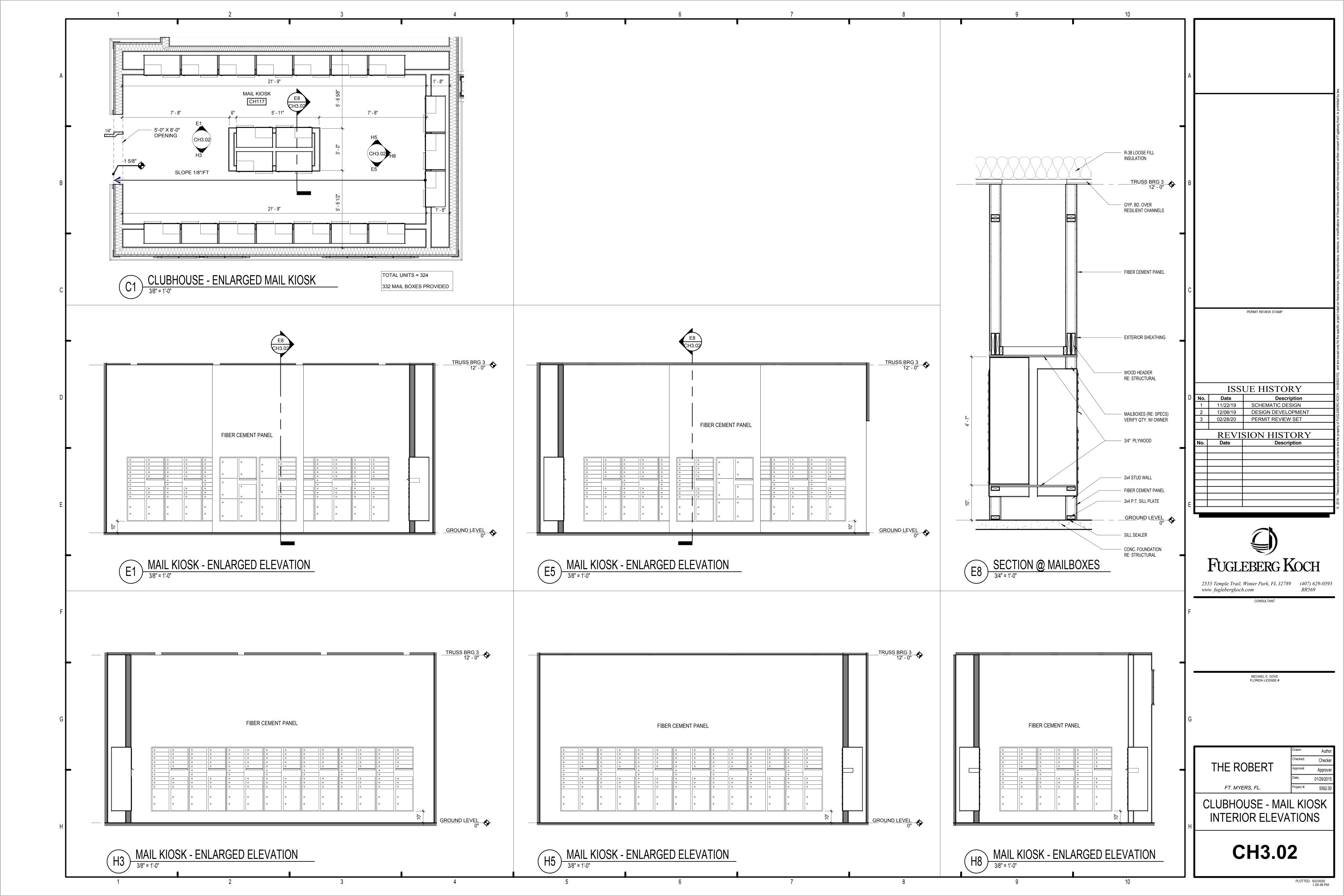
CLUBHOUSE - LIFE SAFETY PLAN

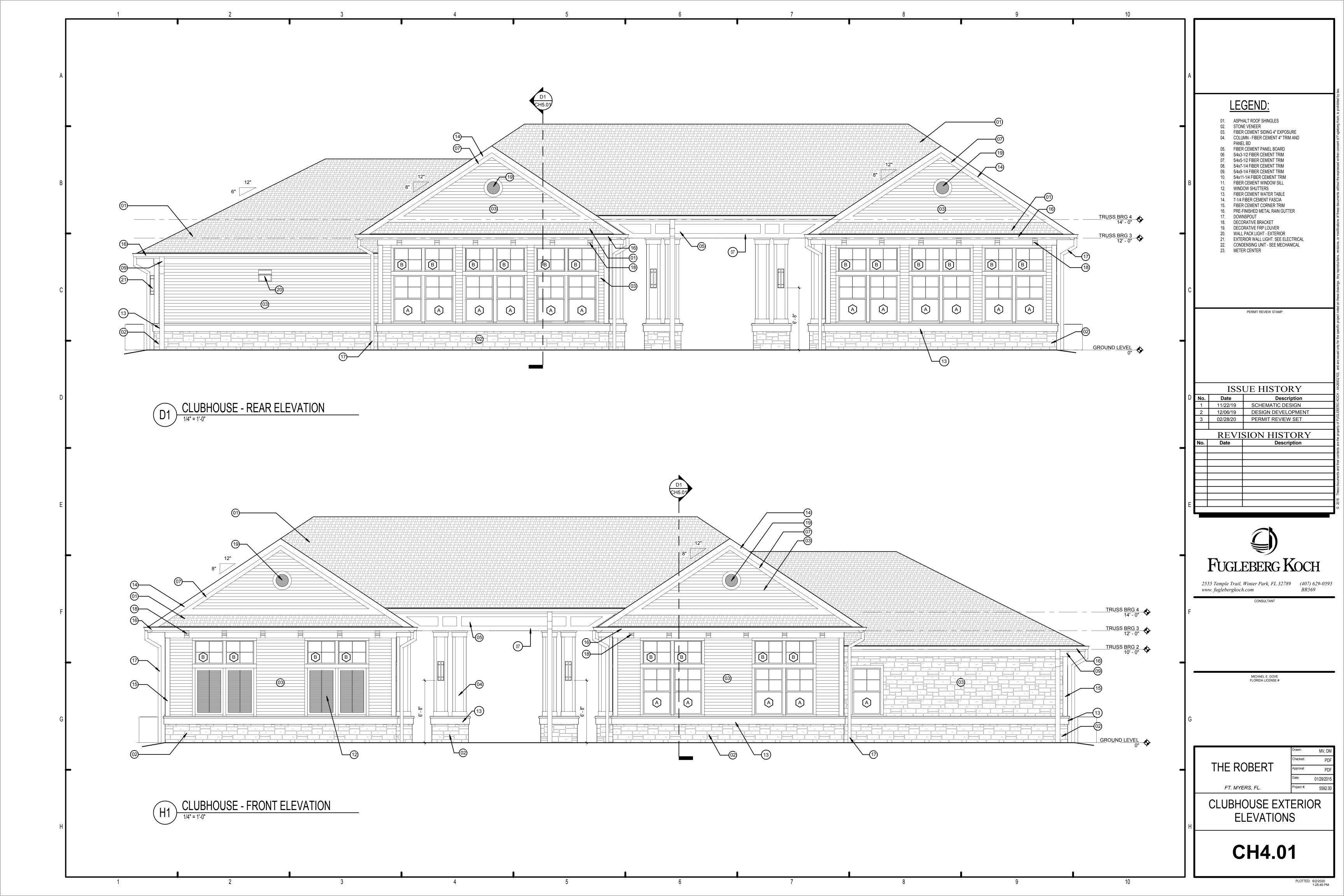


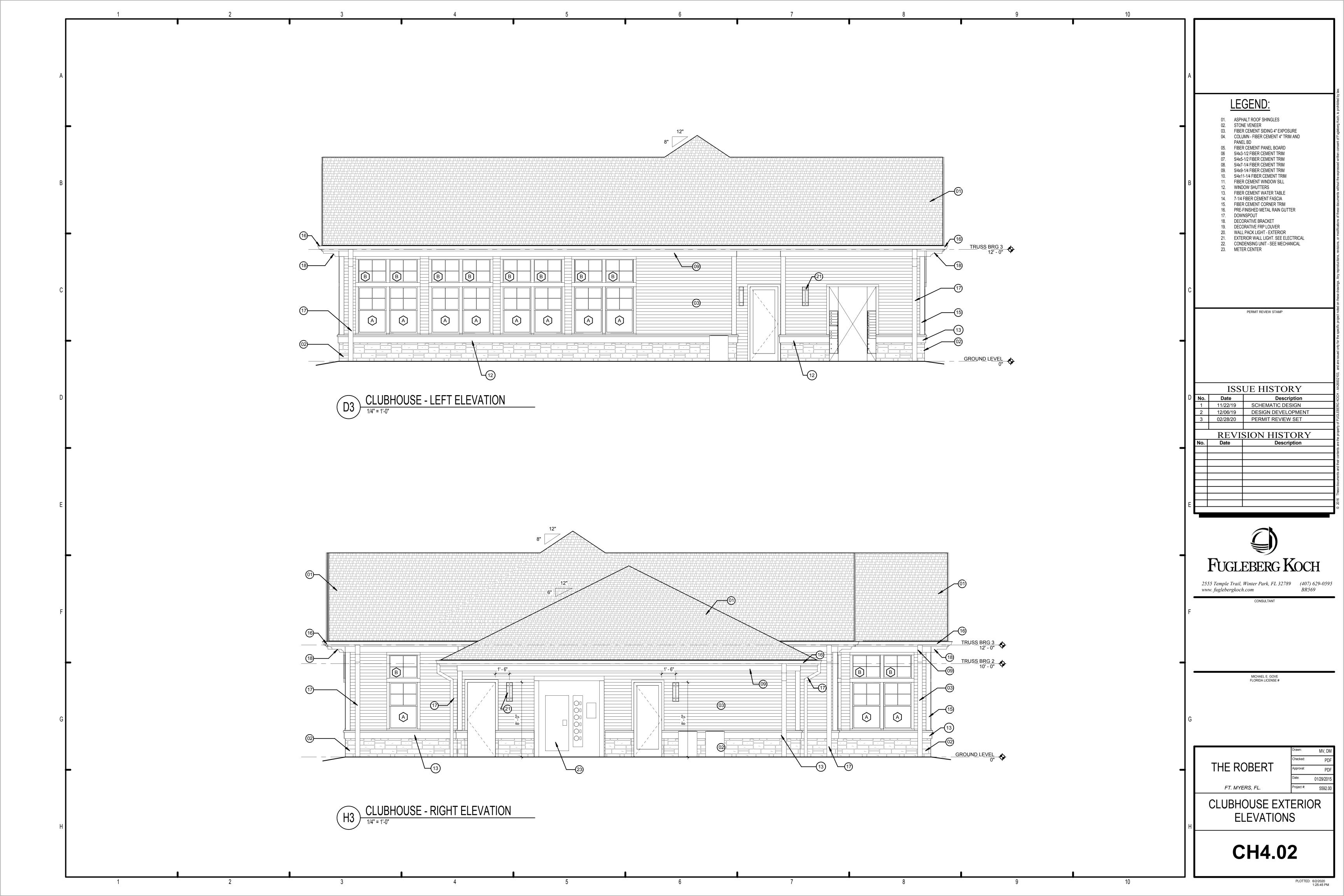


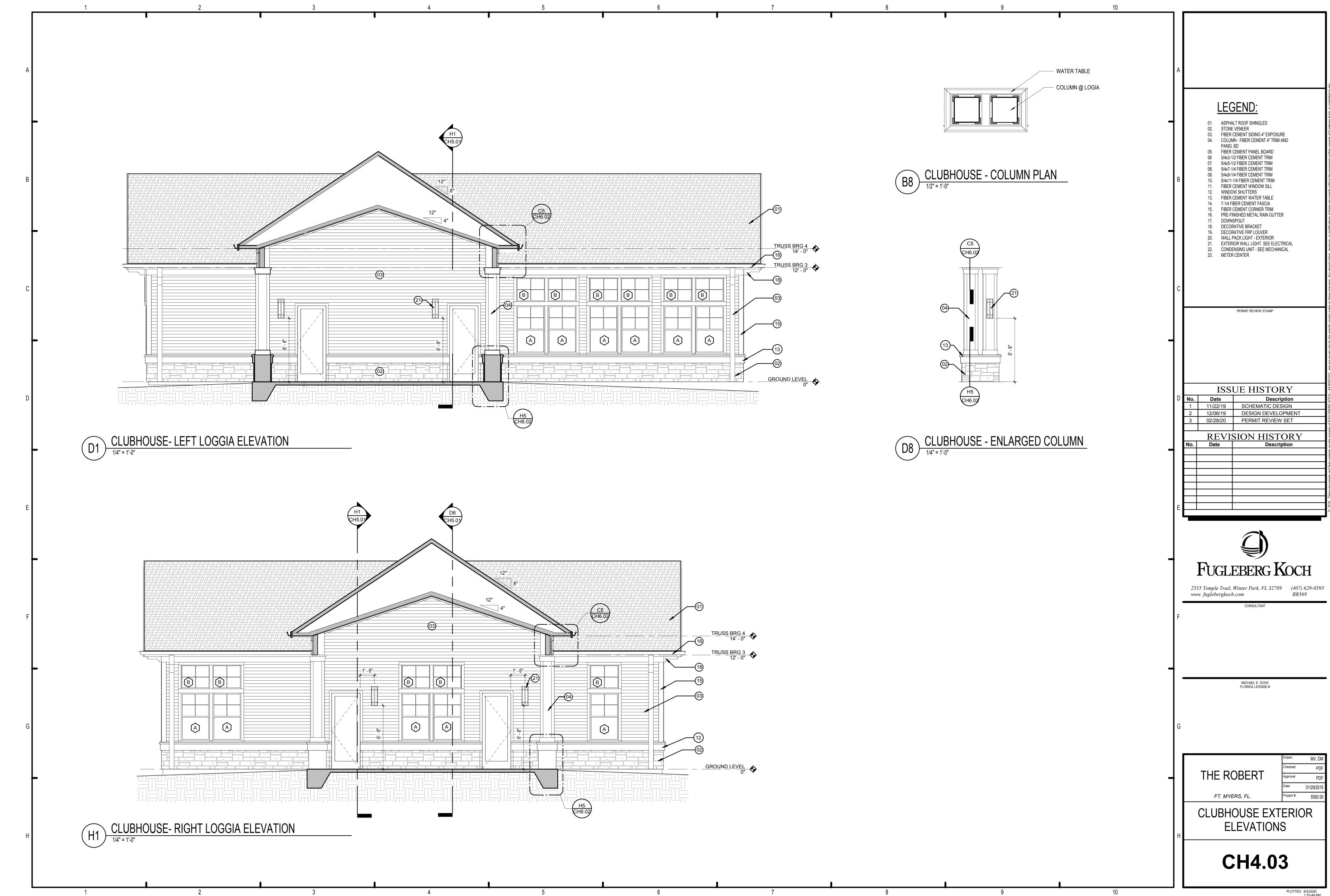


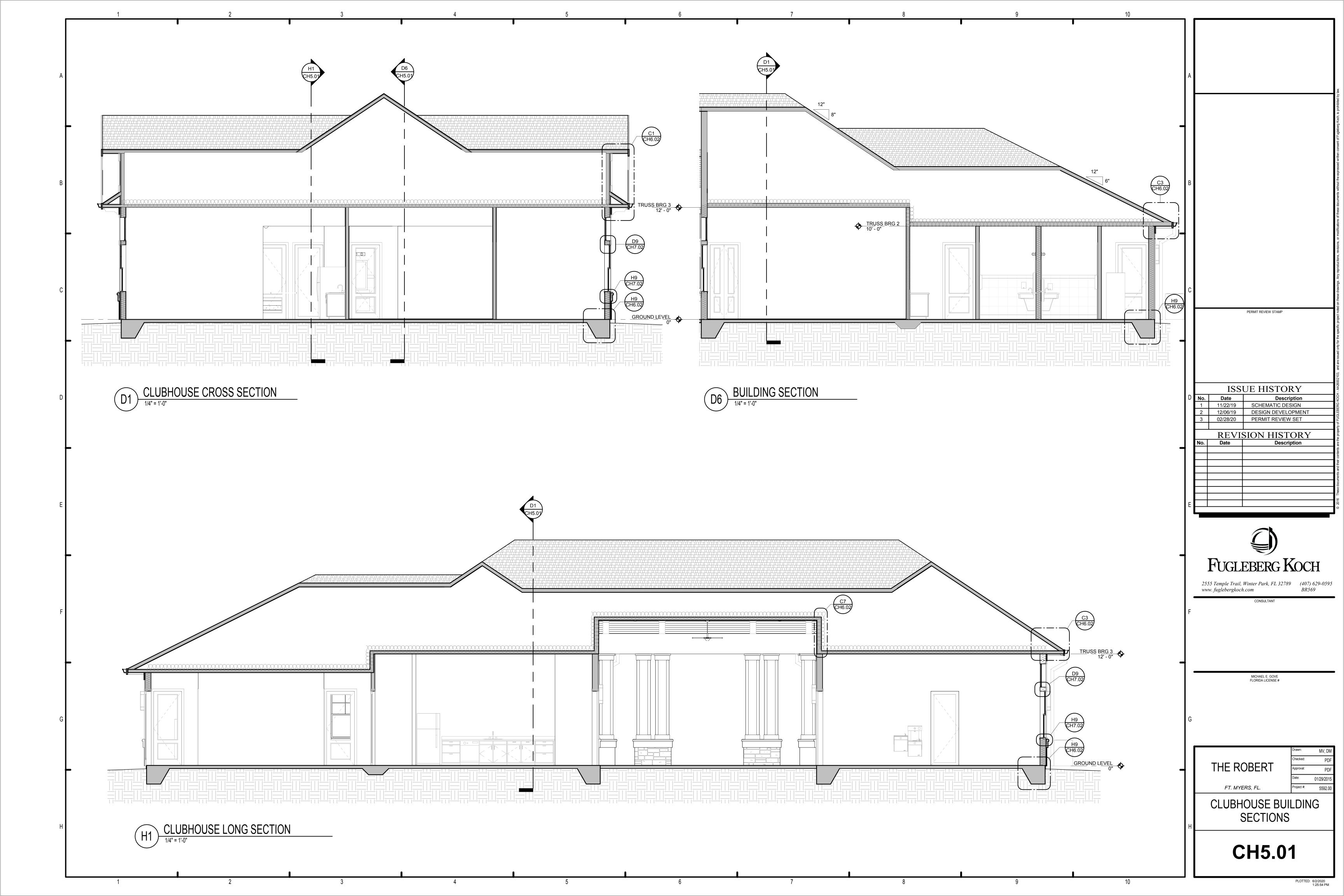


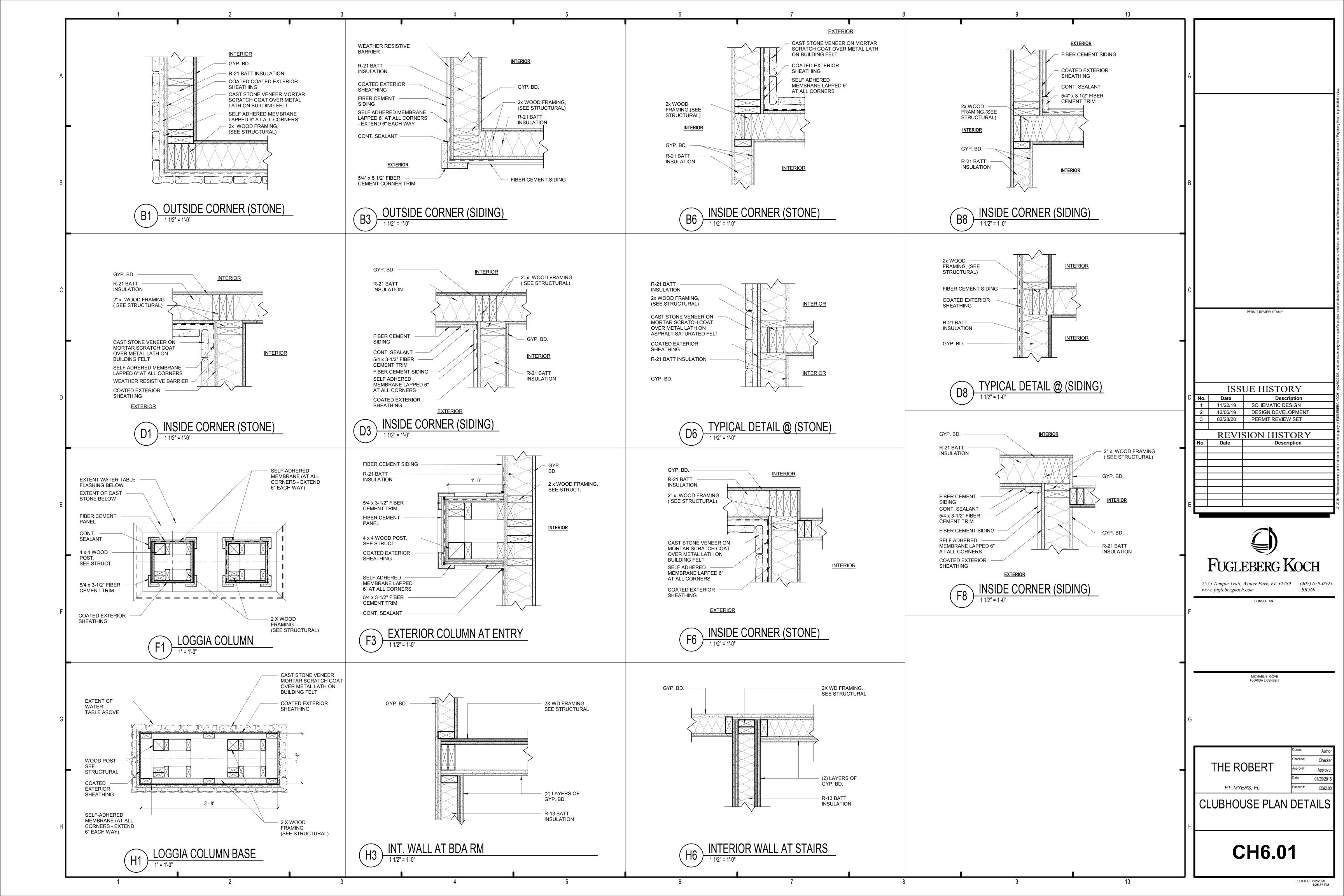


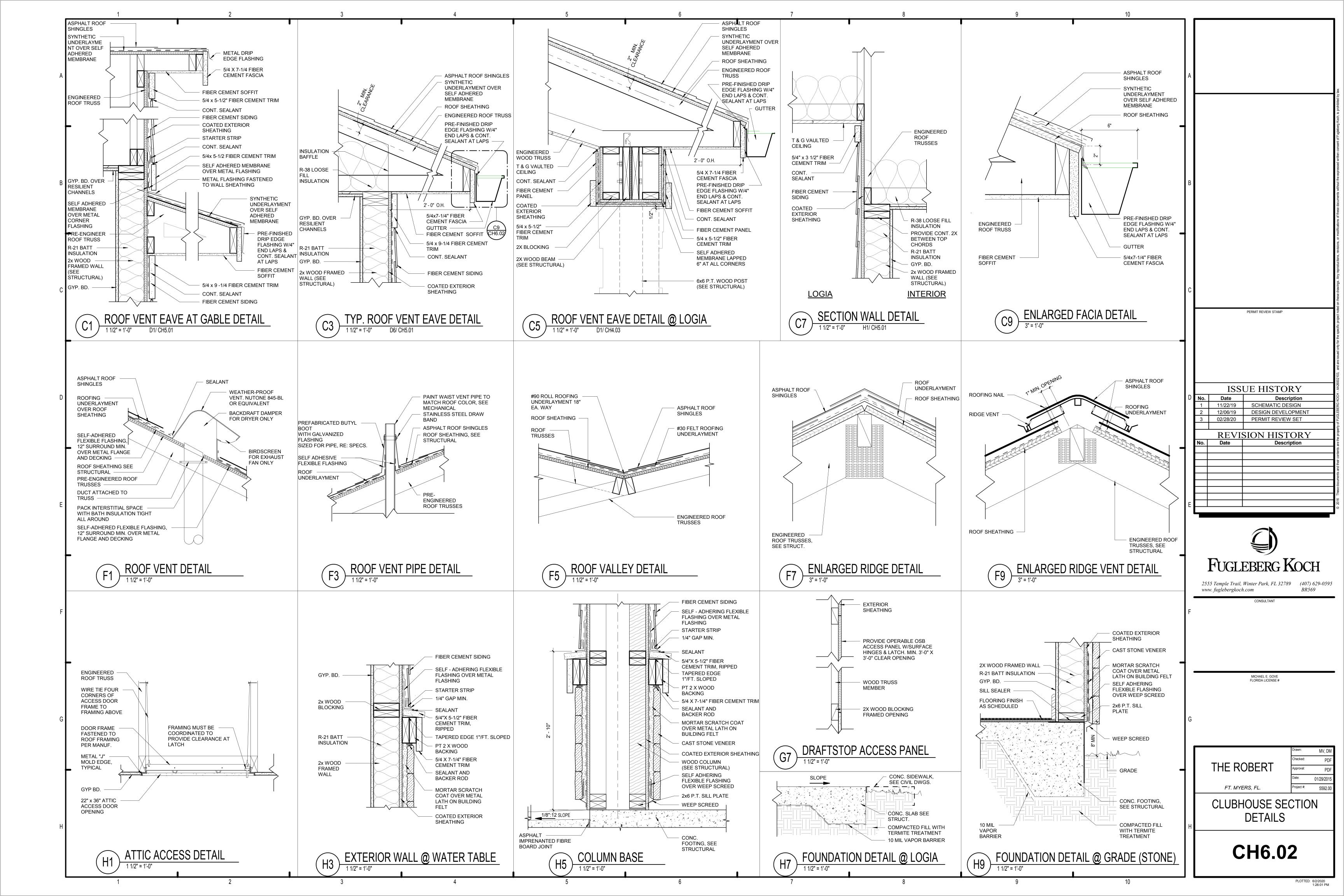


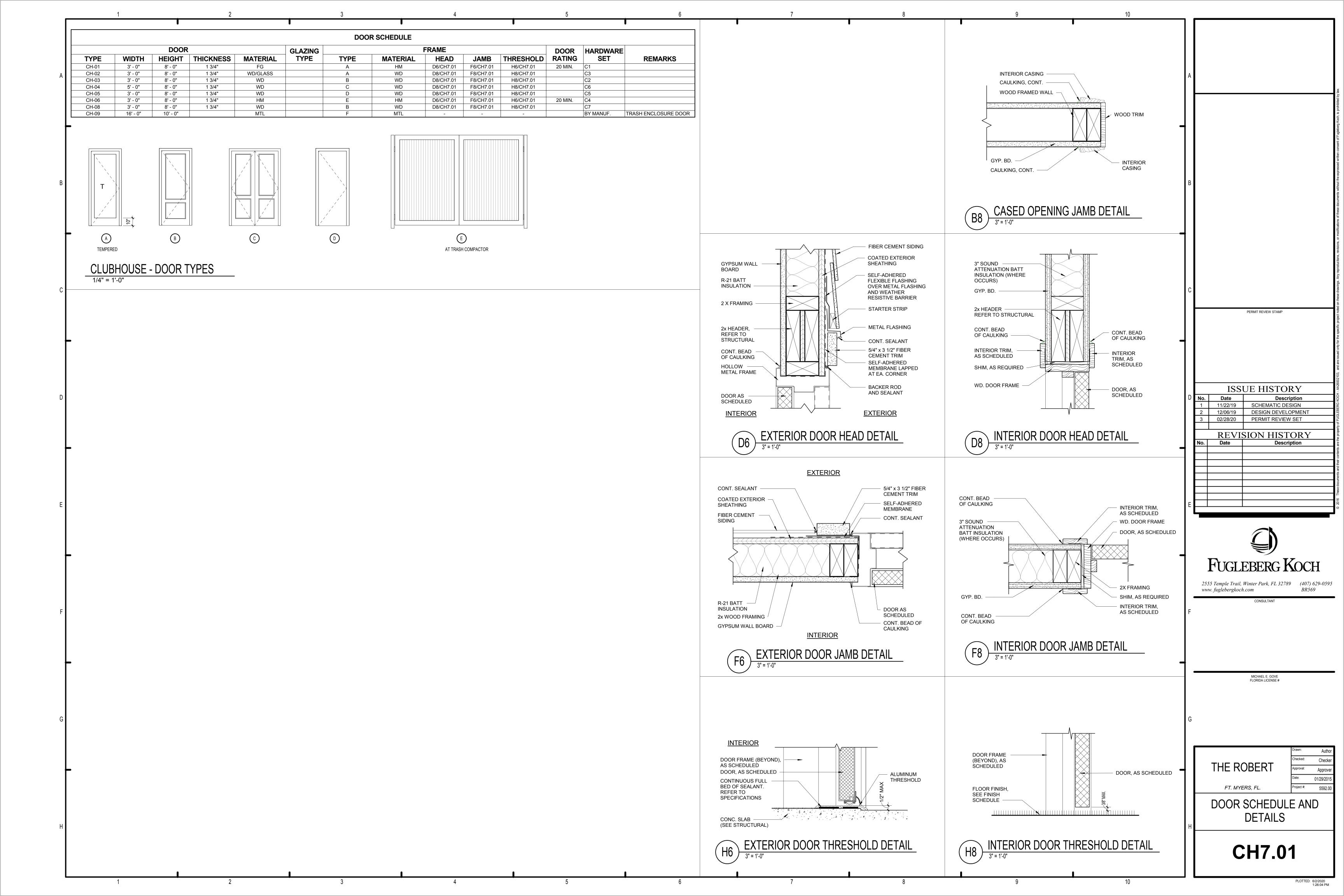


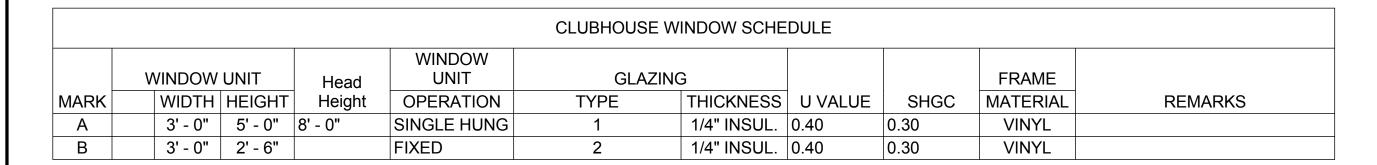


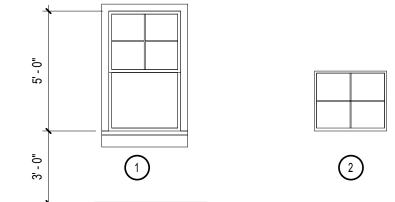










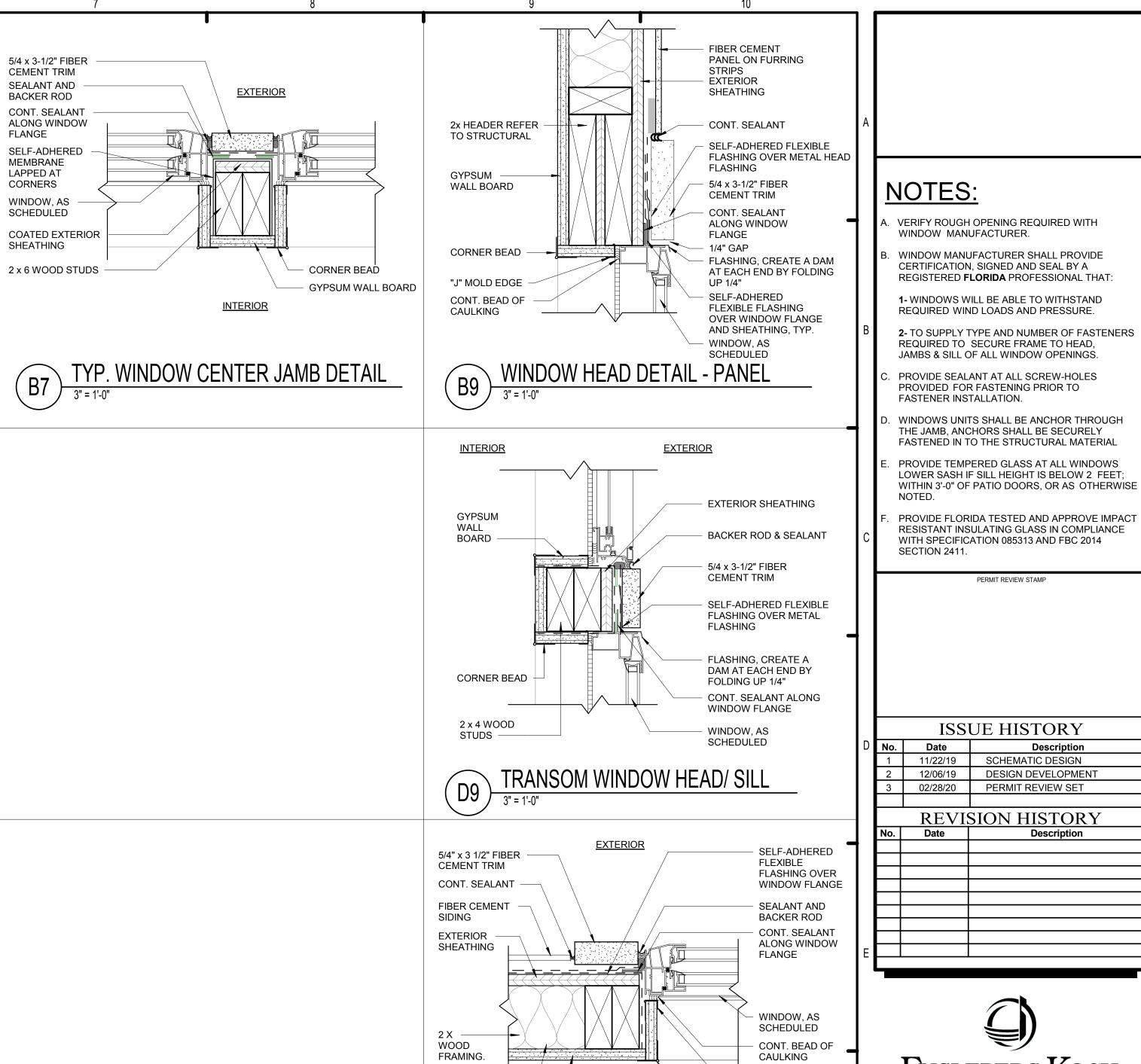


* ALL GROUND FLOOR WINDOWS HAVE A SILL HEIGHT OF 36"

CLUBHOUSE - WINDOW TYPES

1/4" = 1'-0"

				CLUBHOU	ISE FINISH S	SCHEDULE		
		FLOOR	BASE	WA			LING	
MARK	SPACE DESIGNATION	MATERIAL	MATERIAL	MATERIAL	FINISH	MATERIAL	FINISH	REMARKS
		T	I	T =	T	T	I	
CH101	RECEPTION	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH102	MANAGER	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH103	ASST. MANAGER	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH104	CLOSET	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH105	HALL	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH106	GATHERING AREA	LVT	WOOD	GWB	PAINT	GWB	PAINT	
CH107	MEDIA ROOM	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH108	WORK ROOM	CARPET	WOOD	GWB	PAINT	GWB	PAINT	
CH109	STORAGE	CARPET	CONC	GWB	PAINT	GWB	PAINT	
CH110	WOMEN	TILE	СТ	GWB*/CT	PAINT/	GWB	PAINT	
CH111	MEN	TILE	СТ	GWB*/CT	PAINT/	GWB	PAINT	
CH112	JAN. CLOSET	CONC	CONC	GWB	PAINT	GWB	PAINT	
CH113	MECHANICAL	CONC	CONC	GWB	PAINT	GWB	PAINT	
CH114	OUTDOOR LOGGIA	СТ	CT	SIDING	PAINT	T & G	T & G	
CH115	MECH. CLOSET	CONC	CONC	GWB	PAINT	GWB	PAINT	
CH116	FITNESS	RUBBER	WOOD	GWB	PAINT	GWB	PAINT	
CH117	MAIL KIOSK	CONC	CONC	FC PANEL	PAINT	GWB	PAINT	



R-21 BATT

INSULATION

INTERIOR

SILL, AS SCHEDULED

CONT. CAULKING

MOLD EDGE

WOOD SHIM, -AS REQUIRED

2 X WOOD

FRAMING,

SEE

STRUCT.

R-21 BATT

GYPSUM

INSULATION

WALL BOARD

GYPSUM WALL BOARD

WINDOW JAMB DETAIL



PERMIT REVIEW STAMP

ISSUE HISTORY

Description

Description

Date

	Drawn:	MV, DN
THE DODEDT	Checked:	PDI
THE ROBERT	Approval:	PDI
	Date:	01/29/201
FT. MYERS. FL.	Project #:	5592 0

CLUBHOUSE WINDOW DETAILS AND SCHEDULES

CH7.02

WINDOW SILL DETAIL - SIDING

3" = 1'-0"

- "J" MOLD

CORNER BEAD

EDGE

WINDOW, AS

SCHEDULED

3/8" JOINT W/ SEALANT, CONT.

5/4"X 3-12" FIBER CEMENT TRIM,

SEALANT, CONT.

SLOPED

FIBER

5/4 X 7-1/4"

FLASHING

1/4" GAP

SEALANT

CEMENT TRIM

SELF-ADHERED

FLEXIBLE FLASHING OVER METAL HEAD

FIBER CEMENT SIDING

EXTERIOR SHEATHING

TAPERED EDGE 1"/FT.

