

PROJECT NARRATIVE:

The design and documentation of a new market rental apartment development to be located on a parcel that is part of the Summer Bay DRI on Highway 192 in Lake County, Florida. The Owner's residential building program includes approximately 27 dwelling units of 5 basic types distributed among 6 residential buildings of 2 types with

The dwelling units are distributed among 6 residential buildings of 2 separate building types. The residential buildings are designed to provide 4 floors of dwelling units. The buildings are classified as Type V(b) 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 sla on grade foundations with integral thickened edges and grade beams.

The Project program also includes a Clubhouse and pool with amenity buildings which include a Pool Pavilion, Mail Kiosk, Maintenance/Car Wash building & Trash enclosures, which are submitted under a seperate Cover.

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

9			10
	SYM	BOL K	EY:
•	?	DOOR SYMBOL	NUMBERED BY TYPE REFER TO SCHEDULE
70	\Diamond	WINDOW SYMBOL	NUMBERED BY TYPE REFER TO SCHEDULE
ith	?	WALL TAG	WALL TYPE OR UL
f	?	GRID LINE TARGET	A,B,C, ETC. IN ONE DIRECTION 1,2,3, ETC. IN THE OTHER
alah	?	ROOM TAG	? ROOM NUMBER
slab ch	(XX)	TITLE	PRAWING NUMBER ? ? ? SCALE
		ELEVATION REFERENCES	DIRECTION OF VIEW SHEET NUMBER
		SECTION REFERENCES	DIRECTION OF VIEW SHEET NUMBER
		DETAIL REFERENCES	DETAIL AREA SHEET NUMBER
	$X \longrightarrow X$	INTERIOR ELEVATIONS	X VIEW NUMBER X DIRECTION OF VIEW X SHEET NUMBER
	\Phi	LEVEL REFERENCE	Name Elevation
	6/12"	ROOF SLOPE ARROW	6/12"— SLOPE SLOPE DIRECTION

ROOF SLOPE APPLICATION NOTE NUMBER LOCATION OF NOTE APPLICATION NOTE NUMBER CHANGE IN LEVEL LEVEL CHANGE

REV. LOCATION

ISSUE HISTORY

PERMIT REVIEW STAMP

DEFERRED SUBMITTALS:

Deferral of any submittal items shall have the prior approval of the

Submittal documents for deferred submittal items shall be submitte

to the Entity designated below for the project who shall review them

Official having jurisdiction with a notation indicating that the deferred

submittal documents have been reviewed and that they have been found to be in general compliance with the design of the project. The deferred submittal items shall not be installed until their design

BUILDING RAILINGS & GUARDRAILS - REVIEW BY ARCHITECT

PRE-ENGINEERED (WOOD) FLOOR & ROOF TRUSS SYSTEMS

AUTOMATIC FIRE SUPPRESSION (SPRINKLER) SYSTEM

BUILDING IDENTIFICATION AND WAYFINDING SIGNAGE

POOL DESIGN, ENGINEERING & EQUIPMENT - REVIEW BY

SITE FENCING - REVIEW BY LANDSCAPE ARCHITECT

These will then be forwarded by the Contractor to the Building

Building Official having jurisdiction.

and submittal documents have been approved.

FIRE ALARM SYSTEM - REVIEW BY ARCHITECT

<u>LIST (INCLUDING BUT NOT LIMITED</u> TO):

REVIEW BY ARCHITECT

- REVIEW BY ARCHITECT

7/21/2017 50% DESIGN DEVELOPMENT SET 11/10/2017 75%-90% REVIEW COORD. SET 3 12/20/2017 100% PERMIT SET

REVISION HISTORY

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

www. fuglebergkoch.com

MICHAEL E. GOVE FLORIDA LICENSE # AR94111

SUMMER BAY APTS. II

LAKE COUNTY, FL

COVER SHEET BUILDING TYPE 2

A0.01b

SUMMER BAY II APARTMENTS

LAKE COUNTY, FLORIDA

ARCHITECT OWNER/DEVELOPER **CIVIL ENGINEER MECHANICAL / ELECTRICAL / PLUMBING** LANDSCAPE ARCHITECT CONTRACTOR **BRYANSTONE PARTNERSHIP** NAME NAME FUGLEBERG KOCH, LLC BRAVO ENGINEERING, LLC GUTHERMAN STRUCTURAL INC. JLC & CO., CONSULTING ENGINEERS Landscape Dynamics BRAVO ENGINEERING BRYANSTONE Dynamics FUGLEBERG KOCH LANDSCAPE ARCHITECTS AND PLANNERS ATTN: JOE H. SCOTT, SR. ATTN: MICHAEL E. GOVE ATTN: ADAM J. BARNEY ATTN: RANDY BUCHANAN ATTN: NAME ATTN: NAME ATTN: CHRISTOPHER T. BRAVO ATTN: JACK GUTHERMAN 1180 HARWOOD AVENUE, SUITE 300 1065 EXECUTIVE PARKWAY, SUITE 300 2555 TEMPLE TRAIL 5127 SOUTH ORLANDO AVENUE 130 CROWN OAK CENTRE DRIVE 629 WARRENTON ROAD ORLANDO, FLORIDA 32809 SUITE 200 CITY, STATE ZIP CODE CITY, STATE ZIP CODE ST. LOUIS, MISSOURI 63141 WINTER PARK, FLORIDA 32789 LONGWOOD, FLORIDA 32750 ALTAMONTE SPRINGS, FLORIDA 32714 WINTER PARK, FL 32792 PHONE (321) 972-4466 PHONE (407) 252-1671 PHONE: (407) 579-1811 PHONE PHONE (314) 542-0105 PHONE (407) 629-0595 FAX (407) 628-1057 PHONE (407) 701-0875

		REV.	REV.	ISSUE	PRINTING
SHT#	SHEET NAME	No.	DATE	DATE	SESSIONS
00 - GENERAL					
A0.01b	COVER SHEET BUILDING TYPE 2			11/10/17	BUILDING TYPE 2
A0.02	CODE ANALYSIS			11/10/17	GENERAL
A0.03	ACCESSIBILE DATA AND DETAILS			11/10/17	GENERAL
A0.04	ACCESSIBILE DETAILS			11/10/17	GENERAL
A0.05	ACCESSIBILE DETAILS			11/10/17	GENERAL
A0.12	LIFE SAFETY PLANS - BUILDING TYPE 2			11/10/17	BUILDING TYPE
A0.13 A0.17	LIFE SAFETY PLANS - BUILDING TYPE 2 LIFE SAFETY PLANS SECTIONS - BLDG. TYPE 2			11/10/17 11/10/17	BUILDING TYPE
A0.17 A0.20	PARTITION TYPES			11/10/17	GENERAL
A0.20 A0.22	AREA PLANS - BUILDING TYPE 2			11/10/17	BUILDING TYPE
A0.22 A0.30	UL REFERENCE DIRECTORY - WALL SYSTEMS			11/10/17	GENERAL
A0.32	UL REFERENCE DIRECTORY - WALL / FLOOR SYSTEMS			11/10/17	GENERAL
A0.32	UL REFERENCE DIRECTORY - FLOOR SYSTEM			11/10/17	GENERAL
A0.34	UL REFERENCE DIRECTORY - ROOF SYSTEMS			11/10/17	GENERAL
A0.35	UL REFERENCE DIRECTORY - FLOOR PENETRATIONS			11/10/17	GENERAL
A0.36	UL REFERENCE DIRECTORY - FLOOR PENETRATIONS			11/10/17	GENERAL
A0.37	UL REFERENCE DIRECTORY - WALL PENETRATIONS			11/10/17	GENERAL
17			l l		
01 - ARCHITEC	CTURAL				
A1.01	ARCHITECTURAL SITE PLAN			11/10/17	GENERAL
1		'			•
04 - ARCHITEC	CTURAL				
A2.08	BUILDING TYPE 2 - GROUND FLOOR PLAN			11/10/17	BUILDING TYPE
A2.09	BUILDING TYPE 2 - LEVEL 2 PLAN			11/10/17	BUILDING TYPE
A2.10	BUILDING TYPE 2 - LEVEL 3 PLAN			11/10/17	BUILDING TYPE
A2.11	BUILDING TYPE 2 - LEVEL 4 PLAN			11/10/17	BUILDING TYPE 2
A2.12	BUILDING TYPE 2 - FLAT ROOF PLAN			11/10/17	BUILDING TYPE
A2.13	BUILDING TYPE 2 - TOP ROOF PLAN			11/10/17	BUILDING TYPE
A2.22	CORRIDOR RCP - BUILDING TYPE 2 - LEVELS 1 & 2			11/10/17	BUILDING TYPE
A2.23	CORRIDOR RCP - BUILDING TYPE 2 - LEVELS 3 & 4			11/10/17	BUILDING TYPE
A2.31	ENLARGED GARAGE PLANS - BUILDING TYPE 2			11/15/17	BUILDING TYPE
A2.33	ENLARGED ENTRY PLANS - BUILDING TYPE 2			11/15/17	BUILDING TYPE
A2.43	BUILDING TYPE 2 - STAIR PLANS			11/10/17	BUILDING TYPE
A2.44	BUILDING TYPE 2 - STAIR SECTIONS			11/29/17	BUILDING TYPE
A2.45	STAIR DETAILS			11/10/17	BUILDINGS
A2.47	BLDG. TYPE 2 - ELEVATOR PLANS & SECTIONS			11/10/17	BUILDING TYPE
A2.48	ELEVATOR DETAILS			11/10/17	BUILDINGS
A3.01 A3.02	STUDIO UNIT - S1 1 BR UNIT PLANS - A1			11/10/17 11/10/17	BUILDINGS BUILDINGS
A3.02 A3.03	1 BR UNIT PLANS - A1S			11/10/17	BUILDINGS
A3.03	2 BR UNIT PLANS - ATS			11/10/17	BUILDINGS
A3.04 A3.05	2 BR UNIT PLANS - B2			11/10/17	BUILDINGS
A3.06	2 BR UNIT PLANS - B2S			11/10/17	BUILDINGS
A3.07	3 BR UNIT PLANS - C1			11/10/17	BUILDINGS
A3.08	3 BR UNIT PLANS - C1			11/10/17	BUILDINGS
A3.10	ENLARGED PLANS - KITCHEN			11/10/17	BUILDINGS
A3.11	ENLARGED PLANS - BATHROOM			11/10/17	BUILDINGS
A3.12	ENLARGED PLANS - BATHROOM			11/10/17	BUILDINGS
A3.13	KITCHEN, BATH, AND LAUNDRY REQ.	1	Date 1	11/10/17	BUILDINGS
A3.14	FINISH SCHEDULES	1	Date 1	05/07/15	GENERAL
A4.03	BUILDING TYPE 2 - NORTH & SOUTH ELEVATIONS			11/10/17	BUILDING TYPE
A4.04	BUILDING TYPE 2 - EAST & WEST ELEVATIONS			11/10/17	BUILDING TYPE
A4.12	BUILDING TYPE 2 - AXONOMETRICS			11/10/17	BUILDING TYPE
A4.20	BALCONY 1 - PLANS AND ELEVATIONS			11/10/17	BUILDINGS
A4.52	BUILDING TYPE 2 - SECTIONS			11/10/17	BUILDING TYPE
A4.53	BUILDING TYPE 2 - SECTIONS			11/10/17	BUILDING TYPE 2
Δ5.01	WALL SECTION DETAILS			11/10/17	BLIII DINGS

PROJECT SITE

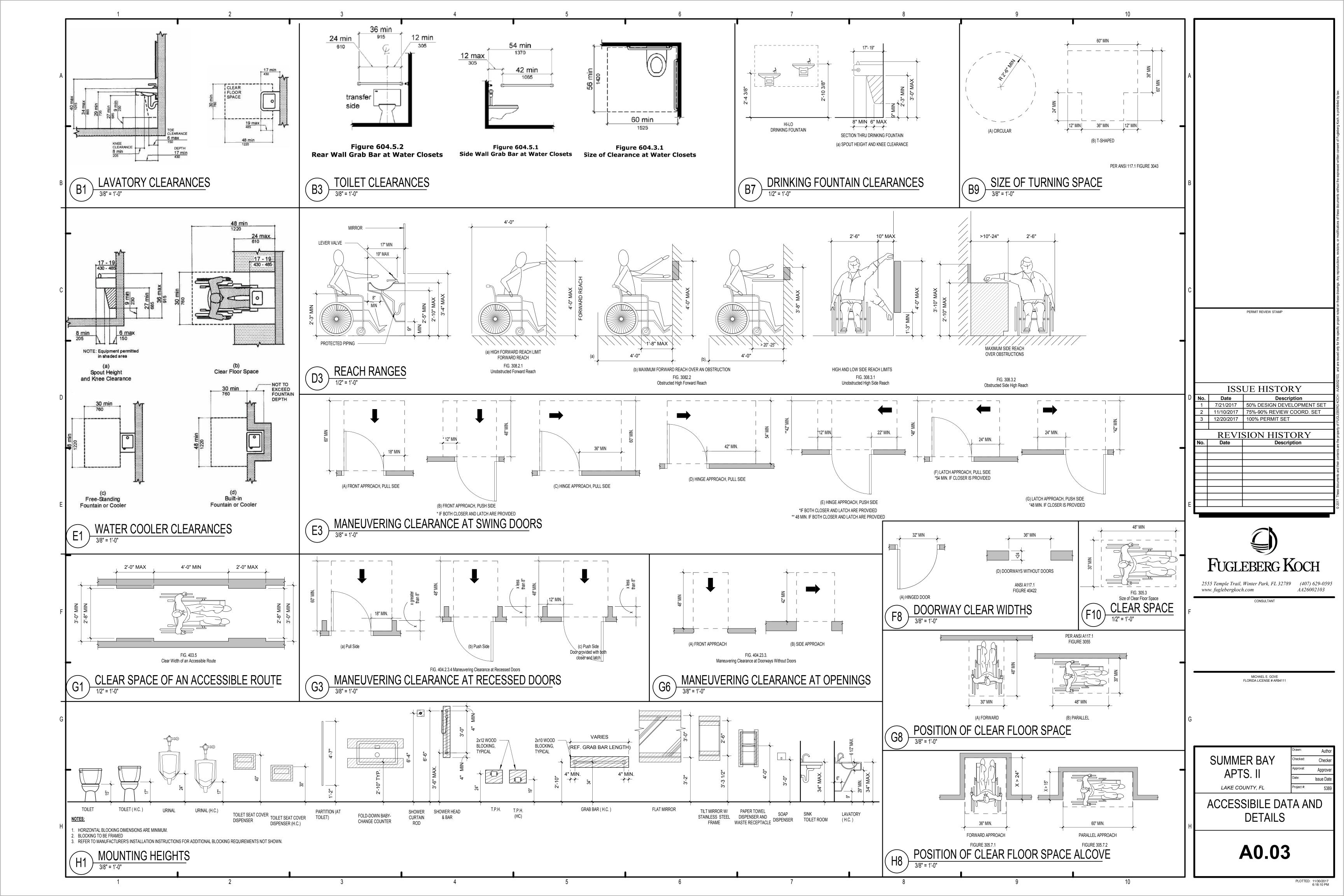
A5.04 PENETR/ A5.05 ROOF DE A5.10 SECTION A5.14 BALCON' A6.01 PLAN DE A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW A7.03 WINDOW 45 05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 SCHEDU M6.01 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.04 BUILDING M5.05 BUILDING M5.06 BUILDING M5.07 SCHEDU M6.08 DETAILS M6.09 BUILDING M5.09 BUILDING M5.01 SCHEDU M6.01 DETAILS M6.03 DETAILS	SHEET NAME ECTION DETAILS ATION AND FLASHING DETAILS	REV. No.	REV.	ISSUE	PRINTING
A5.04 PENETR/ A5.05 ROOF DE A5.10 SECTION A5.14 BALCON' A6.01 PLAN DE A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW A7.03 WINDOW 45 05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.09 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.01 ENLARGI M4.01 SCHEDU M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.06 BUILDING E3.06 BUILDING E3.07 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING	ATION AND FLASHING DETAILS	1	DATE	DATE	SESSION
A5.05 ROOF DE A5.10 SECTION A5.14 BALCON' A6.01 PLAN DE A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW A7.03 WINDOW A5.06 BUILDING S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU S2.02 SCHEDU M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.01 BUILDING M4.02 ENLARGI M4.03 ENLARGI M4.01 SCHEDU M6.01 DETAILS M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC M6.03 DETAILS M7.01 RISER M7.01 R				11/10/17	BUILDINGS
A5.10 SECTION A5.14 BALCON' A6.01 PLAN DE A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW A7.03 WINDOW A7.03 WINDOW A5 05 - STRUCTURAL S1.06 BUILDING S1.08 BUILDING S1.09 BUILDING S1.09 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.02 DETAILS M6.03 DETAILS M6.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 BUILDING E3.07 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING				11/10/17	BUILDINGS
A5.14 BALCON' A6.01 PLAN DE A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW 45 05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.09 BUILDING S1.09 BUILDING S1.09 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 SCHEDU M6.01 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 BUILDING E3.08 BUILDING E3.09 BUILDING	= I AILS			11/10/17	BUILDINGS
A6.01 PLAN DE A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW 45 05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.01 ENLARGI M4.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.03 DETAILS M6.04 BUILDING M8.05 BUILDING M8.01 SPECIFIC M8.01 STEPLA E3.01 BUILDING E3.04 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.06 BUILDING E3.06 BUILDING E3.06 BUILDING E3.07 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING	N DETAILS			11/15/2013	BUILDINGS
A6.02 PLAN DE A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW 45 05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 SYMBOL M6.01 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 BUILDING E3.07 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING	Y WATERPROOFING DETAILS	1	Date 1	11/15/2013	BUILDINGS
A7.01 DOOR SC A7.02 WINDOW A7.03 WINDOW A7.03 WINDOW A7.03 WINDOW A7.03 WINDOW A7.05 STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU S3.01 FOUNDA S3.02 STRUCTU S4.05 BUILDING M3.01 BUILDING M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 BUILDING M4.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 SCHEDU M6.01 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC M5.01 STEPLA E3.01 BUILDING E3.02 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06	TAILS			11/10/17	BUILDINGS
A7.02 WINDOW A7.03 WINDOW 45.05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9.07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.03 ENLARGI M4.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 BUILDING E3.06 BUILDING E3.06 BUILDING E3.06 BUILDING E3.07 BUILDING E3.07 BUILDING E3.07 BUILDING E3.08 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING E3.00 BUILDING	TAILS			11/10/17	BUILDINGS
A7.03 WINDOW 45 05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTU S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M3.06 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 EXCENTION E	CHEDULE AND DETAILS			11/10/17	BUILDINGS
STRUCTURAL	V SCHEDULE AND DETAILS			11/10/17	BUILDINGS
05 - STRUCTURAL S1.06 BUILDING S1.07 BUILDING S1.08 BUILDING S1.09 BUILDING S1.10 BUILDING S2.01 STRUCTG S2.02 SCHEDU S3.01 FOUNDA S3.02 STRUCTG 9 O7 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M4.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M6.01 DETAILS M6.02 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 O9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 </td <td>V AND DOOR TAPING PROCEDURES</td> <td>1</td> <td>Date 1</td> <td>11/15/2013</td> <td>BUILDINGS</td>	V AND DOOR TAPING PROCEDURES	1	Date 1	11/15/2013	BUILDINGS
\$1.06 BUILDING \$1.07 BUILDING \$1.08 BUILDING \$1.09 BUILDING \$1.10 BUILDING \$1.10 BUILDING \$2.01 STRUCTU \$2.02 SCHEDU \$3.01 FOUNDA \$3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 DETAILS M6.01 SYMBOL M8.01 SPECIFIC 15 109 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 BUILDING E3.06 BUILDING E3.06 BUILDING E3.07 BUILDING E3.07 BUILDING E3.07 BUILDING E3.08 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING			•		•
\$1.07 \$1.08 \$UILDING \$1.09 \$UILDING \$1.10 \$UILDING \$2.01 \$2.01 \$TRUCTO \$2.02 \$CHEDU \$3.01 FOUNDA \$3.02 \$TRUCTO \$0.07 - MECHANICAL M0.01 \$YMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.02 ENLARGI M4.03 M5.01 \$CHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 \$PECIFIC 15 09 - ELECTRICAL E0.01 \$YMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06					
\$1.08 \$1.09 \$UILDING \$1.09 \$UILDING \$1.10 \$UILDING \$2.01 \$TRUCTU \$2.02 \$CHEDU \$3.01 FOUNDA \$3.02 \$TRUCTU 9 07 - MECHANICAL M0.01 \$YMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06	G TYPE 2 - FOUNDATION PLAN			11/10/17	BUILDING TYPE
\$1.09 BUILDING \$1.10 BUILDING \$1.10 BUILDING \$2.01 STRUCTG \$2.02 SCHEDU \$3.01 FOUNDA \$3.02 STRUCTG 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 EXCEPTION E	G TYPE 2 - LEVEL 2 FRAMING PLAN			11/10/17	BUILDING TYPE
\$1.10 BUILDING \$2.01 STRUCTU \$2.02 SCHEDU \$3.01 FOUNDA \$3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 EXCEPTION EXCEP	G TYPE 2 - LEVEL 3 FRAMING PLAN			11/10/17	BUILDING TYPE
\$2.01 STRUCTO \$2.02 SCHEDU \$3.01 FOUNDA \$3.02 STRUCTO 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M6.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 EXCEPTOR EXCEPTO	G TYPE 2 - LEVEL 4 FRAMING PLAN			11/10/17	BUILDING TYPE
\$2.02 SCHEDU \$3.01 FOUNDA \$3.02 STRUCTU 9 07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 BUILDING E3.06 BUILDING E3.06 BUILDING E3.06 BUILDING E3.07 BUILDING E3.07 BUILDING E3.07 BUILDING E3.08 BUILDING E3.09 BUILDING E3.09 BUILDING E3.09 BUILDING E3.00 BUILDING E3.00 BUILDING E3.00 BUILDING E3.00 BUILDING E3.00 BUILDING	G TYPE 2 - ROOF FRAMING PLAN			11/10/17	BUILDING TYPE
\$3.01 FOUNDA' \$3.02 STRUCTU 77 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 19 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.07 EXPRESS EXPRISED EXPRE	URAL NOTES & SCHEDULES			11/10/17	GENERAL
\$3.02 STRUCTO OF - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 O9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.06 BUILDING E3.06	ILES AND TYPICAL DETAILS			11/10/17	GENERAL
07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING E3.06 BUILDING	ATION SECTIONS			11/10/17	GENERAL
07 - MECHANICAL M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 O9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	URAL FRAMING SECTIONS			11/10/17	GENERAL
M0.01 SYMBOL M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 D9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING					
M3.01 BUILDING M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 D9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING					
M3.02 BUILDING M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 D9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	LEGEND MECHANICAL			11/10/17	GENERAL
M3.03 BUILDING M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - GROUND FLOOR PLAN - MECHANICAL			11/10/17	BUILDING TYPE
M3.04 BUILDING M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 O9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - LEVEL 2 PLAN - MECHANICAL			11/10/17	BUILDING TYPE
M3.05 BUILDING M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 509 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - LEVEL 3 PLAN - MECHANICAL			11/10/17	BUILDING TYPE
M4.01 ENLARGI M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIO 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - LEVEL 4 PLAN - MECHANICAL			11/10/17	BUILDING TYPE
M4.02 ENLARGI M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - ROOF - MECHANICAL			11/10/17	BUILDING TYPE
M4.03 ENLARGI M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING	ED TYPICAL UNITS - MECHANICAL			11/10/17	BUILDINGS
M5.01 SCHEDU M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	ED TYPICAL UNITS - MECHANICAL			11/10/17	BUILDINGS
M6.01 DETAILS M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	ED TYPICAL UNIT PLANS - MECHANICAL			11/10/17	BUILDINGS
M6.02 DETAILS M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	ILES - MECHANICAL			11/10/17	GENERAL
M6.03 DETAILS M7.01 RISER DI M8.01 SPECIFIC 15 D9 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	S - MECHANICAL			11/10/17	GENERAL
M7.01 RISER DI M8.01 SPECIFIO 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDINO E3.02 BUILDINO E3.03 BUILDINO E3.04 BUILDINO E3.05 BUILDINO E3.06 BUILDINO E3.06 BUILDINO	S - MECHANICAL			11/10/17	GENERAL
M8.01 SPECIFIC 15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	S - MECHANICAL			11/10/17	GENERAL
15 09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	IAGRAMS - MECHANICAL			11/10/17	GENERAL
09 - ELECTRICAL E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	CATIONS - MECHANICAL			11/10/17	GENERAL
E0.01 SYMBOL E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING					
E1.01 SITE PLA E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	LEGEND AND GENERAL NOTES - ELECTRICAL			11/10/17	GENERAL
E3.01 BUILDING E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	AN - ELECTRICAL			11/10/17	GENERAL
E3.02 BUILDING E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - GROUND FLOOR PLAN - POWER AND SYSTEMS			11/10/17	BUILDING TYPI
E3.03 BUILDING E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING					
E3.04 BUILDING E3.05 BUILDING E3.06 BUILDING	G TYPE 2 - SECOND FLOOR PLAN - POWER AND SYSTEMS			11/10/17	BUILDING TYPE
E3.05 BUILDING	G TYPE 2 - THIRD FLOOR PLAN - POWER AND SYSTEMS			11/10/17	BUILDING TYPI
E3.06 BUILDING	G TYPE 2 - FOURTH FLOOR PLAN - POWER AND SYSTEMS			11/10/17	BUILDING TYPI
	G TYPE 2 - ROOF ELECTRICAL			11/10/17	BUILDING TYPI
E5 U/ BUILDIN(G TYPE 2 - GROUND FLOOR PLAN - LIGHTING			11/10/17	BUILDING TYPI
	G TYPE 2 - SECOND FLOOR PLAN - LIGHTING			11/10/17	BUILDING TYPI
	G TYPE 2 - THIRD FLOOR PLAN - LIGHTING			11/10/17	BUILDING TYPI
	G TYPE 2 - FOURTH FLOOR PLAN - LIGHTING			11/10/17	BUILDING TYPI
	ED TYPICAL UNITS - ELECTRICAL			11/10/17	BUILDINGS
	ED TYPICAL UNITS - ELECTRICAL			11/10/17	BUILDINGS
	ED TYPICAL UNITS - ELECTRICAL			11/10/17	BUILDINGS
E4.04 ENLARGI E5.01 RISER DI	ED ELEVATOR PLANS - ELECTRICAL			11/10/17 11/10/17	BUILDINGS GENERAL

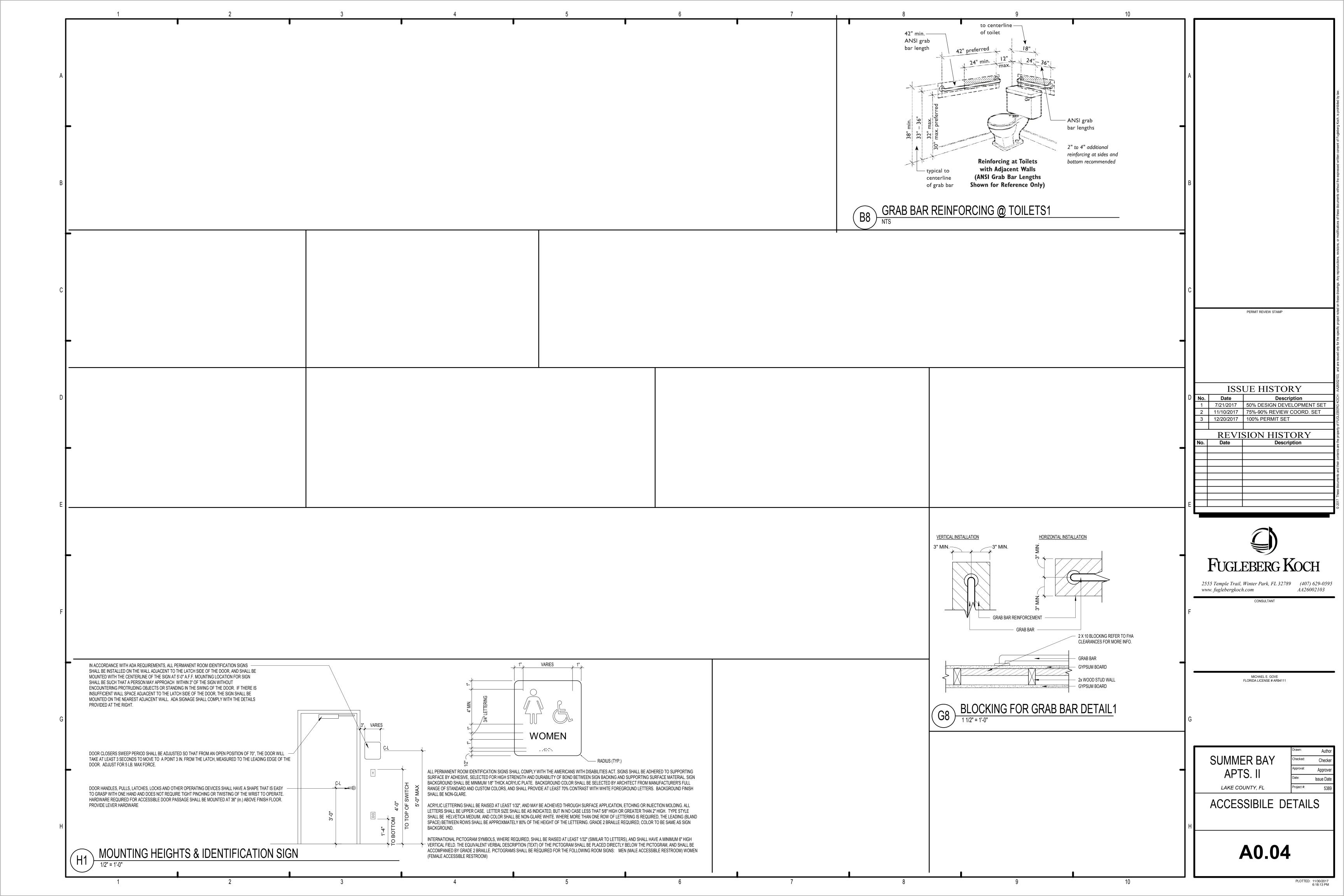
		REV.	REV.	ISSUE	PRINTING
SHT#	SHEET NAME	No.	DATE	DATE	SESSIONS
E5.02	RISER DIAGRAMS ELECTRICAL			11/10/17	GENERAL
E5.03	RISER DIAGRAMS ELECTRICAL			11/10/17	GENERAL
E5.04	RISER DIAGRAMS ELECTRICAL			11/10/17	GENERAL
E6.01	SCHEDULES ELECTRICAL			11/10/17	GENERAL
E6.02	SCHEDULES ELECTRICAL			11/10/17	GENERAL
E6.03	SCHEDULES - ELECTRICAL			11/10/17	GENERAL
E6.04	DETAILS - ELECTRICAL			11/10/17	GENERAL
E6.05	DETAILS - ELECTRICAL			11/10/17	GENERAL
,		'			<u>'</u>
- PLUMBING	3				
P0.01	SYMBOL LEGEND & NOTES - PLUMBING			11/10/17	GENERAL
P3.01	BUILDING TYPE 2 - GROUND LEVEL PLAN - PLUMBING			11/10/17	BUILDING TYPE 2
P3.02	BUILDING TYPE 2 - LEVEL 2 PLAN - PLUMBING			11/10/17	BUILDING TYPE 2
P3.03	BUILDING TYPE 2 - LEVEL 3 PLAN - PLUMBING			11/10/17	BUILDING TYPE 2
P3.04	BUILDING TYPE 2 - LEVEL 4 PLAN - PLUMBING			11/10/17	BUILDING TYPE 2
P3.05	BUILDING TYPE 2 - ROOF - PLUMBING			11/10/17	BUILDING TYPE 2
P4.01	ENLARGED TYPICAL UNITS PLANS - PLUMBING			11/10/17	BUILDINGS
P4.02	ENLARGED TYPICAL UNITS PLANS - PLUMBING			11/10/17	BUILDINGS
P4.03	ENLARGED TYPICAL UNIT PLANS - PLUMBING			11/10/17	BUILDINGS
P5.01	SCHEDULES - PLUMBING			11/10/17	GENERAL
P6.01	RISER DIAGRAMS - PLUMBING			11/10/17	GENERAL
P6.02	RISER DIAGRAMS - PLUMBING			11/10/17	GENERAL
		'			'
- FIRE PRO	TECTION				
FP0.01	SYMBOL, LEGEND, & GEN NOTES - FIRE PROTECTION			11/10/17	GENERAL
FP3.01	BUILDING TYPE 2 - GROUND FLOOR PLAN - FIRE PROTECTION			11/10/17	BUILDING TYPE 2
FP3.02	BUILDING TYPE 2 - LEVEL 2 PLAN - FIRE PROTECTION			11/10/17	BUILDING TYPE 2
FP3.04	BUILDING TYPE 2 - LEVEL 4 PLAN - FIRE PROTECTION			11/10/17	BUILDING TYPE 2
FP3.05	BUILDING TYPE 2 - ROOF - FIRE PROTECTION			11/10/17	BUILDING TYPE 2
FP13.01	APARTMENT & CLUBHOUSE DETAILS - FIRE PROTECTION			11/10/17	GENERAL

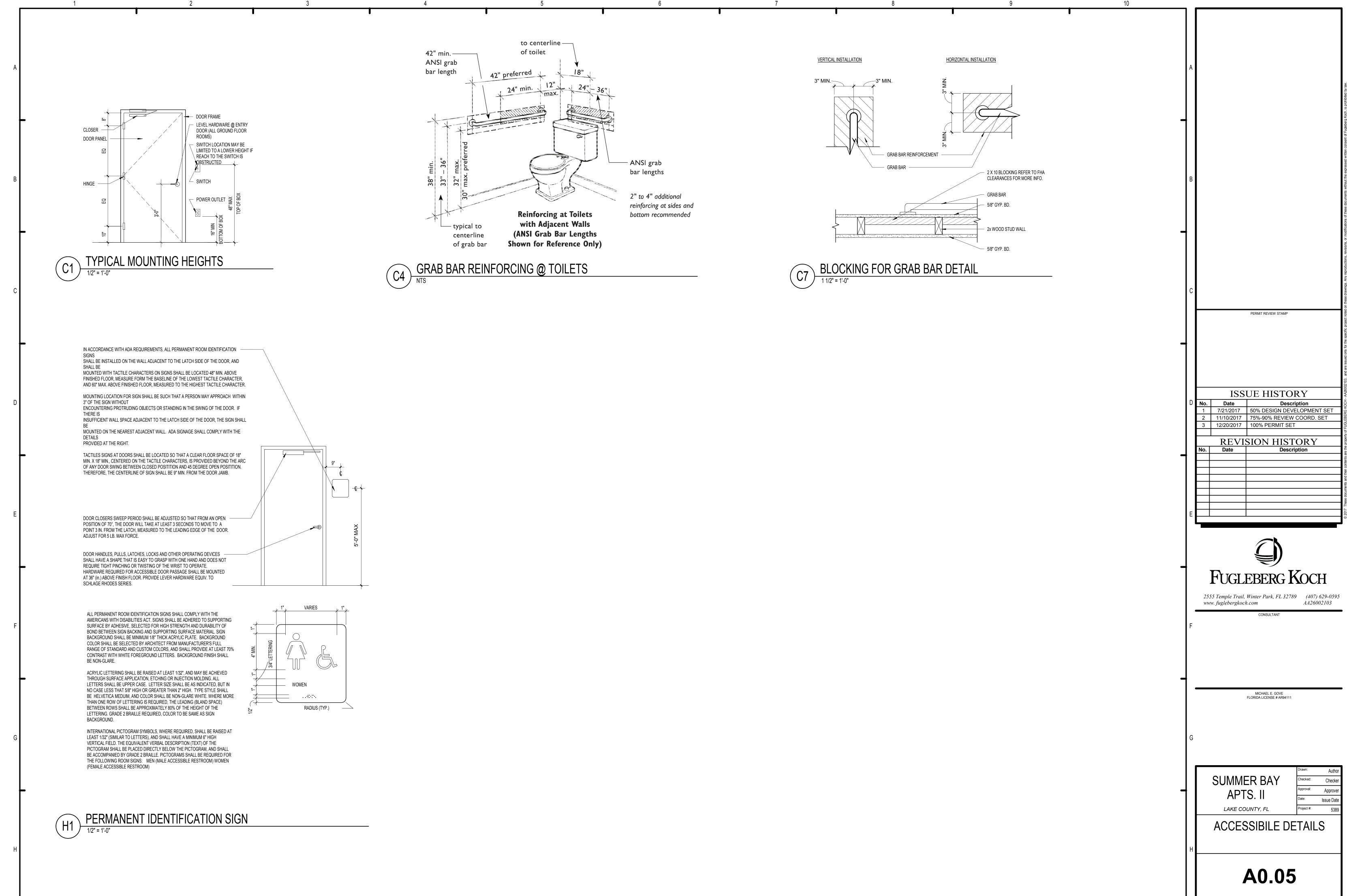
INDEX OF DRAWINGS - BUILDING TYPE 2

A	1. BUILDING CODE: 2. LIFE SAFETY CODE: 3. PLUMBING CODE: 4. ENERGY CODE: 5. FIRE CODE:	2014 NFPA 101 FLORIDA PLUMBII FLORIDA ENERGY		TION)	(BUILDING AR		TS & II NS PER SECTION 506) $x \mid_f + [A_t \mid_s]$	FIRE-RESISTANCE RATING (PER TABLE APARTMENTS - V) STRUCTURAL FRAME: INCLUDING COLUMNS, GIRDERS, TRUSSES	601) A) N/A	V(A) REQ'D PROV 1 1	OCCUPANCY CLASSIFICATION LOCATION UNS R-2 BUILDING I R-2 BUILDING II OCCU	PRINK. SPRINK. 200' 250' 200' 250' PANT LOAD TA	MAX. TRAVEL DISTANCE (ACTUAL) 78'-11" 72'-10" ABLE 1004.1.2	6.2] REMARKS	REQUIREMENT 2 REQUIREMENT 3	NG ACCESSIBIL REQUIREMENT ACCESSIBLE BUILDING ENTRANCE ACCESSIBLE AND USABLE PUBLIC USEABLE DOORS ACCESSIBLE ROUTE INTO AND THE	T SUMMARY E ON A ACCESSIBLE ROUTE			A	ohibited by law.
—	6. ACCESSIBILITY CODE:	FHA - FAIR HOUSI 2011 NATIONAL EI FLORIDA MECHAN OR PORTABLE FIR FOR INSTALLATIO	SING ACCESSIBILITY (ELECTRIC CODE NICAL CODE (5TH ED RE EXTINGUISHERS, 2 ON OF SPRINKLER SY	GUIDELINES DITION) , 2014 ED. YSTEMS IN	** BUILDING	= 0.75 $A_a = \begin{cases} 12,000 + [12,000] \\ = 21,000 & \text{SF PE} \end{cases}$	IODIFICATION	BEARING WALLS: EXTERIOR (PER TABLE 601/602/704.10) INTERIOR NONBEARING WALLS AND PARTITIONS: EXTERIOR (PER TABLE 601/602) INTERIOR (PER SECTION 601) FLOOR CONSTRUCTION not INCLUDING SUPPORTING BEAMS AND JOISTS per EXCEPTION 2 of 7.12.4 ROOF CONSTRUCTION SEPARATION DISTANCE (PER TABLE 602)		1 1 1 0 0 0 0 0 0 1 1 1 1	SPACE NAME FUNCTION OF S UNIT A1 UNIT A1-S RESIDENT UNIT B1 RESIDENT UNIT C1 RESIDENT UNIT C1 RESIDENT	IAL 810 SF IAL 810 SF IAL 1,410 SF IAL 1,398 SF	AREA PER OCCUPANT 200 GROSS 200 GROSS 200 GROSS 200 GROSS 200 GROSS 200 GROSS	OCCUPANT PER UNIT $5(2) = 10$ $5(4) = 20$ $8(4) = 32$ $7(2) = 14$ $4(1) = 4$	REQUIREMENT 6 REQUIREMENT 7 FAIR HOUSING A	LIGHT SWITCHES, ELECTRICAL OU ENVIRONMENTAL CONTROLS IN ACREINFORCED WALLS FOR GRAB BACKERS WAS ACCESSIBILITY NO PLIANT PER THE FAIR HOUSING ACT	DARS OTES:			В	ut the expressed written consent of Fugleberg Koch, is p
- 	PEOU	PITION RE ALARM CODE, 2	2014 EDITION E PARAMET MENTS	TERS	FOR GROUP R BUILDINGS AUTOMATIC SPRINKLER S 903.3.1.2 (NFPA 13R), THE HEIGHT IS INCREASED BY NUMBER OF STORIES IS EXCEED FOUR STORIES	E SYSTEM IN ACCORDAN E VALUE SPECIFIED IN BY 20 FEET (6096 MM) AI B INCREASED BY ONE S' B OR 60 FEET (18 288 MM) BALCONIES ilar projections.	GHOUT WITH AN APPROVED ANCE WITH SECTION N TABLE 503 FOR MAXIMUM AND THE MAXIMUM STORY, BUT SHALL NOT IM), RESPECTIVELY.	SEPARATION DISTANCE (PER TABLE 602) ≥ 30' INTERIOR FINISH CLASSIFIC PER FBC 2010 SECTION 803.1.1 & TABLE 803.9, ALL RC BE OF A CLASS C FINISH. PER NFPA 101 SECTION 10.2, TABLE 10.2.2, ALL NEW ACCORRIDORS ARE FINISH CLASS C AND ALL EXITS ARE AS SCHEDULED TO BE PER SECTION 804. ALL INTERIOR FINISHES SHALL ALSO COMPLY WITH RESERVED.	OOMS AND ENCLOSEI APARTMENT EXIT ACI E FINISH CLASS C. AL	CESS L FLOOR FINISH		IAL 810 SF		OCCUPANT PER UNIT 5(2) = 10 5(3) = 15	2. ACCESSIBLE BUILDING ENTE 3. ACCESSIBLE AND USABLE P 4. USABLE DOORS. ALL DOORS HAVE A 32" MIN. CLEAR WID 5. THERE SHALL BE AN ACCES MIN. CLEAR PATH. 6. ALL PREMISES WITHIN THE I THERMOSTATS AND OTHER FIVE. 7. SHALL PROVIDE REINFORCE 8. USABLE KITCHENS AND BAT 9. ALL BATHROOMS SHALL BE	RANCES SHALL BE ON AN ACCESS PUBLIC AND COMMON USE AREAS S DESIGNED TO ALLOW PASSAGE OF THE PER CHAPTER THREE. SSIBLE ROUTE INTO AND THROUGH DWELLING UNIT MUST CONTAIN LICE RENVIRONMENTAL CONTROLS IN A SED WALLS FOR FUTURE INSTALLAT THROOMS SHALL COMPLY WITH CHE	SIBLE ROUTE. 36" WIDE MIN. CLEAR PATH SHALL BE PER CHAPTER TWO. INTO AND WITHIN ALL PREMISES MUST HITHE COVERED DWELLING UNIT. 36" WIE IGHT SWITCHES, ELECTRICAL OUTLETS, ACCESSIBLE LOCATIONS PER CHAPTER TION OF GRAB BARS PER CHAPTER SIX. HAPTER SEVEN.				, revisions, or modifications of these documents withou
С	WIND SPEED 130 CONVERSION 101 SEISMIC ZONE N SNOW LOAD N	MPH 130 MPH 130 MPH 1/A	PROJECT D MPH SEC. TABLE 1 N/A SEC. N/A SEC. N/A SEC.	1609.3.1 2. 1613 3. 1608 1805.2.1	for floor construction or shall 602.4 The aggregate length on each floor. Exceptions: 3. Balconies and similar proconstruction shall be permitted required to have a fire-resistation these areas. 4. Where sprinkler protect	Il be fire-resistance rated in Il be of Type IV construction in shall not exceed 50 perconstructions on buildings of the tent of the perconstruction is extended to the ball to the ball to the ball the perconstruction is extended to the ball to the ball the perconstruction is extended to the perconstruction in the perconstruction is extended to the perconstruction in the perconstruction is extended to the perconstruction in the perconstruction in the perconstruction is extended to the perconstruction in the perco	tin accordance with Table 601 tion in accordance with Section reent of the buildings perimeter of Type III, IV and V struction, and shall not be kler protection is extended to balcony areas, the aggregate	MAXIMUM AREA OF EXTERION FROM TABLE 705.8 - [FBC 2014: BUILDING] ASSUMED PROPERTY LINE DISTANCE:	NORTH 30'- EAST 30'- SOUTH 30'- WEST 30'-	D" D"	UNIT B1 RESIDENT UNIT B2 RESIDENT UNIT B2-S RESIDENT UNIT C1 RESIDENT TOTAL ENERGY CONSE	1,095 SF 1AL 1,095 SF 1AL 1,398 SF	200 GROSS 200 GROSS 200 GROSS 200 GROSS	8(4) = 32 6(1) = 6 6(1) = 6 7(1) = 7	11. ALL BATHROOMS SHALL HAY 12. ALL BATHROOMS SHALL HAY 13. ALL BATHROOMS SHALL HAY 14. ALL BATHROOMS SHALL HAY 15. ALL BATHROOMS SHALL HAY 16. ALL BATHROOMS SHALL HAY 17. ALL BATHROOMS SHALL HAY 18. ALL BATHROOMS SHALL HAY 18	VE SWITCHES, OUTLETS, AND CON VE REINFORCING AROUND TOILET	NTROLS IN ACCESSIBLE LOCATIONS.	DESIGN WINE		PROVAL MBER(S)	Amy reproductions: project noted on these drawings. Any reproductions
- [BUILDING CC DESCRIPTION CONSTRUCTION TYPE	REQUIRED (Table 503)	ALLOWABLE (w/ increases)	THIS PR APARTMENT BUILDING TYPE I TYPE V(A)	PROJECT APARTMENT BUILDING TYPE II TYPE V(A)	REFERENCE (FBC) TABLE 503	REMARKS	UNPROTECTED, NONSPRINKLERED (UP, NS) 0 FT TO 3 FT OVER 3 FT TO 5 FT OVER 5 FT TO 10 FT OVER 10 FT TO 15 FT OVER 15 FT TO 20 FT OVER 20 FT TO 25 FT OVER 25 FT TO 30 FT OVER 30 FT FROM ASSUMED PROPERTY LINE UNPROTECTED, SPRINKLERED (UP, S) / PROTECTED	NP NP 10% 15% 25% 45% 70% NL	NA N	THE BUILDING THERMAL ENVELOPE SI BETWEEN DISSIMILAR MATERIALS SHATTHE FOLLOWING SHALL BE CAULKED, BARRIER MATERIAL, SUITABLE FILM O 1- ALL JOINTS, SEAMS AND PENETRAL SITE-BUILT WINDOWS, DOORS AN OPENINGS BETWEEN WINDOWS	LL ALLOW FOR DIFFERENTIA GASKETED, WEATHERSTRIPF R SOLID MATERIAL: J.TIONS D SKYLIGHTS.	O LIMIT INFILTRATION. THE IL EXPANSION AND CONTF PED OR OTHERWISE SEAL	RACTION. ED WITH AN AIR	A. EXTERIOR DOORS SWINGING SWINGING FRENCH SECTIONAL B. WINDOWS	WINDSOR REPUBLIC DOORS MASONITE OVERHEAD DOOR CO. MI WINDOWS &	STEEL EXT. DOOR DL416 BELLEVIEW PATIO DOOR PDB-122-3105-X GARAGE DOOR SERIES 194	+55.5 / -55.5 +31.8 / -35.5	NO FL 5	14963 - 5507.1 - 11267.5 - 550.0 FM.4	ISSUE HISTORY
-	JSE / OCCUPANCY FIRE RATING DCCUPANCY SEPARATION SPRINKLER LEVEL 1 (GROUND) LEVEL 2 LEVEL 3	1 HR YES 12,000 SF 12,000 SF 12,000 SF	 21,000 SF 21,000 SF 21,000 SF	R-2 1 HR 1 HR NFPA 13R 15,541 SF 15,414 SF 15,414 SF	R-2 1 HR 1 HR NFPA 13R 14,728 SF 14,621 SF 14,621 SF	CH. 3 & 4 TABLE 601 TABLE 508.4 SEC 903 TABLE 503 TABLE 503 TABLE 503	SEE TABLE SEE NOTE #1, #2, #5 SEE MODIFICATIONS SEE MODIFICATIONS SEE MODIFICATIONS	0 FT TO 3 FT OVER 3 FT TO 5 FT OVER 10 FT TO 10 FT OVER 10 FT TO 15 FT OVER 15 FT TO 20 FT OVER 20 FT TO 25 FT OVER 25 FT TO 30 FT OVER 30' FROM ASSUMED PROPERTY LINE BLOWER DOOL	NP 15% 25% 45% 75% NL NL NL	NP NL NL NR	4- UTILITY PENETRATIONS. 5- DROPPED CEILINGS OR CHASES A 6- KNEE WALLS. 7- WALLS AND CEILINGS SEPARATIN 8- BEHIND TUBS AND SHOWERS ON 9- COMMON WALLS BETWEEN DWEL 10- ATTIC ACCESS OPENINGS. 11- RIM JOIST JUNCTIONS. 12- OTHER SOURCES OF INFILTRATION	G A GARAGE FROM CONDITION EXTERIOR WALLS LING UNITS.			SINGLE HUNG FIXED C. PANEL WALL SIDING SIDING SOFFITS	JAMES HARDIE JAMES HARDIE JAMES HARDIE	FIXED HP-PW-3500 FIXED HP-PW-3500 HARDIE PLANK LAP SIDING HARDIE PANAL SIDING HARDIE SOFFIT	N/A N/A N/A N/A	NO FL 115 NO FL 131 NO FL 13	250.3-R11 D 548.1-R6 192.2-R2 322.2-R1 3265-R1	No. Date Description 1 7/21/2017 50% DESIGN DEVELOPMENT SET 2 11/10/2017 75%-90% REVIEW COORD. SET 3 12/20/2017 100% PERMIT SET
E -	LEVEL 4 TOTAL GROSS AREA MEZZ/LOFT INCI. HEIGHT LIMIT (S) HEIGHT LIMIT (FT) MIN No. OF EXITS	12,000 SF 48,000 SF 3 STORIES 50'-0"	21,000 SF 84,000 SF 4 STORIES 70'-0"	15,414 SF 61,783 SF N/A 4 STORIES 51'-7"	14,621 SF 58,591 SF N/A 4 STORIES 51'-7"	TABLE 503 TABLE 503 TABLE 503 TABLE 503 TABLE 503 TABLE 503 TABLE 1021.1	SEE MODIFICATIONS SEE MODIFICATIONS SEE MODIFICATIONS SEE MODIFICATIONS SEE NOTE #3	PERFORM MANDATORY ENVELOPE LEAK TESTING PERFORM MANDATORY ENVELOPE LEAK TESTING PERFORM MANDATORY ENVELOPE LEAK TESTING PERFORM OF CONSERVATION CODE PARAGRAPH R402.4.1.2. SPECIFICALLY, THE BUILDING OR DWELLING UNIT SHE HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 7 AIR PROVIDE A WRITTEN REPORT OF THE TEST RESULTS PARTY TO THE CODE OFFICIAL. SEE R402.4.1.2 FOR MORE TECHNICAL SPECIFICS.	ER THE 2014 FLORIDA ALL BE TESTED AND R CHANGES PER HOL	VERIFIED AS JR AT .2" WC.					D. ROOFING PRODUCTS UNDERLAYMENTS ROOFING ROOFING ROOFING	W.R. GRACE	VENTILATION	N/A N/A N/A	NO FL 29 NO FL 106 NO FL 107	98.1-R3 674.1-R8 758.3-R3 219.1-R2	© 2017 These documents and th
	,	SEMBLIES SHALL B	BE CONTINUOUS WIT	•	70 INCHES 44 INCHES ALLS) & 712 (HORIZONTAL-FL TRATIONS OR JOINTS EXCEP	,	THIS SECTION	WHERE REQUIRED BY THE CODE OFFICIAL, TESTING APPROVED THIRD PARTY. PERFORM TESTING AT ANY TIME AFTER CREATION OF BUILDING ENVELOPE. THE GENERAL CONTRACTOR AND SUB-CONTRACTOR PASSING RESULTS AT NO ADDITIONAL COST TO THE	OF ALL PENETRATION	S OF THE					SPACE DESCRIF NONSPRINKLE EXIT ENCLOSURES-EXIT PASSA CORRIDORS	PTION ERED WALLS CEILIN AGEWAYS A		FLOORS N CLASS II NONE CLASS II NONE	OTE IN PROJECT IN PROJECT	443 - R6	FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 AA26002103
F P	TWO (2) STAIRS ARE PER ALL UNITS EXIT INTO A OCCUPANCY CLASSIFICATION	OVIDED IN 2-HR RA	ATED EXIT ENCLOSU	OR PER 1018.1	EGRESS WIDTH PER PERSON SE (REQ'D.) STAIRWAYS (IN. PER OCCUPANT)	;ERVED	EGRESS WIDTH PROVIDED STAIRWAYS								ROOMS AND ENCLOSED SPACE	TO THE BEST OF WITH THE APPLIC	THRESHOL SECT THE ARCHITECT'S KNOWLED CABLE MINIMUM BUILDING CO	STATEMENT (D.D. BUILDING ONLY ION 110.8.4.4 DGE, THE PLANS AND S DDES AND APPLICABLE	FL) PECIFICATIONS COM		
G A	TYPE V(A) TYPE V(A) ABOVE C.FL. ACCESS FLOOR COUST. ACOUSTICAL	BRK BSM BTW B.U. B.W	REVIATIO K. BRICH MT. BASEMEN NN BETWEEN . BUILT-UP	CK CON NT COO N CON	0.3 (40 OCCUPANTS = 12.0" DNTR. CONTRACTOR DOR. COORDINATE DNT. CONTINUOUS PT. CARPET EMT. CASEMENT	<u>Е</u> Е ЕА. Е.F.	EAST EACH EACH FACE	F.E.C. FIRE EXTINGUISHER GL CABINET GR. FED. FEDERAL GYP F.F. FINISH FLOOR F.H.C. FIRE HOSE CABINET		J, J, J,	.F. JOINT FILLER MI NT. JOINT MI	C. MINERAL CORE CH. MECHANICAL MB. MEMBRANE ZZ. MEZZANINE	OD O OH. O	VERHEAD	Q Q.T. QUARRY TILE QTY. QUANTITY R	CHAPTER 633, FLO	SHEET SIMILAR SPECIFICATION SQUARE	V VAR. VARIES V.B. VINYL BASE VCT VINYL COMF		G	MICHAEL E. GOVE FLORIDA LICENSE # AR94111
A A A A A A A A A A	CT ACOUSTICAL CE TILE D. AREA DRAIN DJ. ADJACENT DJUST. ADJUSTABLE		B. CABIN / TB. CORKBOA TACKBOAI . CATCH BA M. CEMENT R. CERA I. CEILING H CIRCLE CONTROL G. CEILING G. CAULKING CENTER L	C.T. CTR ARD/ ARD D. ASIN DBL AMIC DET HEIGHT D.F. DIA. L JOINT DIAG G DIM. LINE DISF	T. CERAMIC TILE	E.J. E.I.F.S. EL. / ELEV. ELEC. ELEV. EMER. ENCL. TAIN EQ EQUIP. E.W. E.W.C. EXIST. EXP. JT	EXPANSION JOINT EXTERIOR INSULATION AND FINISH SYSTEM ELEVATION ELECTRICAL ELEVATOR EMERGENCY ENCLOSURE EQUIPMENT EACH WAY ELECTRIC WATER COOLER EXISTING EXPANSION JOINT	FIN. FINISH H. FIXT FIXTURE H.B. F.L. FLOW LINE H.C. FLR. FLOOR H/C FLUOR FLUORESCENT HD. F.O.B. FACE OF BRICK HDW F.O.C. FACE OF CONCRETE HDW F.O.F. FACE OF STUD HOR F.R. FIRE RETARDANT H.P. F.S. FULL SIZE HR	/D. HARDWOOI HOLLOW MI IZ. HORIZONTA HORSE POV HOUR HEIGHT C HEATING, V	DRE — K ED K ED L ETAL L WER L	ST. JOIST MI	TR MANUFACTURER GR. MANAGER H. MANHOLE N. MINIMUM GC. MISCELLANEOUS DG. MOLDING WK. MILLWORK D. MASONRY OPENI R. MOISTURE RESIS B. MARBLE T. MARBLE THRESH	OPNG. OOPP. P PART. P PH PI PL. PI PLAM. PI PLAM. PI PLAS. PI PLYWD. PI PNL. P POL.	PENING OPPOSITE ARTITION RE HUNG LATE ROPERTY LINE LASTIC LAMINATE LASTER LYWOOD ANEL POLISHED	R. RISER RAD. RADIUS R.B. RUBBER BASE RCP REFLECTED CF RD ROOF DRAIN RE: REFER TO REF. REINFORCED REQD. REQUIRED REV. REVISED / RH RIGHT HAND RM ROOM R.O. ROUGH OPENI	EILING PLAN STL. STN. STOR. STOR. STRUCT. SUSP. SYST. I T T & G	SEMI RECESSED STAINLESS STEEL STAGGERED STANDARD STEEL STAINED STORAGE T. STRUCTURAL SUSPENDED SYSTEM TREAD TONGUE & GROOVE	VER. VERIFY VERT. VERTICAL V.I.F. VERIFY W W WEST / WIDE W/ WITH W.C. WATER CLO W/D WASHER/DR WD. WOOD WP. WATER PRO W.R. WATER RES W/O WITHOUT	IN FIELD E SET YER COMBO OF ISTANT		SUMMER BAY APTS. II LAKE COUNTY, FL Checked: Checker Approval: Approver Date: Issue Date Project #: 5389 CODE ANALYSIS
H <u>E</u> BI BI BI	AVERAGE D. BOARD BD. BLACK BOARD DG. BUILDING K/BLK'G BLOCK OR BLOCK M. BEAM DT. BOTTOM	CLO CLR CMU C.O. CKING CON CON CON CON	D. CLOS R. CLEAR U. CONCRET UNIT D. CLEAR OP L. COLU MM. COMMUNI NC. CONCRET	SET DIV. DN. TE MASONRY DR DRA PENING DS. UMN DTL IICATION DWO TE DWF TION DW	V. DIVIDER J. DOWN DOOR RAP. DRAPERY DOWNSPOUT L. DETAIL VG. DRAWING VR. DRAWER	EXT. F(TRU. F.A. F.D. F.D.C. FDN. F.E.	EXTERIOR EXTRUDED FIRE ALARM FLOOR DRAIN FIRE DEPARTMENT CONNECTION FOUNDATION FIRE EXTINGUISHER	FUT. FUTURE HOLE F.V. FIELD VERIFY GA. GAUGE GALV. GALVANIZE INSU G.B. GRAB BAR INT. G.C. GENERAL CONTRACTOR GEN. GENERAL	. HOLLOW INCHES	LI L. L. N <u>N</u>	N LINE P. LOW POINT N T. LIGHT N MAC MASONIDY NO	NORTH NOT APPLICABLE C. NOT IN CONTRAC NUMBER M. NOMINAL T.S. NOT TO SCALE	PREC. PI PREFAB. PI PROJ. PI PROP. PI P.T. PI PTD. PVC PI	AIR RECAST REFABRICATED ROJECT ROPERTY RESSURE TREATED PAINTED OLYVINYL CHLORIDE AVERS	S S SOUTH SAFB SOUND ACOUS FIBER BOARD S.C. SOLID CORE SCHED. SCHEDULE SECT. SECTION S.F. SQUARE FOOT	TEMP GL TER TH. T.O. TOIL. TYP. U	L. TEMPERED GLASS TERRAZZO THICK TOP OF TOILET TYPICAL UNLESS OTHERWISE NOTED	WNF WELDED WIF	KE FABRIC	Н	A0.02 PLOTTED: 11/30/2017

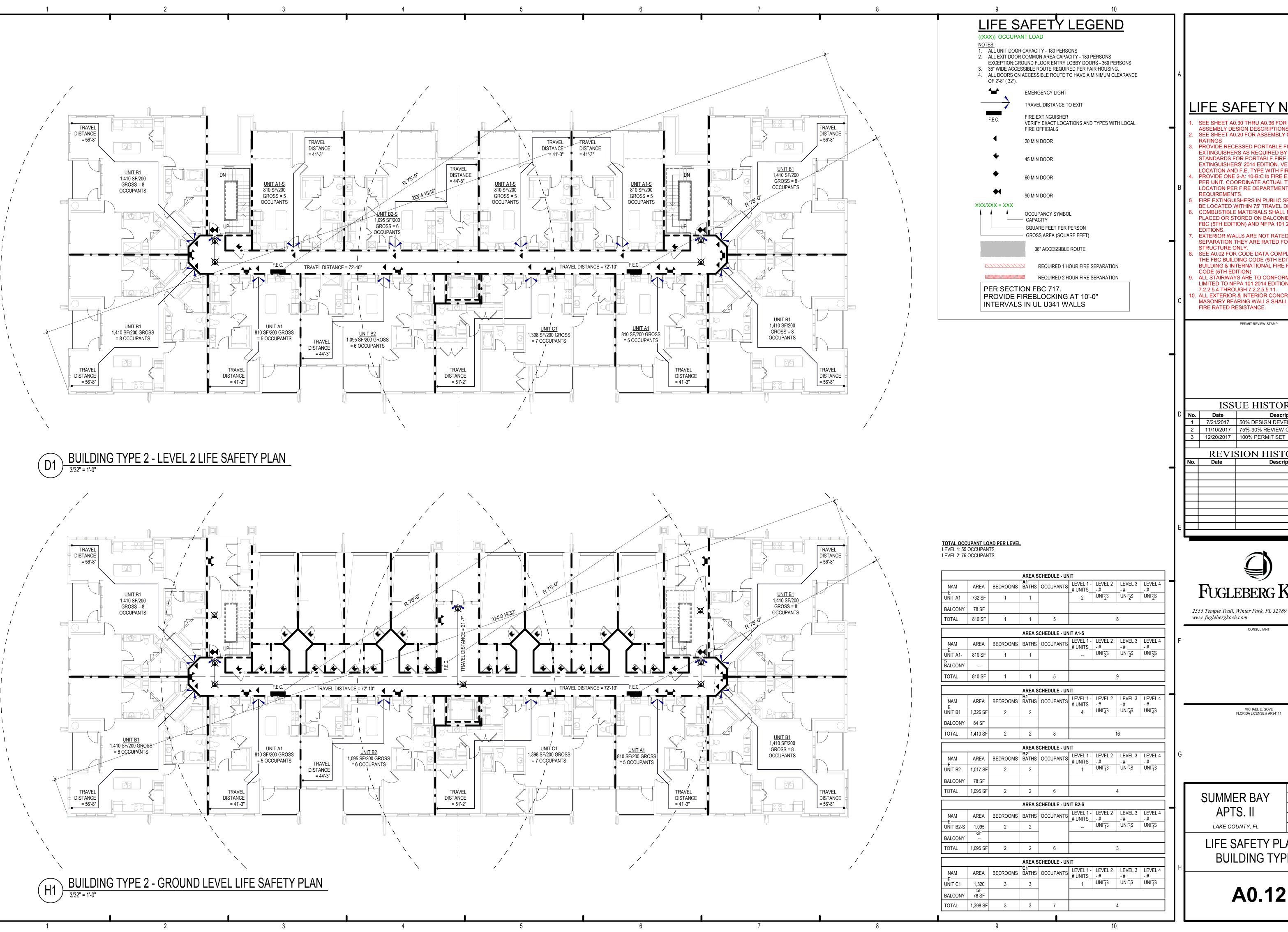
BUILDING CODE ANALYSIS - FLORIDA BUILDING CODE, 2014 EDITION







PLOTTED: 11/30/2 6:18:17



LIFE SAFETY NOTES:

SEE SHEET A0.30 THRU A0.36 FOR ALL U.L. ASSEMBLY DESIGN DESCRIPTIONS.

SEE SHEET A0.20 FOR ASSEMBLY SOUND

PROVIDE RECESSED PORTABLE FIRE

EXTINGUISHERS AS REQUIRED BY NFPA 10 STANDARDS FOR PORTABLE FIRE EXTINGUISHERS' 2014 EDITION. VERIFY EXACT LOCATION AND F.E. TYPE WITH FIRE OFFICIAL.

PROVIDE ONE 2-A: 10-B:C lb FIRE EXTINGUISHER PER UNIT. COORDINATE ACTUAL TYPE AND LOCATION PER FIRE DEPARTMENT REQUIREMENTS. FIRE EXTINGUISHERS IN PUBLIC SPACES SHALL

COMBUSTIBLE MATERIALS SHALL NOT BE PLACED OR STORED ON BALCONIES PER THE FBC (5TH EDITION) AND NFPA 101 2014 EXTERIOR WALLS ARE NOT RATED FOR FIRE

BE LOCATED WITHIN 75' TRAVEL DISTANCE.

SEPARATION THEY ARE RATED FOR STRUCTURE ONLY. SEE A0.02 FOR CODE DATA COMPLYING WITH THE FBC BUILDING CODE (5TH EDITION)

BUILDING & INTERNATIONAL FIRE PREVENTION CODE (5TH EDITION) ALL STAIRWAYS ARE TO CONFORM BUT NOT BE

LIMITED TO NFPA 101 2014 EDITION SECTIONS 7.2.2.5.4 THROUGH 7.2.2.5.5.11.

0. ALL EXTERIOR & INTERIOR CONCRETE AND MASONRY BEARING WALLS SHALL HAVE (2) HR FIRE RATED RESISTANCE.

PERMIT REVIEW STAMP

ISSUE HISTORY

Date 7/21/2017 50% DESIGN DEVELOPMENT SET 2 11/10/2017 75%-90% REVIEW COORD. SET

REVISION HISTORY

Description

Date

FUGLEBERG KOCH

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

MICHAEL E. GOVE

FLORIDA LICENSE # AR9411

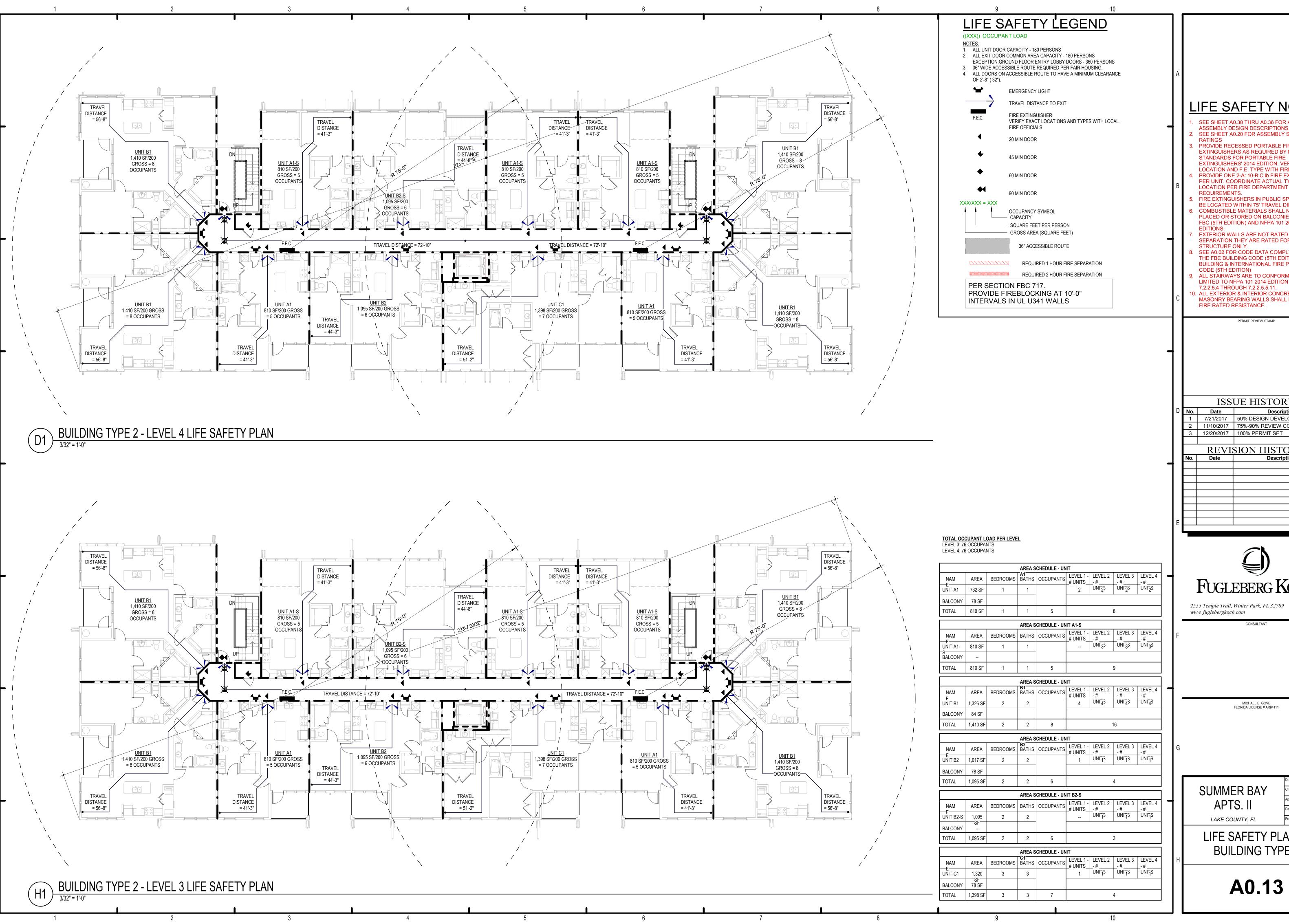
SUMMER BAY APTS. II

LAKE COUNTY, FL

LIFE SAFETY PLANS -**BUILDING TYPE 2**

A0.12

Approve



LIFE SAFETY NOTES:

SEE SHEET A0.30 THRU A0.36 FOR ALL U.L. ASSEMBLY DESIGN DESCRIPTIONS.

SEE SHEET A0.20 FOR ASSEMBLY SOUND RATINGS PROVIDE RECESSED PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY NFPA 10

STANDARDS FOR PORTABLE FIRE EXTINGUISHERS' 2014 EDITION. VERIFY EXACT LOCATION AND F.E. TYPE WITH FIRE OFFICIAL. PROVIDE ONE 2-A: 10-B:C lb FIRE EXTINGUISHER PER UNIT. COORDINATE ACTUAL TYPE AND

FIRE EXTINGUISHERS IN PUBLIC SPACES SHALL BE LOCATED WITHIN 75' TRAVEL DISTANCE. COMBUSTIBLE MATERIALS SHALL NOT BE PLACED OR STORED ON BALCONIES PER THE FBC (5TH EDITION) AND NFPA 101 2014

EXTERIOR WALLS ARE NOT RATED FOR FIRE SEPARATION THEY ARE RATED FOR

STRUCTURE ONLY. SEE A0.02 FOR CODE DATA COMPLYING WITH THE FBC BUILDING CODE (5TH EDITION) **BUILDING & INTERNATIONAL FIRE PREVENTION**

ALL STAIRWAYS ARE TO CONFORM BUT NOT BE LIMITED TO NFPA 101 2014 EDITION SECTIONS 7.2.2.5.4 THROUGH 7.2.2.5.5.11.

0. ALL EXTERIOR & INTERIOR CONCRETE AND MASONRY BEARING WALLS SHALL HAVE (2) HR FIRE RATED RESISTANCE.

PERMIT REVIEW STAMP

ISSUE HISTORY

Date 7/21/2017 50% DESIGN DEVELOPMENT SET 2 11/10/2017 75%-90% REVIEW COORD. SET

REVISION HISTORY

Description

FUGLEBERG KOCH

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

FLORIDA LICENSE # AR9411

MICHAEL E. GOVE

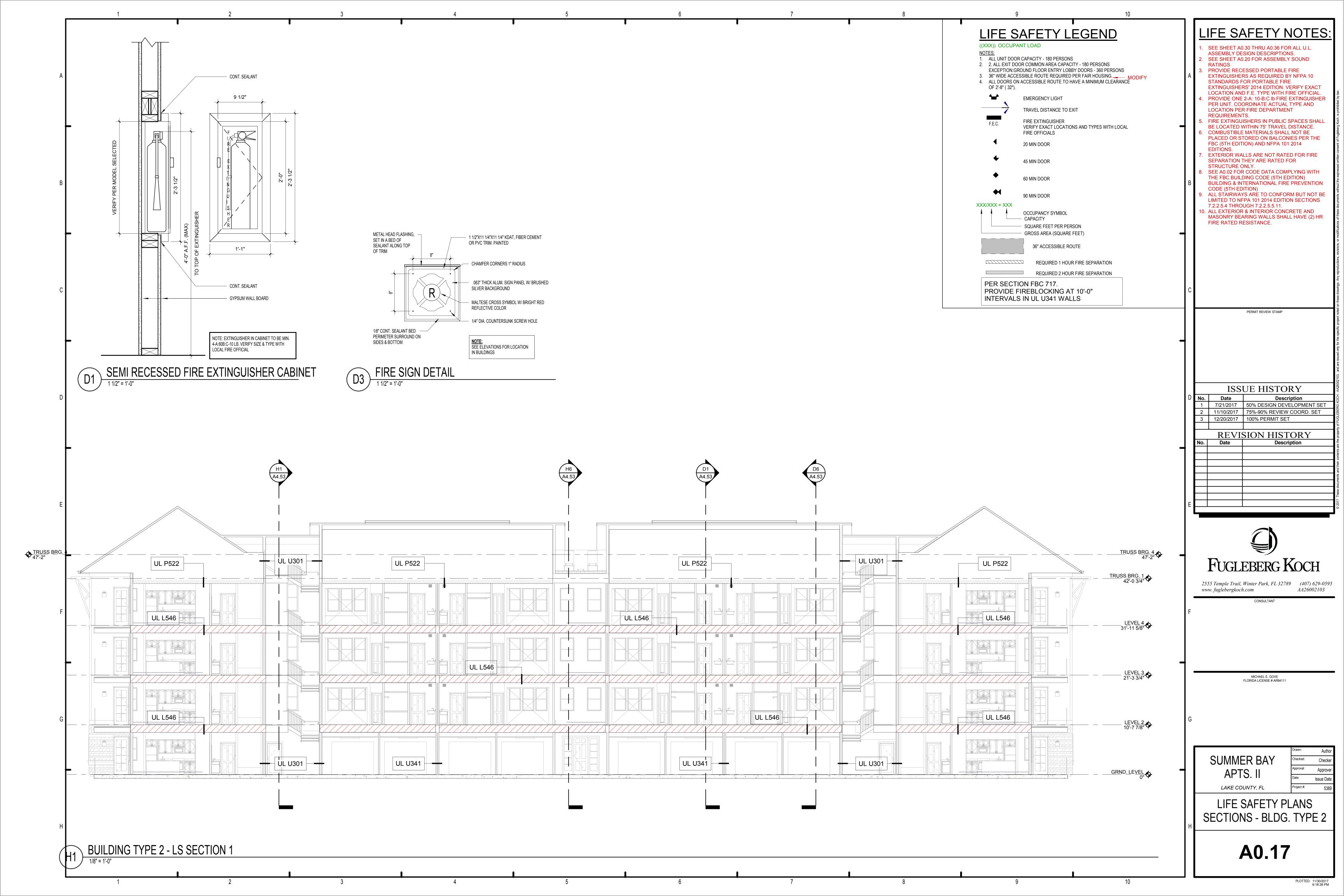
SUMMER BAY APTS. II

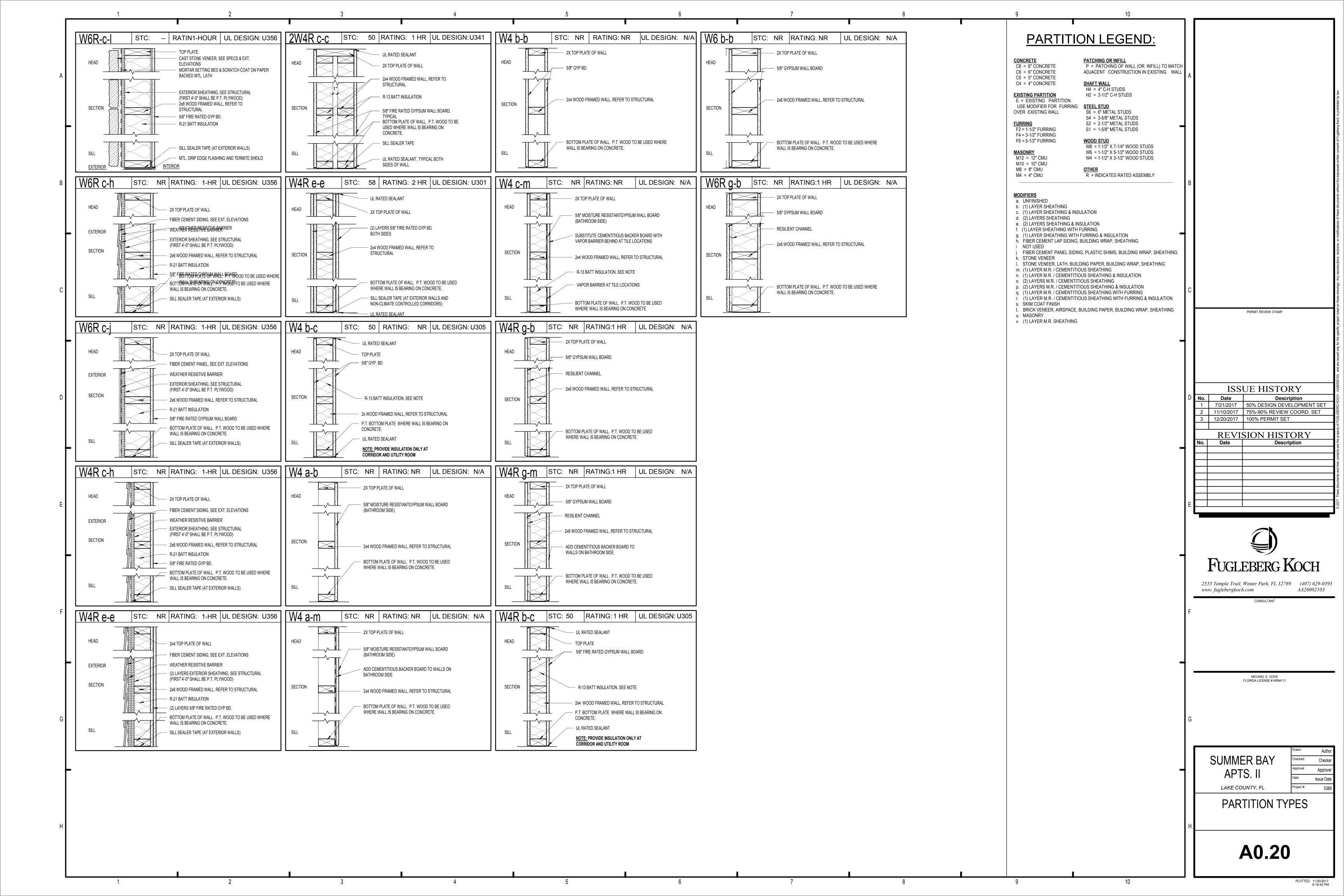
LAKE COUNTY, FL

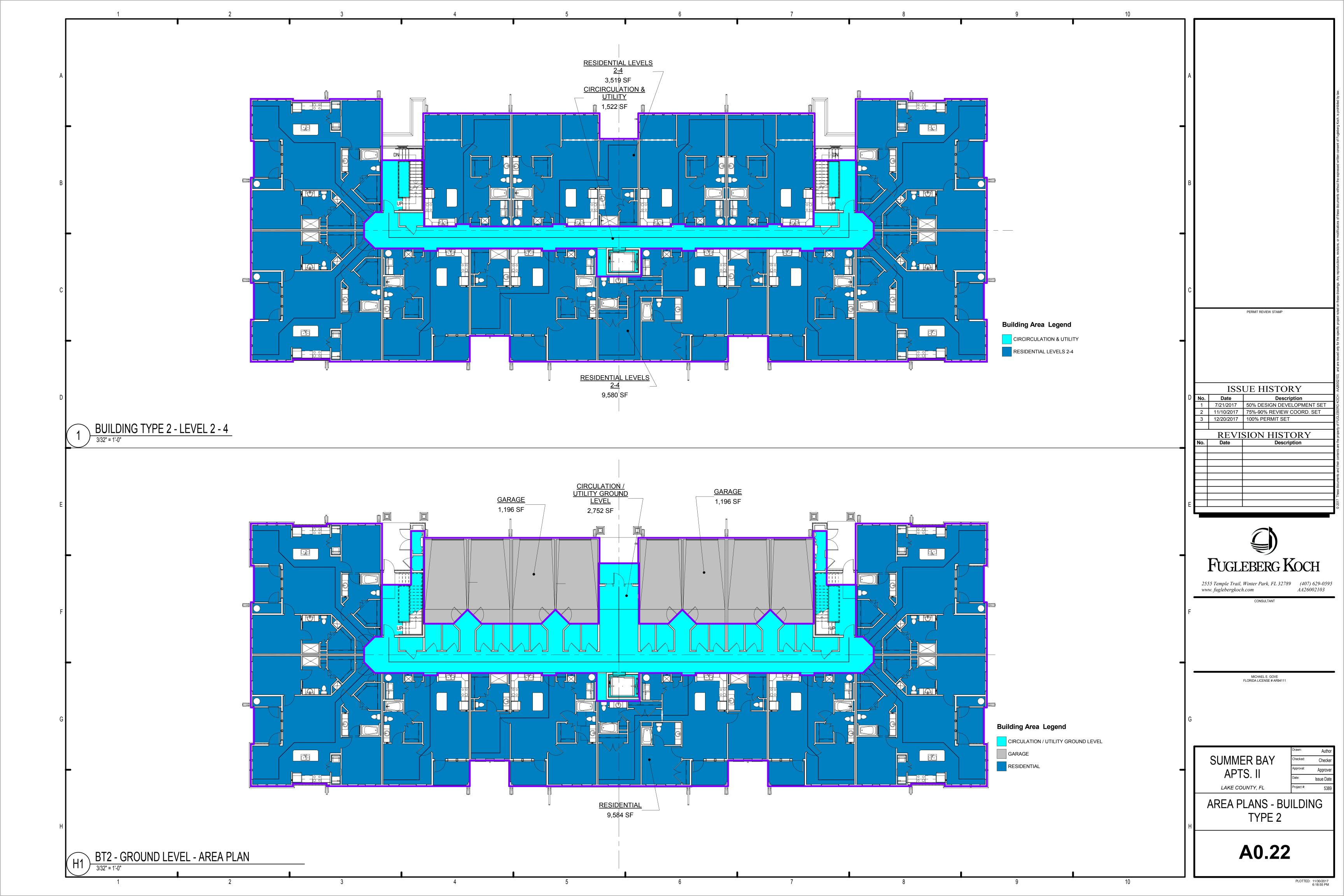
LIFE SAFETY PLANS -**BUILDING TYPE 2**

A0.13

Approve

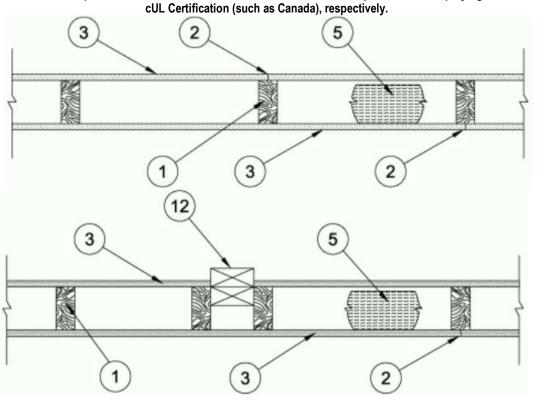






This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

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



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 Item 6, 6A or 6B,

Steel Framing Members*. When Item 6,6B, or 6C 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 3.

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, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs. ACADIA DRYWALL SUPPLIES LTD — 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 AMERICAN GYPSUM CO — Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type LightRoc (finish rating 22 min) or Type AG-C BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1 (finish rating 24 min).

CERTAINTEED GYPSUM INC — Type 1, Type SF3 (finish rating 20 min) or FRPC, Type C or Type X (finish rating 26 min), Type EGRG or GlasRoc (finish rating 23 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 ULX (finish rating 22 min), Type WRC (finish

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). 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-

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 or Type PG-C.

PANEL REY S A — Type GREX, PRX; Types RHX, MDX, ETX (finish rating 22 min) SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min)

WRC (finish rating 24 min), Type ULIX (finish rating 20 min).

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

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.), Type AG-C (finish rating 25 min.).

CERTAINTEED GYPSUM INC — Type C or Type X (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). 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 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 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 required.

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

CGC INC — 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 study 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

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** — 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. **UNITED STATES GYPSUM CO** — 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. GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board (finish rating

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 — SoundBreak XP Type X Gypsum Board 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 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.

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). 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-

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 laver 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 vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in

CERTAINTEED GYPSUM INC — 5/8" Easi-Lite Type X (finish rating 24 min) 3O. 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 sidebetween 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) 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

KNAUF INSULATION LLC JOHNS MANVILLE INTERNATIONAL INC **KNAUF INSULATION LLC** MANSON INSULATION INC

OWENS CORNING HT INC, DIV OF OWENS CORNING — Corning Fiberglas Corp. **ROCK WOOL MANUFACTURING CO** — Delta Board.

ROXUL INC — Acoustical Fire Batts **THERMAFIBER INC** — Type SAFB. 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, INS765LD or INS770LD. U S GREENFIBER L L C — INS735& INS745 for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS745, INS765LD, and INS770LD 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) and Item 5A - 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 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 Item 6, 6A or 6B). As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated mineral fiber material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ). TEXAS AMERROCK PARTNERS L P, DBA AMERROCK PRODUCTS — Rockwool

5G. Fiber, Sprayed* — (Optional, Not Shown - Not for use with Items6, 6A or 6B). 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 lbs/ft3. INTERNATIONAL CELLULOSE CORP — Celbar-RL

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 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 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

b. Steel Framing Members* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V clips secured to study with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels PAC INTERNATIONAL INC — 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 study 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

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 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 3.

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 resilient sound isolation clip 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 secured together with four self-tapping No. 8x1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge).

Gypsum board attached to furring channels as described in Item 3. Side joint furring channels shall be attached to studs with RESILMOUNT Sound Isolation Clips located approximately 2 in. from each end of length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge.

b. Steel Framing Members* — Resilient sound isolation clip used to attach furring channels (Item 6Ca) to studs. Clips spaced 16 in. OC., and secured to studs with No. 10 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

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,

perimeter for sound control.

8. Caulking and Sealants — (not shown, optional) A bead of acoustical sealant applied around the partition

9. STC Rating — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1

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 joint compound. C. Item 5, above - Batts and Blankets* The cavities formed by the studs 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 rating.

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-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 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

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

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. 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

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 FRPC, 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 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 2015-02-04

Design No. U341

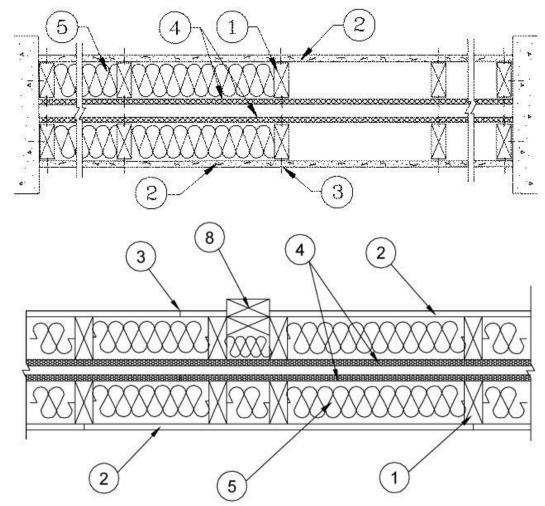
September 23, 2014

Bearing Wall Rating — 1 Hr.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., is used on both halves of wall. 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

Finish Rating — Min 20 min.

* 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 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, below: 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, 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.

S bugle-head steel screws spaced 12 in. OC.

When used in widths other than 48 in., gypsum board to be installed horizontally.

ACADIA DRYWALL SUPPLIES LTD (View Classification) — CKNX.R25370 AMERICAN GYPSUM CO (View Classification) — CKNX.R14196 BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374 CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660 CGC INC (View Classification) — CKNX.R19751 CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C (View Classification) — CKNX.R18482 GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717 LOADMASTER SYSTEMS INC (View Classification) — CKNX.R11809 NATIONAL GYPSUM CO (View Classification) — CKNX.R3501 PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094 PANEL REY S A (View Classification) — CKNX.R21796 SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262 THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517 UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319 USG MEXICO S A DE C V (View Classification) — 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 a substitute for the required layer(s) of UL Classified Gypsum Board. for use with Steel Framing Members, Furring Channels or Fiber, Sprayed. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-530 (finish rating 23 min)

edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. UNITED STATES GYPSUM CO

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 study 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 t be installed horizontally. AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C CERTAINTEED GYPSUM INC — Type C or Type X 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 — SoundBreak XP Type X Gypsum Board

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 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. CERTAINTEED GYPSUM INC — Type SilentFX

2I. Wall and Partition Facings and Accessories* — (As an alternate to Items 2 through 2H) — Nominal 5/8 in. thick, 4 f 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.

3. Joints and Nailheads — Gypsum board joints of outer layer covered with tape and joint compound. Nail heads of oute layer covered with joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the enti 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" of "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 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 product. U S GREENFIBER L L C — INS735 & INS745 for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS745, INS765LD, and INS770LD are to be used for dry application only.

5B. 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 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, friction-fitted 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 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

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. O perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 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 channel as described in Item 2.

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 INC — Types RSIC-1, RSIC-1 (2.75). 6A. Steel Framing Members* — (Optional, Not Shown) - Furring channels and Steel Framing Members as described

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicula 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 G512 or U305. Nom 5/8 in. thick 4 ft wide. Gypsum board or lath applied horizontally or vertically, unless specified 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.

When Steel Framing Members* (Item 6-6B) are used, wallboard attached to furring channels with 1 in. long Type 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 PLITEQ INC — Type Genie Clip

> 6B. Steel Framing Members — (Optional, Not Shown)* — Furring channels and resilient sound isolation clip as describe a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured together with four self-tapping No

> 8x1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Gypsum board attached to furring channels as

described in Item 2. Side joint furring channels shall be attached to studs with RESILMOUNT Sound Isolation Clips - Ty

A237R located approximately 2 in. from each end of length of channel. Both Gypsum Boards at side joints fastened into

channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge. b. Steel Framing Members* — Resilient sound isolation clip used to attach furring channels (Item 6Ba) to studs. Clips spaced 24 in. OC., and secured to studs with No. 10 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

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-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 a

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-510. 8. Non-Bearing Wall Partition Intersection — (Optional) Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed 2B. Gypsum Board* — (As an alternate to Item 2, not shown) - Any 5/8 in. thick gypsum panels that are eliqible 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 for use in Design Nos. L501, G512 or U305, supplied by the Classified companies listed below shown in the in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flust Gypsum Board* (CKNX) category. Applied horizontally or vertically and attached to studs and bearing plates with 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 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 with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stu 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 Certificati (such as Canada), respectively.

***NOTE: PROVIDE FIRE BLOCKING @ 10'-0" INTERVALS PER FBC 717

Last Updated on 2014-09-23

MICHAEL E. GOVE

PERMIT REVIEW STAMP

ISSUE HISTORY

7/21/2017 50% DESIGN DEVELOPMENT SET

11/10/2017 75%-90% REVIEW COORD. SET

REVISION HISTORY

FUGLEBERG KOCH

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

Description

Date

Date

www. fuglebergkoch.com

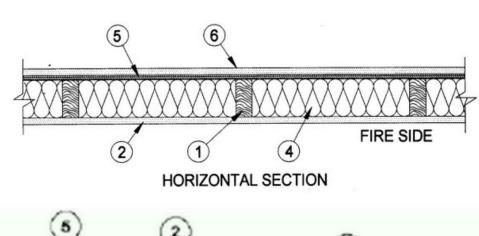
3 | 12/20/2017 | 100% PERMIT SET

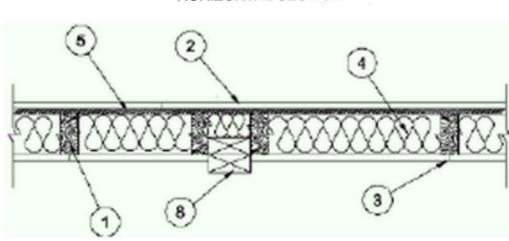
SUMMER BAY LAKE COUNTY, FL

UL REFERENCE DIRECTORY - WALL SYSTEMS

Approve

When used in Canada it is required that all materials included within the UL design are also cUL certified.





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, 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, 7B, or 7C 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. ACADIA DRYWALL SUPPLIES LTD (View Classification) — CKNX.R25370 **AMERICAN GYPSUM CO** (View Classification) — CKNX.R14196

THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) CKNX.R19374 CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660 CGC INC (View Classification) — CKNX.R19751

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C (View Classification) — CKNX.R18482 GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717 **LOADMASTER SYSTEMS INC** (View Classification) — CKNX.R11809

NATIONAL GYPSUM CO (View Classification) — CKNX.R3501 PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094 PANEL REY S A (View Classification) — CKNX.R21796 SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262

UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319 **USG MEXICO S A DE C V** (View Classification) — CKNX.R16089 are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified Companies listed below

2A. Gypsum Board* — (As an alternate to Item 2, not shown) - Any 5/8 in. thick 4 ft wide gypsum panels that 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 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. **ACADIA DRYWALL SUPPLIES LTD** — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing

AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C **CERTAINTEED GYPSUM INC** — Type C or Type X

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.

ACADIA DRYWALL SUPPLIES LTD — 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 — SoundBreak XP Type X Gypsum Board

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 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. 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.

3. Joints and Nailheads — (Not Shown) — Wallboard joints covered with tape and joint compound. Nail 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& INS745 for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS745, INS765LD, and INS770LD 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/ft3.

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 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 and Fiber Boards.

GEORGIA-PACIFIC PANEL PRODUCTS L L C — Types FiberBrace or QuietBrace **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. Vinyl Siding** — Molded Plastic* — Contoured rigid vinyl siding having a flame spread value of 20 or

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 companies. **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 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 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 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 INC — 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 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 clip PLITEQ INC — Type Genie Clip

7C. Steel Framing Members — (Optional, Not Shown)* - Furring channels and resilient sound isolation clip 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 secured together wit.Last Updated on 2014-06-27 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Gypsum board attached to furring channels as described in Item 2. Side joint furring channels shall be attached to studs with RESILMOUNT Sound Isolation Clips - Type A237R located approximately 2 in. from each end of length of channel. Both

joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge. **b. Steel Framing Members*** — Resilient sound isolation clip used to attach furring channels (Item 7Ca) to studs. Clips spaced 16 in. OC., and secured to studs with No. 10 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R 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. Nonbearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

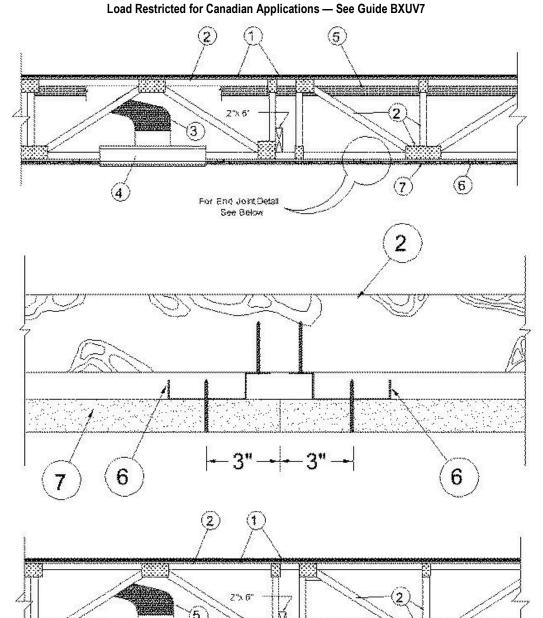
*Bearing the UL Classification Mark

Design No. L574

December 12, 2012

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 24 or 25 Min (See Items 5, 5A and 5B)



Alternate Insulation Placement

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

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with No. 6d ring shank nails spaced 12 in. OC along each truss. 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. plywood, min grade "Underlayment" or "Sturd-I-Floor" with T & G edges and conforming with PS1-83 specifications, or nonveneer APA rated Sturd-I-Floor, T & G panels per APA specifications PRP-108. Face grain of plywood to be perpendicular to joists with joints staggered.

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. 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.

Floor Mat Materials* - (Optional) — Nom 1/4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. When floor mat material is used, min thickness of floor topping mixture is 1 in. Floor topping thickness a min 3/4 in. over Acousti-Mat I floor mat.

MAXXON CORP — Type Acousti-Mat I, Acousti-Mat II, Acousti-Mat II HP. Alternate Floor Mat Materials* - (Optional) - Nom 0.8 in. thick floor mat material loose laid over the subfloor with Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min

MAXXON CORP — Type Acousti-Mat 3, Acousti-Mat 3 HP, Crack Suppression Mat (CSM) Metal Lath (Alternate to Crack Suppression Mat (CSM)) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in. Alternate Floor Mat Materials* - (Optional) — Nom 0.4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be min 1-1/2 in.

MAXXON CORP — Type Enkasonic 9110, Enkasonic 9110 HP. Alternate Floor Mat Materials* - (Optional) — Nom 0.2 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer may be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be as specified under Floor Topping Mixture.

MAXXON CORP — Type Acousti-Mat LP-R Metal Lath (Optional) — For use with floor mat materials, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd or Maxxon Corp. UL Classified Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min 1 in. **MAXXON CORP** — Type Crack Suppression Mat (CSM)

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 3 to 7 gal of water mixed with 80 lbs of floor topping mixture and 1.0 to 2.1 cu ft of sand.

MAXXON CORP — Types D-C, GC, GC 2000, L-R, T-F, CT

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. 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. Floor Mat Materials* - (Optional) — Nom 1/4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. When floor mat material is used, min thickness of floor topping mixture is 1 in. Floor topping thickness a min 3/4 in. over Acousti-Mat I floor mat. **MAXXON CORP** — Type Acousti-Mat I, Acousti-Mat II, Acousti-Mat II HP.

Alternate Floor Mat Materials* - (Optional) - Nom 0.8 in. thick floor mat material loose laid over the subfloor with Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min

MAXXON CORP — Type Acousti-Mat 3, Acousti-Mat 3 HP, Crack Suppression Mat (CSM) Metal Lath (Alternate to Crack Suppression Mat (CSM)) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in. Alternate Floor Mat Materials* - (Optional) — Nom 0.4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be min 1-1/2 in.

Maxxon Floor Primer may be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be as specified under Floor Topping Mixture. MAXXON CORP — Type Acousti-Mat LP-R

Alternate Floor Mat Materials* - (Optional) — Nom 0.2 in. thick floor mat material loose laid over the subfloor.

MAXXON CORP — Type Enkasonic 9110, Enkasonic 9110 HP.

Metal Lath (Optional) — For use with floor mat materials, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd or Maxxon Corp. UL Classified Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min 1 in. MAXXON CORP — Type Crack Suppression Mat (CSM)

Finish Flooring - Floor Topping Mixture* - Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1200 psi. Mixture shall consist of 4 to 7 gal of water to 80 lbs of floor topping mixture to 1.4 to 1.9 cu ft of sand. **RAPID FLOOR SYSTEMS** — Type RF, RFP, RFU, RFR, Ortecrete

System No. 4

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with No. 6d ring shank nails spaced 12 in. OC along each truss. 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.

Floor Mat Materials* — (Optional) - Min 3/8 in. to max 3/4 in. thick floor mat material loose laid over the UNITED STATES GYPSUM CO — LEVELROCK® Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture. UNITED STATES GYPSUM CO — 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

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1200 psi. Thickness increased to min 1 in. for use with LEVELROCK® Brand Floor Underlayment SRM-25. Refer to manufacturer's instructions accompanying the material for specific mix design. UNITED STATES GYPSUM CO — Type LRK

System No. 5

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with No. 6d ring shank nails spaced 12 in. OC along each truss. 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. Floor Mat Materials* — (Optional) - Min 3/8 in. to max 3/4 in. thick floor mat material loose laid over the

UNITED STATES GYPSUM CO — LEVELROCK® Brand Sound Reduction Board Alternate Floor Mat Materials* — (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture. UNITED STATES GYPSUM CO — 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 Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 3000 psi. Thickness increased to min 1 in, for use with LEVELROCK® Brand Floor Underlayment SRM-25. Refer to manufacturer's instructions accompanying the material for specific mix design. UNITED STATES GYPSUM CO — Type HSLRK

System No. 6 Subflooring — Min 3/4 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. Long edges may be T & G or square.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. ALLIED CUSTOM GYPSUM PLASTERWORKS L L C — Accu-Crete and Accu-Radiant, AccuLevel G40 and AccuLevel SD30.

Alternate 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. or 1 in. thick for 19/32 or 15/32 in. thick wood structural panels respecitively

ALLIED CUSTOM GYPSUM PLASTERWORKS L L C — Type AccuQuiet P80, Type AccuQuiet C40, AccuQuiet D13, Type AccuQuiet RSM 20, Type AccuQuiet RSM 32, Type AccuQuiet RSM 48, Type AccuQuiet RSM 64, Type AccuQuiet RSM 120, and Type AccuQuiet D-18.

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 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. ¼ in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a

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

System No. 8

Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with No. 6d ring shank nails spaced 12 in. OC along each truss. 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 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 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill 4

Fill High Strength and Gyp-Span Radiant Metal Lath (Optional) — For use with 3/8 in. or 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. Floor Mat Materials* — (Optional) — Nom 6 mm thick floor mat material adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of floor-topping mixture. When floor mat material is used, min thickness of floor topping mixture is 1 in.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat.

Alternate Floor Mat Materials* — (Optional) — Floor mat material nom 10 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 1-1/2 in. of floor-topping mixture. **HACKER INDUSTRIES INC** — Type Hacker Sound-Mat II.

Alternate Floor Mat Materials* — (Optional) — Floor mat material nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. **HACKER INDUSTRIES INC** — Type Quiet Qurl 55/025 Alternate Floor Mat Materials* — (Optional) — Floor mat material nom 3/8 in. thick loose laid over the

subfloor. Floor topping thickness shall be a min of 1-1/2 in. **HACKER INDUSTRIES INC** — Type Quiet Qurl 60/040

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

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 18 in. Truss depth may be reduced to 12 in. when Batts and Blankets* (Item 5A) are draped over the resilient channel and gypsum board ceiling membrane. Truss members secured together with min 0.0356 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* — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

4. Ceiling Damper* — Nom 20 in. long by 18 in. wide by 2-1/8 in. high, fabricated from galvanized steel. Plenum box max size nom 21 in. long by 18 in. wide by 16 in. high fabricated from either galvanized steel or Classified Air Duct Materials bearing the UL Classification Marking for Class 0 or Class 1 rigid air duct material. 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.

NAILOR INDUSTRIES INC — Types 0755, 0755A, 0756, 0756D, 0757, 0757D, 0757FP, 0757DFP, 0758, 0759, 0760, 0761, 0762, CRD5, CRD5D, CRD6, CRD6D, CRD6FP, CRD6DFP 4A. Alternate Ceiling Damper* — Max nom 9 by 9 in. damper with Airzone fan installed in accordance with the instructions provided by the manufacturer. Max height of damper with fan shall be 11 in. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.

PANAMEX GROUP INC — Type 0750HM 4B. Alternate Ceiling Damper* — 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 4C. Alternate Ceiling Damper* — 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,

4D. Alternate Ceiling Damper* — 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 model 55 EA w/Boot. LLOYD INDUSTRIES INC — Model CRD 50-95BT, CRD 50-EA-95BT, CRD 55-95BT, CRD 55 EA-95BT

4E. Alternate Ceiling Damper* — 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. **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, -6.0 NI.

4F. Alternate Ceiling Damper* — 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

4G. Alternate Ceiling Damper* — 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 100 sq ft of ceiling area. Installed in accordance with the manufacturers installation instructions provided with the damper. **LLOYD INDUSTRIES INC** — Model 45-LTD-95-BT-4 4H. Alternate Ceiling Damper* — 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. 12-12 **LLOYD INDUSTRIES INC** — Model CRD50-w X-BT 4l. Alternate Ceiling Damper* — Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed 324 sq in. with a max width of 18 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 9) shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS — Model RD-521 **POTTORFF** — Model CFD-521. 4J. Alternate Ceiling Damper* — Max nom area shall be 196 sq in. Max square size shall be 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in. with a max width of 26 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 9) 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. 4K. Alternate Ceiling Damper* — Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed 324 sq in. with a max width and max length of 18 in. Max round size shall be 18 in. dia. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper

RUSKIN COMPANY — Models CFD7-T, CFDR7-T. 5. Batts and Blankets* — (Optional) — When truss depth is 18 in. or greater, insulation is optional. Insulation may alternately 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 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 Items 6 and 7. 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 may be used. The Finish Rating is 24 min. when the insulation is draped over the resilient channels and gypsum board ceiling membrane and 25 min. when it is installed on underside of the plywood subfloor or when it is omitted.

5A. Batts and Blankets* — When truss depth is less than 18 in., Max 3-1/2 in. thickness of glass fiber

installed in accordance with the manufacturers installation instructions provided with the damper.

insulation shall 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 Items 6 and 7. 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 may be used. The Finish Rating is 24 min. when the insulation is draped over the resilient channels and gypsum board ceiling membrane. 5B. Loose Fill Material* — Loose fill material may be used as an alternate to batt insulation (Items 5A and

5B). When used, the resilient channel and gypsum board attachment is modified as specified in Items 6 and 7. Any loose fill material bearing the UL Classification Marking for Surface Burning Characteristics, having a min density of 0.5 pcf and installed at a max thickness of 3-1/2 in. may be used. The finished rating when loose fill material is used has not been determined. 6. Resilient Channels — Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC perpendicular to

trusses. When batt insulation (Item 5) is draped over the resilient channel/gypsum board ceiling membrane, or when loose fill insulation (Item 5A) is used, the resilient channel spacing shall be reduced to 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 board end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of board. 6A. Steel Framing Members* — (Optional, Not Shown) - Used as an alternate method to attach min. 1/2 in. deep resilient channels (Item 6) to wood trusses (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the bottom chord of each wood truss with a min. 1-3/4 in. long Type S bugle head steel screw through the center hole of the clip and the resilient channel flange. Adjoining resilient channels are overlapped 4 in, under trusses. The clip flange is opened slightly to accommodate the two overlapped channels. Additional clips required to hold resilient channel that supports the gypsum board butt joints, as

described in Item **KEENE BUILDING PRODUCTS CO INC** — Type RC Assurance. 6B. Steel Framing Members* - (Not Shown) — As an alternate to Item 6, 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 trusses. When batt insulation (Items 5) is draped over the resilient channel/gypsum board ceiling membrane, the resilient 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 SWG 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. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to 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 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

PAC INTERNATIONAL INC — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75). 7. **Gypsum Board*** — 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 spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. End joints secured to both resilient channels as shown in end joint details. When batt insulation (Item 5) are draped over the resilient channel/gypsum board ceiling membrane, or when loose fill insulation (Item 5A) is used, screws spacing shall be 8 in. OC.

AMERICAN GYPSUM CO — Types AG-C **TEMPLE-INLAND** — Type TG-C 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.

*Bearing the UL Classification Mark

PERMIT REVIEW STAMP **ISSUE HISTORY** Date 1 7/21/2017 50% DESIGN DEVELOPMENT SET 11/10/2017 75%-90% REVIEW COORD. SET 3 12/20/2017 100% PERMIT SET REVISION HISTORY Date Description

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

www.fuglebergkoch.com

MICHAEL E. GOVE

FLORIDA LICENSE # AR9411

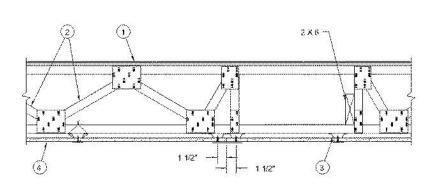
LAKE COUNTY, FL

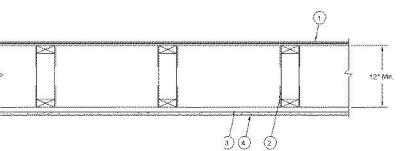
IL REFERENCE DIRECTORY WALL / FLOOR SYSTEMS

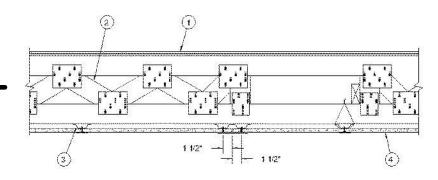
NU-WOOL CO INC — Cellulose Insulation

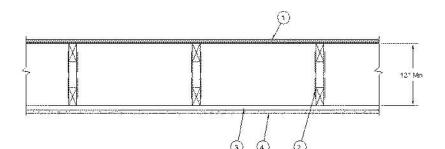
Approve

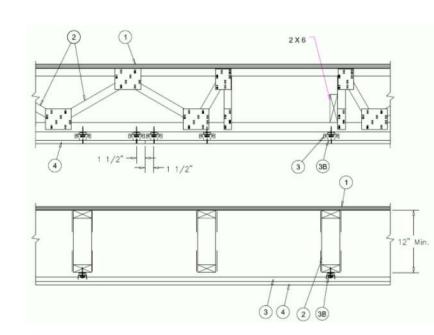
Design No. L574 August 01, 2014 **Unrestrained Assembly Rating - 1 Hr.** Finish Rating - 22 Min.











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

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

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

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 **Vapor Barrier** — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick. Floor Mat Materials* — (Optional)— Floor mat material nom 5/64 in. (2mm) 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. **HACKER INDUSTRIES INC** — Type Hacker Sound-Mat Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6mm) 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. (32mm) of floor-topping mixture. **HACKER INDUSTRIES INC** — Type Hacker Sound-Mat II.

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/8 in. (3mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19mm) **HACKER INDUSTRIES INC** — FIRM-FILL SCM 125 Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25mm) HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Qurl 55/025 Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/8 in. (10mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32mm) HACKER INDUSTRIES INC — FIRM-FILL SCM 400, Quiet Qurl 60/040 Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/4 in. (19mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38mm) HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075

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

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

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

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

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. 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. Floor topping thickness shall be as specified under Floor Topping Mixture. **GRASSWORX L L C** — Type SC50 Alternate Floor Mat Material* — (Optional) - Floor mat material nominal 3/8 in. thick loose laid over the subfloor. Floor topping shall be a min 3/4 in. thick.

System No. 5

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

OWENS CORNING — Type QuietZone Acoustical Floor Mat

Vapor Barrier-(Optional) — Commercial asphalt saturated felt, 0.030 in. thick. 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. 6

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

Vapor Barrier-(Optional) — Commercial asphalt saturated felt, 0.030 in. thick. 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 5-1/2 gal of water. **AERIX INDUSTRIES** — Floor Topping Mixture

System No. 7

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

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick. Finish Flooring - Floor Topping Mixture* — Min 1 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, 62.5 lbs of Pea Gravel, 312.5 lbs of sand with 5-1/2 gal of water. LITE-CRETE INC — Type I

System No. 8

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

Vapor Barrier — **(Optional)** — Commercial asphalt saturated felt, 0.030 in. thick. Floor Mat Materials* — (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. When floor mat material is used, min thickness of floor topping thickness is 1 in. Floor topping thickness a min 3/4 in. over Acousti-Mat I floor mat. **MAXXON CORP** — Type Acousti-Mat I, Acousti-Mat II, Acousti-Mat II HP.

Alternate Floor Mat Materials* - (Optional) - Nom 0.8 in, thick floor mat material loose laid over the subfloor with Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in. **MAXXON CORP** — Type Acousti-Mat 3, Acousti-Mat 3 HP, Crack Suppression Mat (CSM) Metal Lath (Alternate to Crack Suppression Mat (CSM)) - 3/8 in. expanded galvanized steel

diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in. Fiber Glass Mesh Reinforcement — (Optional) — Maxxon Corp's "Maxxon Reinforcement (MR)" for use with or as an alternate to CSM or metal lath reinforcement, the materials consists of a plastic coated non-woven fiber glass mesh grid intended to suppress cracks in the Floor Topping Mixture.

Alternate Floor Mat Materials* - (Optional) — Nom 0.4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be min 1 in. Floor topping thickness shall be min 3/4 in. when used with Crack Suppression Mat (CSM), Metal Lath, or Maxxon

Reinforcement (MR). **MAXXON CORP** — Type Enkasonic 9110, Enkasonic 9110 HP. Alternate Floor Mat Materials* - (Optional) — Nom 0.2 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer may be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be as specified under Floor Topping

MAXXON CORP — Type Acousti-Mat LP-R **Metal Lath** (Optional) — For use with floor mat materials, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd or Maxxon Corp. UL Classified Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min 1 in. MAXXON CORP — Type Crack Suppression Mat (CSM)

Fiber Glass Mesh Reinforcement — (Optional) — Maxxon Corp's "Maxxon Reinforcement (MR)" for use with or as an alternate to CSM or metal lath reinforcement, the materials consists of a plastic coated non-woven fiber glass mesh grid intended to suppress cracks in the Floor

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 3 to 7 gal of water to 80 lbs of floor topping mixture to 1.0 to 2.1 cu ft of sand. MAXXON CORP — Types D-C, GC, GC2000, L-R, T-F, CT

System No. 9

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

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick. 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 — UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 10

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

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick. Floor Mat Materials* — (Optional) - Nom 1/4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. When floor mat material is used, min thickness of floor topping mixture is 1 in. Floor topping thickness a min 3/4 in. over Acousti-Mat I floor mat.

MAXXON CORP — Type Acousti-Mat I, Acousti-Mat II, Acousti-Mat II HP. Alternate Floor Mat Materials* - (Optional) - Nom 0.8 in. thick floor mat material loose laid over the subfloor with Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in. MAXXON CORP — Type Acousti-Mat 3, Acousti-Mat 3 HP, Crack Suppression Mat (CSM)

Metal Lath (Alternate to Crack Suppression Mat (CSM) - 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Floor topping thickness shall be min 1-1/2 in. Fiber Glass Mesh Reinforcement — (Optional) — Maxxon Corp's "Maxxon Reinforcement (MR)" for use with or as an alternate to CSM or metal lath reinforcement, the materials consists

of a plastic coated non-woven fiber glass mesh grid intended to suppress cracks in the Floor

MAXXON CORP — Type Enkasonic 9110, Enkasonic 9110 HP.

Topping Mixture. Alternate Floor Mat Materials* - (Optional) — Nom 0.4 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be min 1 in. Floor topping thickness shall be min 3/4 in. when used with Crack Suppression Mat (CSM), Metal Lath, or Maxxon Reinforcement (MR).

Alternate Floor Mat Materials* - (Optional) — Nom 0.2 in. thick floor mat material loose laid over the subfloor. Maxxon Floor Primer may be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness shall be as specified under **Floor Topping**

MAXXON CORP — Type Acousti-Mat LP-R Fiber Glass Mesh Reinforcement — (Optional) — Maxxon Corp's "Maxxon Reinforcement (MR)" for use with or as an alternate to CSM or metal lath reinforcement, the materials consists of a plastic coated non-woven fiber glass mesh grid intended to suppress cracks in the Floor

Metal Lath (Optional) — For use with floor mat materials, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd or Maxxon Corp. UL Classified Crack Suppression Mat (CSM) loose laid over the floor mat material. Floor topping thickness shall be min 1 in.

MAXXON CORP — Type Crack Suppression Mat (CSM) Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1200 psi. Mixture shall consist of 4 to 7 gal of water mixed with 80 lbs of floor topping mixture and 1.4 to 1.9 cu ft of sand. **RAPID FLOOR SYSTEMS** — Types RF, RFP, RFU, RFR, Ortecrete

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. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered. 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.

System No. 12

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

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

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

ALLIED CUSTOM GYPSUM — Accu-Crete, AccuRadiant, AccuLevel G40 and AccuLevel Alternate 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. ALLIED CUSTOM GYPSUM — Type AccuQuiet P80, Type AccuQuiet C40, AccuQuiet D13,

and Type AccuQuiet D-18.

Subflooring — Min 15/32 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

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

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. ¼ 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

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 1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Additional clips are No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Gypsum Board* — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in. 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 minimum of 12 inches from the joints of the

GEORGIA-PACIFIC GYPSUM L L C — Type DS Floor Mat Materials* — (As an alternate to the single layer gypsum board) - Floor mat material loose laid over the subfloor.

MAXXON CORP — Type Acousti-Mat I, Acousti-Mat II, Acousti-Mat II HP, Acousti-Mat 3, Acousti-Mat 3 HP, Enkasonic 9110, Enkasonic 9110 HP, Acousti-Mat LP-R. Gypsum Board* — (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each 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 and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and from the joints of the subfloor. **GEORGIA-PACIFIC GYPSUM L L C** — Type DS

System No. 15

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

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick. **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. **DEPENDABLE LLC** — GSL M3.4, GSL K2.6 and GSL RH 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. ¼ 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.

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

System No. 16

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

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.

PLITEQ INC — Type GenieMat FF04 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. 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 minimum of 1 in.

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

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.

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 the board.

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. 3B. **Steel Framing Members*** — (Optional) - Used as an alternate method to attach furring channels to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to the bottom chord of alternating trusses 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 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.

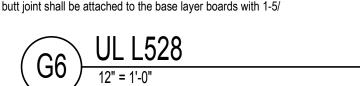
PAC INTERNATIONAL INC — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75). 3C. Steel Framing Members* — (Optional, Not Shown) - Used as an alternate method to attach furring channels to trusses. Clips spaced 48 in. OC., and secured to the bottom chord to alternating trusses with two No. 8 x 2-1/2 in. 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) - Used as an alternate method to attach furring channels to trusses. Clips spaced at 24" OC and secured to the bottom of the trusses with one No. 10 x 2-1/2 Coarse Drywall Screw through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and screwed with four #8 x required to hold the Gypsum Butt joints and side joints as described in item 4. Not evaluated

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R 3F. Resilient Channels — 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

4. 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 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 furring channels. Base layer attached to the furring channels using 1 in. long No. 6 Type S bugle-head steel screws 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



PERMIT REVIEW STAMP **ISSUE HISTORY** 7/21/2017 50% DESIGN DEVELOPMENT SET 11/10/2017 75%-90% REVIEW COORD. SET 3 | 12/20/2017 | 100% PERMIT SET REVISION HISTORY Date Description

FUGLEBERG KOCH

www.fuglebergkoch.com

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

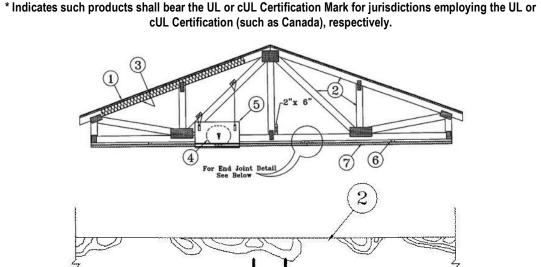
MICHAEL E. GOVE

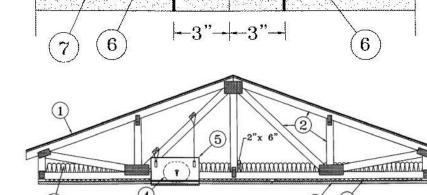
LAKE COUNTY, FL

JL REFERENCE DIRECTORY

- FLOOR SYSTEM

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





 Roofing System* — Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive may be used with either the nails or staples.

Alternate Insulation Placement

2. Trusses — Pitched or parallel chord wood trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together with min. 0.0356 in. thick galv 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 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 approximately 7/8 in. centers with four rows of teeth per inch of plate width. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. area in the plane of the truss of 21 sq/ft. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts and blankets (Item 3) are used as shown in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the plywood sheathing.

3. Batts and Blankets* — (Optional) - Required when Item 6B is used — Glass fiber insulation, secured to the wood structural panels with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Any 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. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. When **Steel Framing** Members (Item 6B) are used, max 3-1/2 in. thick insulation shall be draped over the furring channels (Item SBa) and gypsum board ceiling membrane, and friction-fitted between trusses and Steel Framing Members (Item 6Bd). The finished rating has only been determined when the insulation is secured to the decking.

3A. Fiber. Sprayed* — As an alternate to Item 3 (not evaluated for use with Item 6B) — Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft3, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft3 over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft3 behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a

cavity to accept the cellulose fiber. **U S GREENFIBER L L C** — INS735& INS745 for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS745, INS765LD, and INS770LD are to be used for dry application only.

4. Air Duct* — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. Ceiling Damper* — Max nom area, 324 sq in. Max square size, 18 in. by 18 in. rectangular sizes not to exceed 324 sq in, with a max width of 18 in, Max damper height is 14 in, Installed in accordance with manufacturers installation instructions provided with the damper. Max damper openings not to exceed 162 sq in. per 100 sq ft of ceiling area. **C&S AIR PRODUCTS** — Model RD-521 POTTORFF — Model CFD-521

5A. Alternate Ceiling Damper* — Max nom area, 196 sq in. Max square size, 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in. with a max width of 26 in. Max overall damper height is 7 in. Installed in accordance with the manufacturers installation instructions provided with the damper. Max damper openings not to exceed 98 sq in. per 100 sq ft of ceiling area.

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

5B. Alternate Ceiling Damper* — Ceiling damper & fan assembly. Max nom area shall be 75 sq in. with the length not to exceed 8-9/16 in. and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 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 manufacturers installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

DELTA ELECTRONICS INC — Models CRD2

6. Furring Channels — Resilient channels formed of 25 MSG thick galv steel. Installed perpendicular to the trusses (Item 2), spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane. Two courses of resilient channel positioned 6 in. OC at wallboard butt-joints (3 in. from each end of wallboard). Channels oriented opposite at wallboard butt-joints. Channel splices overlapped 4 in. beneath wood trusses. Channels secured to each truss with 1-1/4 in. long Type S screws.

6A. Steel Framing Members — (Not Shown)* — As an alternate to Item 6, 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 trusses when no insulation (Items 3 or 3A) is fitted in the concealed space or 12 in. OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane or 24 in. OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane and a second layer of gypsum board is attached as described in Item 7 for steel framing members. Channels secured to trusses as described in Item 6Ab. 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.

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 by 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 by 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 6Aa. 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 INC — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

6B. **Steel Framing Members*** — (Not Shown) - As an alternate to Items 6 and 6A.

a. Furring Channels — Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in, pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 3. Two layers of gypsum board attached to furring channels as described

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 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. 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. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location.

d. Steel Framing Members* — Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Bc) on alternating trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.

KINETICS NOISE CONTROL INC — Type ICW.

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, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 24 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space. Channels secured to trusses 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 near each end of

b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (24 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. 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.

PLITEQ INC — Type Genie Clip

6D. **Steel Framing Members*** — (Not Shown) - As an alternate to Items 6, 6A, 6B and 6C.

a. Main runners — Installed perpendicular to trusses — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. Cross tees or channels — Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 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

c. Wall angles or channels — Used to support steel framing member ends and for screw-attachment of the gypsum wallboard — Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC

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

6E. Alternate Steel Framing Members — (Not Shown)* - As an alternate to items 6, 6A, 6B, and 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 24 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to joists as described in Item b.

b. Steel Framing Members* — Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 24" OC and secured to the bottom of the trusses with one No. 10 x 2-1/2 Coarse Drywall Screw through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and screwed with four No. 8 x 1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Additional clips are required to hold the Gypsum Butt joints and side joints as described in Item 7.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6F. Steel Framing Members* — (Not Shown) - As an alternate to Items 6 through 6E- Not for use with Items 3 or 3A. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.

USG INTERIORS LLC — Type DGL or RX

7. Gypsum Board* — One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to trusses. Attached to the resilient channels using 1 in. long Type S bugle-head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 8 in. OC along butted end-joints and in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling

When Steel Framing Members* (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3 or 3A) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the wallboard plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side joints of

When Steel Framing Members (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer.

When Steel Framing Members (Item 6C) 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 72 in. 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, spaced approximately 2 in. in from joint. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Butt joint furring channels shall be attached with a RESILMOUNT Sound Isolation Clip secured to underside of every truss that is located over the butt joint. Over all Gypsum Board side joints, approximately 20 in. lengths of furring channel shall be installed parallel to trusses (Item 2) between main furring channels. Side joint furring channels shall be attached to underside of the joist with RESILMOUNT Sound Isolation Clips - located approximately 2 in. from each end of the approximate 20 in. length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge.

When alternate Steel Framing Members* (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

CGC INC — Types C, IP-X2, IPC-AR. **UNITED STATES GYPSUM CO** — Types C, IP-X2, IPC-AR. **USG MEXICO S A DE C V** — Types C, IP-X2, IPC-AR.

7A. Gypsum Board* — For use with Steel Framing Members (Item 6D) when Batts and Blankets* (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five wallboard screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at wallboard end joints, wallboard screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with wallboard screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with wallboard screws spaced 12 in. OC. Joints treated as described in Item 7. For use with Steel Framing Members* (Item 6D) when Batts and Blankets* (Item 3) are used - Ratings limited to 1 Hour - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.

CGC INC — Type C or IP-X2. **UNITED STATES GYPSUM CO** — Type C or IP-X2. **USG MEXICO S A DE C V** — Type C or IP-X2.

8. Finishing System — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, 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. **Alternate Ceiling Membrane** — Not Shown.

9. **Netting** — Fibrous, woven netting material fastened to underside of each joist with staples, with side joints overlapped.

* 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 2014-06-17

O BE REVIEWED AND ADJUSTE

WALL ASSEMBLY			
(UL ASSEMBLY) SEE LS PLANS	STC RATING	IIC RATING	TEST NUMBER/STANDARD
U305	52	N/A	BW-35ST 1969/GEIGER AND HAMME
U341	58	N/A	TL-93-270/ NRC-CNRC
U344	52	N/A	BW-35ST 1969/GEIGER AND HAMME
U356	52	N/A	BW-35ST 1969/GEIGER AND HAMME
U404	N/A	N/A	

FLOOR ASSEMBLY (UL ASSEMBLY) SEE LS PLANS	FINISH	STC RATING	IIC RATING	TEST NUMBER/S	STANDARD	
L546	VINYL PLANK	62	53	USG090302A	USG LEVELROCK SOUND CONTROL & 6mm (1/4") MAT	
W/ RESILENT CHANNEL	CERAMIC TILE	64	54	USG090501A		
	CARPET & PAD	62	80	USG090402A	(NOTE: SOUND MAT NOT REQUIRED UNDER CARPET)	
					,	

ACOUSTIC NOTES:

1) FLOOR / CEILING SYSTEM-STC RATING

THE FLOOR / CEILING SYSTEM DESIGN IS UL L546 AND IS EXPECTED TO PROVIDE A DESIGN, OR LABORATORY TESTED, STC RATING OF THAT LISTED ABOVE. PROVIDED THAT THE RECOMMENDATIONS ARE FOLLOWED RELATED TO NOISE FLANKING PATHS (SEE BELOW), THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED:

A. RESILIENT CHANNELS SHOULD BE USED TO ATTACH THE CEILING GYPSUM BOARD.

B. THE INSULATION MUST BE INSTALLED AT THE TOP OF THE TRUSS CAVITY IN ORDER TO PROVIDE A BUFFER BETWEEN THE FLOOR ABOVE AND ANY HVAC DUCTING, PIPES, AND CONDUIT THAT ARE INSTALLED IN THE TRUSS CAVITY.

C. ENSURE THAT THE HVAC FLEXIBLE DUCTING THAT IS INSTALLED WITHIN THE FLOOR / CEILING SYSTEM IS LOCATED TO ALLOW INSULATION TO BE PLACED BETWEEN THE TOP OF THE DUCT AND THE WOOD SUB-FLOOR. THIS DUCTING SHALL NOT BE IN DIRECT CONTACT WITH THE BOTTOM OF THE SUB-FLOOR. THERE SHALL BE AT LEAST ONE INCH OF INSULATION ABOVE THE DUCTING, AFTER COMPRESSION. IF THE DUCTING IS IN CONTACT WITH THE FLOOR, IT PROVIDES A DIRECT PATH FOR FOOTFALL NOISE TO ENTER THE DUCTING AND TRAVEL EFFICIENTLY INTO THE LIVING SPACES BELOW.

D. ENSURE THAT THE PERIMETER OF ALL FIRE DAMPERS AND FIRE SPRINKLERS ARE COMPLETELY SEALED WITH A RESILIENT, NON-HARDENING CAULK, SUCH AS SILICONE OR POLYURETHANE, OR FIRE CAULK.

2) FLOOR / CEILING SYSTEM – IIC RATING

THE FLOOR / CEILING SYSTEM DESIGN UL L546 AND IS EXPECTED TO PROVIDE A DESIGN, OR LABORATORY TESTED, II-C RATING OF THAT LISTED ABOVE, PROVIDED THAT THE RECOMMENDATIONS ARE FOLLOWED RELATED TO NOISE FLANKING PATHS ARE FOLLOWED.

THE DESIGN JIC RATING MUST BE AT LEAST 50. AND THE FIELD TESTED RATING MUST BE AT LEAST 45 IN ORDER TO MEET THE MINIMUM BUILDING CODE REQUIREMENT. A HIGHER DESIGN RATING OF 55 OR MORE IS RECOMMENDED IF THE CLIENT DESIRES BETTER PERFORMANCE. ACOUSTICAL UNDERLAYMENT MUST BE INSTALLED IN ALL RESIDENCES ABOVE THE FIRST FLOOR, BENEATH ALL HARD FLOOR COVERINGS, INCLUDING TILE, WOOD, LAMINATE, AND RESILIENT VINYL.

(NOTE: IT IS NOT NECESSARY TO IMPLEMENT ANY IMPROVEMENTS UNDER CARPET AND PAD OR ON FLOORS WHERE THERE ARE NO RESIDENCES LOCATED BELOW.)

THE CEILING GYPSUM BOARD MUST BE SEPARATED FROM THE WALL GYPSUM BOARD BY LEAVING A 1/8" GAP AT THE TOP OF ALL WALLS. THIS GAP MAY BE COVERED WITH MOLDING OR TRIM OR MAY BE SEALED USING CAULK. FIVE-SIDED GYPSUM BOARD BOXES SHOULD BE BUILT TO COMPLETELY ENCLOSE THE TOPS OF ALL RECESSED LIGHT CANS, CEILING FAN FIXTURES, AND ALL OTHER FIXTURES THAT PENETRATE THE CEILING. THIS APPLIES EVEN WHEN THE FIXTURES HAVE FIRE RATED CANS. INSULATION MUST BE PLACED ABOVE THESE GYPSUM BOARD BOXES.

3) TENANT SEPARATION WALL

THE TENANT SEPARATION WALL IS UL ASSEMBLY U341. BOTH STUD CAVITIES ARE TO BE FILLED WITH R13 BATT INSULATION. THIS ASSEMBLY IS EXPECTED TO PROVIDE A DESIGN, OR LABORATORY TESTED, STC RATING AS LISTED, PROVIDED THAT THE RECOMMENDATIONS ARE FOLLOWED RELATED TO NOISE FLANKING PATHS.

4) CORRIDOR WALL / INTERIOR BEARING WALLS

THE CORRIDOR WALL IS UL ASSEMBLY U305. THE STUD CAVITY IS FILLED WITH 3" SOUND ATTENUATION BATT INSULATION. THIS ASSEMBLY IS EXPECTED PROVIDE A DESIGN, OR LABORATORY TESTED STC RATING AS LISTED, PROVIDED THAT THE RECOMMENDATIONS ARE FOLLOWED RELATED TO NOISE FLANKING PATHS.

5) INTERIOR TENNANT WALLS

THE INTERIOR TENNENT NON-BEARING WALLS ARE NON-RATED ASSEMBLIES, AND ARE ATTACHED TO THE TRUSSES WITH STC CLIPS. THE STUD CAVITIES ARE FILLED WITH 3" SOUND ATTENUATION BATT INSULATION WHERE SHOWN ON THE PLANS. THIS ASSEMBLY IS EXPECTED PROVIDE REDUCED SOUND TRAVEL, PROVIDED THAT THE RECOMMENDATIONS ARE FOLLOWED RELATED TO NOISE FLANKING PATHS. GYPSUM BOARD TO BE SEPARATED AND GAPS PROVIDED PER #2 ABOVE, AND SEALED WITH CAULK.

6) NOISE FLANKING PATHS

AIRBORNE NOISE TRANSMITS FROM ONE TENANT SPACE TO ANOTHER BY TRAVELING DIRECTLY THROUGH PARTITIONS AND THROUGH ACOUSTICAL LEAK POINTS, KNOW AS "FLANKING PATHS". PENETRATIONS THROUGH PARTITIONS SUCH AS ELECTRICAL OUTLET BOXES, SWITCHES, FIRE ALARM DEVISES, SIGNALING EQUIPMENT, SPRINKLER HEADS, EXHAUST FANS, PLUMBING PIPES, ETC.. ARE ALL EXAMPLES OF "FLANKING PATHS" AND SHOULD BE SEALED PROPERLY WITH ACOUSTICAL SEALANT AND/OR ENCLOSED WITH 5 SIDED GYP. BD. BOXES WITHIN

STRUCTURE-BORNE NOISE TRANSMISSION IS MORE COMPLEX AND CAN OCCUR THROUGH MANY PATHS. THIS IS ESPECIALLY PREVALENT WHERE WALLS AND FLOOR/CEILING SYSTEMS ARE JOINED TOGETHER. STRUCTURE- BORNE NOISE TRANSMITS FROM ONE ROOM TO ANOTHER WHEN THE WALL OR FLOOR / CEILING SYSTEM VIBRATES AND ALSO THRU STRUCTURAL FLANKING PATHS.

ISSUE HISTORY Date 1 7/21/2017 50% DESIGN DEVELOPMENT SET 2 | 11/10/2017 | 75%-90% REVIEW COORD. SET 3 | 12/20/2017 | 100% PERMIT SET REVISION HISTORY Date Description

PERMIT REVIEW STAMP



www. fuglebergkoch.com

MICHAEL E. GOVE

LAKE COUNTY, FL

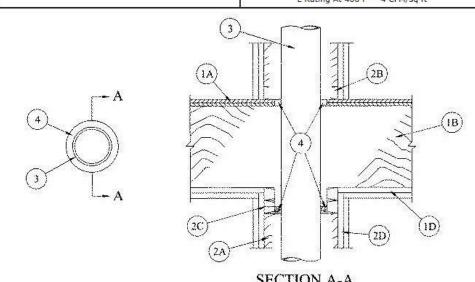
L REFERENCE DIRECTORY

Approve Issue Date

Design No. F-C-1009

January 15, 2015

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 and 2 Hr (See Item 1)	F Rating — 1 and 2 Hr (See Item 1)
T Rating — 1/4 Hr	FT Rating — 1/4 Hr
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 1 and 2 Hr (See Item 1)
L Rating At 400 F — 4 CFM/sq ft	FTH Rating — 1/4 Hr
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — 4 CFM/sg ft



1. Floor-Ceiling Assembly — The 1 or 2 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 F Rating of the firestop system is equal to the rating of the floor**ceiling assembly.** 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 specified in the individual Floor-Ceiling Design. Diam of opening to be max 1 in. (25 mm) larger than diam of pipe. As an alternate, the opening may be square-cut with a max dimension 1 in. (25 mm) greater than the diam of the pipe.

B. **Wood Joists*** — Nom 10 in. (254 mm) 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. Furring Channels — (Not Shown) —(As required) Resilient galvanized steel furring installed in accordance with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory. D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Diam of opening to be max 1 in. (25 mm) larger than diam of pipe.

2. Chase Wall — (Optional) - The through penetrant (Item 3) may be routed through a 1 or 2 hr fire-rated single, double or staggered wood stud/gypsum board chase wall having a fire rating consistent with that of the floor-ceiling assembly. Depth of chase wall to be min 1 in. greater than the diameter of the through penetrant. The chase wall shall be 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

A. Studs — Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs. Nom 2 by 4 in. (51 by 102 mm) studs are allowed for through-penetrants (Item 3) not exceeding nom 2 in. (51 mm) diam.

B. **Sole Plate** — Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening is to be max 1 in. (925 mm) larger than diam of pipe. As an alternate, the opening may be square-cut with a max dimension 1 in. (25 mm) greater than the diam of the pipe. Plates may be discontinuous over opening, terminating at two opposing edges of opening. Max length of discontinuity to be 1 in. (25 mm) greater than diam of through penetrant.

C. Top Plate — The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm), 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 opening is to be max 1 in. (25 mm) larger than diam of pipe. As an alternate, the opening may be square-cut with a max dimension 1 in. (25 mm) greater than the diam of the pipe. Plates may be discontinuous over opening,

terminating at two opposing edges of opening. Max length of discontinuity to be 1 in. (25 mm) greater than diam of through penetrant. D. Steel Plate — When lumber plates are discontinuous, nom 1-1/2 in. (38 mm) wide No. 20 gauge (or heavier) galv steel plates shall be installed to connect each discontinuous lumber plate and to provide a form for the fill material. Steel plates sized to lap 2 in. (51 mm) onto each discontinuous lumber plate and secured to

lumber plates with steel screws or nails. E. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

Through Penetrants — One metallic pipe, conduit or tubing to be installed within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of floor assembly. The annular space within the firestop system shall be min 0 in. (point contact) to max 1 in. (25 mm). The following types and sizes of metallic pipes

or conduits may be used: A. **Steel Pipe** — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe. B. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe. C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit. D. **Copper Tubing** — Nom (102 mm) 4 in. diam (or smaller) Type L (or heavier) copper tubing. E. **Copper Pipe** — Nom (102 mm) 4 in. diam (or smaller) Regular (or heavier) copper pipe.

4. Fill. Void or Cavity Material* — Sealant — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with the top surface of the floor or the sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with bottom surface of ceiling or lower top plate.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP601S, CFS-S SIL GG, CP606, FS-One

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

Sealant or FS-ONE MAX Intumescent Sealant (Note: L Ratings apply only when FS-ONE Sealant is used.)

Last Updated on 2015-01-15

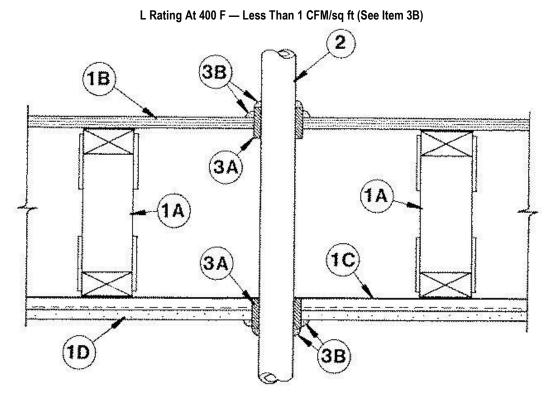
Design No. F-C-2008

May 20, 2005

F Rating — 1 Hr

L Rating At Ambient — 7 CFM/sq ft (See Item 3B)

T Rating — 1 Hr



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 flooring is 3 in. (76 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. 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 manufacturers.

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

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

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.)

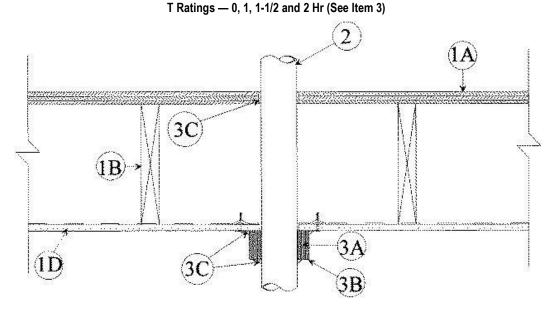
strip/gypsum board ceiling interfaces.

Last Updated on 2005-05-20

Design No. F-C-2024

November 20, 2009

F Ratings — 1 and 2 Hr (See Item 1)



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 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L505, L511 or L536 in the UL Fire Resistance Directory. The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly. 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 specified in the individual Floor-Ceiling Design. B. Wood Joists* — For 1 hr fire-rated floor-ceiling assemblies nom 10 in. (254 mm) deep (or deeper) lumber,

steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped. For 2 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in. (51 by 254 mm) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends

C. **Furring Channels** — (Not Shown) — Resilient galv steel furring installed perpendicular to wood joists between first and second layers of wallboard (Item 1D) in 2 hr fire-rated assembly. Furring channels spaced

D. Gypsum Board* — Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. First layer of wallboard nailed to wood joists. Second layer of wallboard (2 hr fire-rated assembly) screw-attached to furring channels.

2. **Through Penetrants** — One nonmetallic pipe, conduit or tubing to be installed approx midway between wood joists. Diam of openings hole-sawed through flooring system and through two layers gypsum wallboard ceiling to be 0 to 1/4 in. (0 to 6 mm) larger than the outside diam of through-penetrant. Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes

A. Polyvinyl Chloride (PVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid-core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. B. Cellular-Core Polyvinyl Chloride (ccPVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

D. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solidcore ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. E. Cellular-Core Acrylonitrile Butadiene Styrene (ccABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping

3. Firestop System — The details of the firestop system shall be as follows:

Diam In.

(51 mm)to 2-1/2 (64

/2 (13 mm) to 2 (51

2-1/2 (64 mm) to 4 (102

2-1/2 (64 mm) to 3 (76

3-1/2 (89 mm) to 4 (102

1/2 (13 mm)to 1-1/2 (38

1/2 (13 mm) to 1-1/2 (38

/2 (13 mm) to 2 (51

2-1/2 (64 mm) to 3 (76

3-1/2 (89 mm) to 4 (102

3-1/2 (89 mm) to 4 (102

/2 (13 mm) to 1-1/2 (38

Pipe Type

PVC, CPVC, ABS,

ccPVC or ccABS (a) PVC, CPVC, ABS,

ccPVC, or ccABS (a)

ccPVC or ccABS (a)

PVC, CPVC, ABS,

ccPVC or ccABS (a)

PVC, CPVC, ABS or

PVC, CPVC, ABS, or

ABS, PVC, ccPVC, or

ABS, PVC, ccPVC or

PVC, ccPVC or CPVC

ccABS (a)

ccABS (a)

ccABS (a)

PVC, CPVC, ABS,

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 in 1 and 2 in. (25 and 51 mm) wide strips. Strips tightly wrapped around nonmetallic pipe (foil side exposed) with the edges butted against the bottom surface of the gypsum wallboard ceiling. The min wrap strip width, the number of layers of wrap strip required, the type of pipe and the nom diam, as well as the F and T Rating of the system are shown in the following table:

Rating Hr

Wrap Strip Width In.

1 (25 mm)

1 (25 mm)

1 (25 mm)

2 (51 mm)

2 (51 mm)

2 (51 mm)

2 (51 mm)

1 (25 mm)

2 (51 mm)

2 (51 mm)

2 (51 mm)

1-1/2 2 (51 mm)

1-1/2 2 (51 mm) 3

Min Wrap

Strip

Lavers

(a) — Requires use of aluminum tape detailed in Item 3D

3M COMPANY — Type FS-195+

B. Steel Collar — Nom 2 in. (51 mm) deep collar with 1-1/4 in. (32 mm) wide by 2 in. (51 mm) long anchor tabs and min 3/4 in. (19 mm) long tabs to retain wrap strip layers. Coils of precut 0.016 in. (.41 mm) thick (30 gauge) galv sheet steel are available from wrap strip manufacturer. As an alternate, collar my be field fabricated from min 0.016 in. (.41 mm) thick (30 gauge) galv sheet steel in accordance with instruction sheet applied by wrap strip manufacturer Steel collar, with anchor tabs bent outward 90 degrees, wrapped tightly around wrap strip layers with min 1 in. (25 mm) overlap at the seam. With steel anchor tabs pressed tightly against underside of gypsum wallboard ceiling, compress collar around wrap strip layers using a min 1/2 in. (13 mm) wide by 0.028 in. (.71 mm) thick stainless steel band clamp at the collar midheight. As an alternate to the band clamps, collars may be secured by a means No. 10 by 1/2 in. (13 mm) long sheet metal screws installed in the vertical axis at the center of the 1 in. (25 mm) overlap along the perimeter joint of the collar. A min of

Secure collar to gypsum wallboard ceiling using 3/16 in. (5 mm) diam steel toggle bolts (5/8 in. (16 mm) grip) in conjunction with 1-1/4 in. (32 mm) diam steel fender washers. Min of three fasteners, symmetrically located. required for nom 1/2 in. to nom 3 in. (13 mm to 76 mm) diam pipes. Min of four symmetrically located fasteners required for nom 3-1/2 in. and 4 in. (89mm and 102 mm) diam pipes. As a final step, bend wrap strip retainer tabs 90 degrees toward pipe to lock wrap strip layers in position.

C. Fill, Void or Cavity Materials* — Caulk or Sealant — Generous application of caulk to be applied around the perimeter of the steel collar at its interface with the gypsum wallboard ceiling and around the perimeter of the pipe at its interface with the wrap strip layers. Caulk also applied around perimeter of pipe to fill annular space to max extent possible, flush with top surface of floor.

3M COMPANY — CP25 WB+, IC 15WB+ caulk, FireDam 150+ caulk or FB-3000 WT sealant. (Note: CP 25WB+ and FireDam 150+ not suitable for use with CPVC pipes.)

D. Foil Tape (not shown) — Nom 4 in. (102 mm) wide. 3 mil thick aluminum tape wrapped around pipe prior to the installation of the wrap strip (Item 3A). Min of one wrap, flush with the ceiling and proceeding downward. Tape is required only for nom 3-1/2 in. to 4 in. (89 mm to 102 mm) diam ABS pipes and for all ABS pipes.

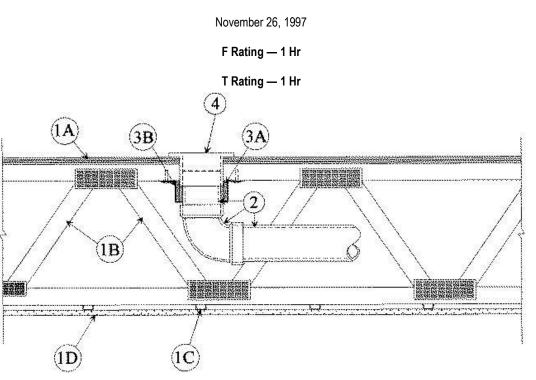
E. Firestop Device* — (Not Shown) — As an alternate to Item A and B when nom 1-1/2 in. (32 mm), 2 in. (51 mm), 3 in. (76 mm), or 4 in. (102 mm) diam nonmetallic pipes are used, a firestop device consisting of a sheetsteel split collar lined with intumescent material and provided with steel clips for attachment may be used in accordance with the table below. Firestop device to be installed on underside of ceiling in accordance with the accompanying installation instructions.

Pipe Type	Nom Pipe Diam, In. (mm)	F Rating Hr	T Rating Hr	Firestop Device
PVC, CPVC, ABS,	1-1/2 (32)	1	1	PPD 1.5 or PPD 150
ccPVC or ccABS (a)				
PVC, CPVC, ABS,	2 (51)	1	1	PPD 2 or PPD 200
ccPVC or ccABS (a)				
PVC, CPVC, ABS,	3 (76)	1	1	PPD 3 or PPD 300
ccPVC or ccABS (a)		# ·		
PVC, CPVC, ABS or ccPVC	4 (102)	1	1	PPD 4 or PPD 400
ccABS (a)	2 (51)	1	1/2	PPD 200
ccABS (a)	3 (76)	1	1/2	PPD 300
ccABS (a)	4 (102)	1	1/2	PPD 400
PVC, CPVC, ABS or ccPVC	1-1/2 (32)	2	1-1/2	PPD 1.5 or PPD 150
ccABS (a)	1-1/2 (32)	2	2	PPD 150
ABS, PVC, ccPVC or CPVC	1-1/2 (32)	2	1-1/2	PPD 150
ABS, PVC, ccPVC or CPVC	2 (51)	2	1-1/2	PPD 200
ABS, PVC, ccPVC or CPVC	3 (76)	2	1-1/2	PPD 300
PVC, ccPVC or CPVC	4 (102)	2	2	PPD 400
ABS	4 (102)	2	1-1/2	PPD 400

(a) — Requires use of aluminum tape detailed in Item 3D

Bearing the UL Classification Mark

Last Updated on 2009-11-20



Design 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

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 holesawed 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.

*Bearing the UL Classification Mark

Last Updated on 1997-11-26

ISSUE HISTORY Date 1 7/21/2017 50% DESIGN DEVELOPMENT SET 2 | 11/10/2017 | 75%-90% REVIEW COORD. SET 3 12/20/2017 100% PERMIT SET REVISION HISTORY Date Description

PERMIT REVIEW STAMP



www. fuglebergkoch.com

MICHAEL E. GOVE FLORIDA LICENSE # AR9411

SUMMER BAY

LAKE COUNTY, FL

L REFERENCE DIRECTOR' - FLOOR PENETRATIONS

A0.35

UL F-C-1009

Approve Issue Date

Design No. F-C-3012 Design No. F-C-8009 Design No. F-C-7002 Design No. F-C-2368 Design No. F-C-2355 January 20, 2015 January 21, 2015 December 08, 2008 December 27, 2007 December 08, 2008 ANSI/UL1479 (ASTM E814) CAN/ULC S115 F Rating — 1 Hr F Rating — 1 Hr F Ratings — 1 and 2 Hr (See Item 1) ANSI/UL1479 (ASTM E814) CAN/ULC S115 F Ratings — 1 and 2 Hr (See Item 1) F Ratings - 1 and 2 Hr (See Item 1 F Rating - 1 Hr F Rating - 1 H T Rating — 3/4 Hr T Rating — 1 Hr T Ratings — 1 and 2 Hr (See Item 1) FT Ratings - 0, 1 and 1-3/4 Hr (See Item 3) T Ratings — 0, 1 and 1-3/4 Hr (See Item 3) T Rating — 1 Hr FT Rating - 1 H FH Ratings - 1 and 2 Hr (See Item 1 L Rating At Ambient — Less Than 1 CFM/sq ft FH Rating - 1 Hr FTH Ratings - 0, 1 and 1-3/4 Hr (See Item 3) FTH Rating - 1 Hr L Rating At 400 F — Less Than 1 CFM/sq ft SECTION A-A 1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be Section A-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, as summarized below: 1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be 1. Floor - Ceiling Assembly — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as Mixture* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 5 in. the UL Fire Resistance Directory. The 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of summarized below: the materials and in the manner specified in Design Nos. L505, L511 or L536 in the UL Fire Resistance B. Wood Joists — Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Directory. The F and T Ratings of the firestop system are equal to the rating of the floor-ceiling assembly. The with ends firestopped. As an alternate to lumber joists, nom 10 in. deep (or deeper) lumber, steel or Mixture* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 4 in. (102 mm). **SECTION A-A** general construction features of the floor-ceiling assembly are summarized below: combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required with B. Wood Joists — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping ends firestopped. trusses or **Structural Wood Members*** with bridging as required and with ends firestopped. **SECTION A-A** Mixture* as specified in the individual Floor-Ceiling Design. Diam of opening hole-sawed in flooring shall be C. Furring Channels — (Not Shown) — Resilient galv steel furring installed perpendicular to wood joists (Item C. Gypsum Board* — Nom 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Wallboard 1B) between wallboard (Item 1D) and wood joists or furring channels as required in the individual Floor-Ceiling max 1/2 in. (13 mm) larger than diam of through penetrant (Item 3). secured to joists as specified in the individual Floor-Ceiling Design. Max diam of ceiling opening is 4 in. (102 B. Wood Joists* — For 1 hr fire-rated floor-ceiling assemblies nom 10 in. deep (or deeper) lumber, steel or 1. Floor-Ceiling Assembly — The 1 or 2 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be D. Gypsum Board* — Nom 4 ft wide by 5/8 in, thick as specified in the individual Floor-Ceiling Design. combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the ends firestopped. For 2 hr fire-rated floor-ceiling assembly, nom 2 by 10 in. (51 by 250 mm) lumber joists Wallboard secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Max 2. Through Penetrants — One nonmetallic pipe to be centered within the firestop system. The annular space UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized diam of ceiling opening is 5 in. System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging with ends firestopped. between pipe and periphery of opening shall be nom 1/4 in. Pipe to be rigidly supported on both sides of floor C. Furring Channels — (Not Shown)— Resilient galv steel furring installed perpendicular to wood joists with the higher pressure on the exposed side. assembly. The following types and sizes of nonmetallic pipes may be used: between first and second layers of gypsum board (Item 1D) in 2 hr fire-rated assembly. 1.1 Chase Wall — (Not Shown, optional) The through penetrant (Item 2) may be routed through a 1 hr fire-A. Polyvinyl Chloride (PVC) Pipe — Nom 3 in. (76mm) Schedule 40 solid core PVC or cellular core PVC A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping D **Gypsum Board*** — Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in (ccPVC) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening for 1 or 2 hr assembly is 2-1/2 Design. First layer of gypsum board nailed to wood joists. Second layer of gypsum board (2 hr fire-rated the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance 1. Floor-Ceiling Assembly — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the B. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 3 in. (76mm) Schedule 40 solid core ABS or cellular in. (64 mm) or 2 in. (51 mm), respectively. assembly) screw-attached to furring channels. Diam of opening shall be max 1/2 in. (13 mm) larger than nom Directory and shall include the following construction features: materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire core ABS (ccABS) for use in closed (process or supply) or vented (drain, waste or vent) piping systems. B. Wood Joists* — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, Resistance Directory, as summarized below: diam of through penetrant (Item 3). trusses or **Structural Wood Members*** with bridging as required and with ends firestopped. 2. Chase Wall — (Optional, Not Shown)—The through-penetrant (Item 3) may be routed through a 1 or 2 hr A. **Studs** — Nom 2 by 6 in. or double nom 2 by 4 in. lumber studs. 3. **Firestop System** — The firestop system shall consist of the following: C. Furring Channels — (Not Shown) — (As required) - Resilient galvanized steel furring installed in accordance fire-rated single, double or staggered wood stud/gypsum board chase wall constructed of the materials and in B. **Sole Plate** — Nom 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted. A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping A. Fill, Void or Cavity Material* - Wrap Strip — One layer of nom 1/4 in. thick by 2 in. wide intumescent wrap with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory. C. **Top Plate** — The double top plate shall consist of two nom by 6 in. or two sets of parallel 2 by 4 in. lumber Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm). the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance strip tightly wrapped around the outer circumference of the pipe with ends butted and held in place with foil D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in the individual B. Wood Joists — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, Directory and which includes the following construction features: plates, tightly butted. Max diam of opening is 5 in. Floor-Ceiling Design. Max diam of opening for 1 or 2 hr assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), tape. Wrap strip slid into the annular space with the bottom edge of the wrap strip extending 1/4 in. below D. **Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in individual Wall trusses or **Structural Wood Members*** with bridging as required and with ends firestopped. A. **Studs** — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs. gypsum board ceiling. 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 and Partition Design. C. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in the individual **RECTORSEAL** — Biostop Wrap Strip The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly. butted. Diam of opening hole-sawed in sole plate to be max 1/2 in. (13 mm) larger than diam of through Floor-Ceiling Design. Max diam of opening in ceiling [when chase wall (Item 2) is not provided] is 3 in. (76 mm). B. Fill, Void or Cavity Material* - Caulk — Min 3/4 in. (19 mm) thickness of fill material applied within 2. Steel Duct — Nom 4 in. diam (or smaller) No. 30 gauge (or heavier) steel duct. One duct to be centered penetrant (Item 3). annulus, flush with top surface of floor. 2. Chase Wall — (Optional) - The through penetrant (Item 3) shall be routed through a fire-rated single, double or within the firestop system. Diam of openings hole-sawed through flooring system and through gypsum 2. Chase Wall — (Optional, Not Shown) — The through penetrant (Item 3) may be routed through a 1 hr fire-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 **RECTORSEAL** — Biostop 500+ staggered wood stud/gypsum wallboard chase wall having a fire rating consistent with that of the floor-ceiling wallboard ceiling to the nom 1/2 in. larger than the outside diam of through-penetrant. Steel duct to be rigidly rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening shall be max 1/2 in. (13 mm) larger assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance than diam of through penetrant (Item 3). supported on both sides of floor-ceiling assembly. *Bearing the UL Classification Mark Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in the individual Directory and shall include the following construction features: Wall or Partition Design. 3. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. thickness of fill material applied within annulus on A. **Studs** — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs. top surface of floor. Min 5/8 in. thickness of fill material applied within annulus on bottom surface of ceiling or A. Studs — Nom 2 by 6 in. (51 by 152 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs. 3 Through Penetrants — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically 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 within the firestop system. The annular space between the pipe or conduit and the periphery of the opening lower top plate of chase wall assembly. Additional fill material to be installed such that a min 1/8 in. crown is B. Sole Plate — Nom 2 by 6 in. (51 by 152 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) lumber plates, butted. Max diam of opening for 1 or 2 hr rated assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively. shall be min 0 in. (0 mm, point contact) to a max 1/2 in. (13 mm). Pipe or conduit to be rigidly supported on formed around the penetrating item on bottom surface of ceiling or lower top plate of chase wall assembly. tightly butted. Max diam of opening shall be 3 in. (76 mm). 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 both sides of floor-ceiling. The following types and sizes of pipes or conduits may be used: C. Top Plate — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) lumber plates or 2 Last Updated on 2007-12-27 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening for 1 or 2 hr rated assembly is 2-1/2 in. SPECIFIED TECHNOLOGIES INC — SpecSeal Series SSS Sealant or SpecSeal LCI Sealant A. Polyvinyl Chloride (PVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular or solid core sets of parallel nom 2 by 4 in. (51 by 102 mm) lumber, tightly butted. Max diam of opening is 3 in. (76 mm). D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems. D. **Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in individual Wall B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 CVPC and Partition Design. and Partition Design. pipe for use in closed (process or supply) piping systems. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 cellular UL or cUL Certification (such as Canada), respectively. 3. **Through Penetrants** — Pipe, cable and tubing to be bundled and rigidly supported on both sides of floor 3. Cables — In 1 hr fire-rated assemblies, aggregate cross-sectional area of cables in opening to be max 45 core or solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. assembly. A nom annular space of min 0 in. (point contact) to max 1/2 in. (13 mm) is required within the percent of the cross-sectional area of the opening (max 2 in. (51 mm) diam bundle). Cables to be rigidly supported D. Rigid Nonmetallic Conduit+ — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 PVC conduit installed in firestop system. The following types and sizes of pipe, cable and tubing are to be used in the firestop system in on both sides of floor assembly. Any combination of the following types and sizes of copper conductors may be accordance with the National Electrical Code, (NFPA No. 70). sufficient quantities to fill the firestop device: Last Updated on 2008-12-08 4. Firestop System — The firestop system shall consist of the following: A. Fill, Void or Cavity Material* — Sealant — Min 3/8 in. (10 mm) thickness of fill material applied within the A. Cable — Type PJT thermoset cable, 5/C No. 18 AWG copper conductor, plastic insulation and jacket. A. RG 59 coaxial cable with single copper conductor, cellular polyethylene cellular foam insulation and polyvinyl B. Polyvinyl Chloride (PVC) Pipe — Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 40 solid core PVC annulus, flush with top surface of floor or sole plate. SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealantpipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems B. Max 8/C No. 22 AWG telephone cable with polyvinyl chloride (PVC) jacketing. C. **Copper Tubing** — Nom 3/4 in. (19 mm) diam (or smaller) Type L (or heavier) copper tubing. B. Fill, Void or Cavity Material* — Wrap Strip — Nom 1/8 in. (3.2 mm) or 3/16 in. (4.8 mm) thick intumescent C. Max 2/C No. 12 AWG cable with polyvinyl chloride (PVC) insulation and jacketing. D. **Copper Tubing** — Nom 1/2 in. (13 mm) diam (or smaller) Type L (or heavier) copper tubing. material faced on both sides with a plastic film, supplied in 1-1/2 in. or 2 in. (51 mm) wide strips or nom 1/4 in. D. Max 3/C with ground No. 2/0 AWG aluminum or copper Type SER cable with polyvinyl chloride (PVC) (6 mm) thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. (38 mm) wide strips. For nom 1-1/2 in. (38 mm) and 2 in. (51 mm) diam pipes/conduits, a min of two layers of wrap strip are 4. Tube Insulation — Plastics+ — Nom 1/2 in. (13 mm) thick acrylonitrile butadiene/polyvinyl chloride E. Max 3/C with ground No. 2/0 AWG Type NM cable with polyvinyl chloride (PVC) insulation. (AB/PVC) flexible foam furnished in the form of tubing. Insulation to be installed only on one through reverant required. For nom 2-1/2 in. (64 mm) or 3 in. (76 mm) diam pipes/conduits, a min of three layers of wrap strip F. Max 3/C No. 12 AWG MC (BX) cable with polyvinyl chloride (PVC) insulation. having a max nom diam of 3/4 in. (19 mm). are required. For nom 3-1/2 in (89 mm) and 4 in. (102 mm) diam pipes/conduits, a min of four layers of wrap G. Max 1 in. diam metal clad TEK cable with PVC jacket. strip are required. The layers of wrap strip are to be eccentrically installed such that the layers do not See Plastics+ (QMFZ2) category in the Recognized Component Directory for names of manufacturers. Any H. Max 4/C with ground No. 300 kcmil (or smaller) aluminum SER cable with PVC insulation and jacket. completely encircle the penetrant. The layers are wrapped around the penetrant flush with bottom surface of Recognized Component tube insulation material meeting the above specifications and having a UL94 I. Through Penetrating Product* - Any cables, Metal-Clad Cable+ or Armored Cable+ currently Classified Flammability Classification of 94-5VA may be used. ceiling or top plate such that the ends butt up to the tangent of the periphery of the opening at the point contact under the Through Penetrating Products category. location. Layers of wrap strip temporarily held in place with tape. See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of **SPECIFIED TECHNOLOGIES INC** — SpecSeal RED Wrap Strip, SpecSeal BLU Wrap Strip or SpecSeal 5. **Firestop System** — The firestop system shall consist of the following: BLU2 Wrap Strip The T Rating is 1 and 1-3/4 hr for 1 and 2 hr rated assemblies, respectively, for cables 3A through 3G. The C. Steel Collar — Collar fabricated from coils of precut 0.016 in. (4 mm) thick (No. 30 MSG) galy sheet steel A. Firestop Device* — Firestop Collar — Firestop collar shall be installed in accordance with the T Rating is 0 hr for cables 3H and 3l. available from wrap strip manufacturer. Collar shall be nom 1-1/2 in. (38 mm) or 2 in. (51 mm) deep (dependent accompanying installation instructions. Collar to be installed and latched around the penetrants and secured to upon width of wrap strip) with min four 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs for attachment to underside of gypsum wallboard ceiling using the anchor hooks provided with the collar. The anchor hooks are 4. Fill. Void or Cavity Material* — Sealant — Min 3/4 in. (19 mm) thickness of fill material applied within the to be secured to the surface of the ceiling with min 3/16 in. diam min 2-1/2 in. long toggle bolts. the ceiling or top plate. Retainer tabs, 3/4 in. (19 mm) wide tapering down to 3/8 in. (10 mm) wide and located annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material also applied opposite the anchor tabs, are folded 90 degree toward through-penetrant surface to maintain the annular space within the annulus, flush with bottom surface of ceiling or lower top plate. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 64-3 90/3"N, CP 64-3 63/2"N, CP 64-3 50/1around the through-penetrant and to retain the wrap strips. Steel collar wrapped around wrap strips and through penetrant with a 1 in. (25 mm) wide overlap along its perimeter joint. Steel collar tightened around wrap HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS611A Sealant or FS-One Sealant or FS-ONE strips and through penetrant using min 1/2 in. (13 mm) wide by 0.028 in. (7 mm) thick stainless steel hose MAX Intumescent Sealant B. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. (19 mm) thickness of fill material applied within the clamp installed at midheight of the collar or using three symmetrically located No. 8 steel sheet metal screws. annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within Collar secured to gypsum board surface with 1/8 in. (3 mm) diam steel hollow wall anchors in conjunction with the annulus, flush with bottom surface of ceiling or lower top plate. Caulk to be forced into interstices of min 1 in. (25 mm) diam steel fender washers installed symmetrically opposite the point contact location. When * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL installed inside chase wall, the collar is fastened to the top plate with nom 3/4 in. (19 mm) long steel wood penetration group to max extent possible at top surface of floor or sole plate and bottom surface of ceiling or or cUL Certification (such as Canada), respectively. screws in conjunction with nom 1 in. (25 mm) diam steel fender washers. The number of fasteners used is lower top plate. dependent upon the nom diam of the through penetrant. Two fasteners, symmetrically located, are required for nom 1-1/2 in (38 mm) and 2 in. (51 mm) diam through penetrants. Three fasteners, symmetrically located, are HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS611A, FS-ONE Sealant or FS-ONE MAX required for nom 2-1/2 in. (64 mm) and 3 in. (76 mm) diam through penetrants. Five fasteners, symmetrically Intumescent Sealant located, are required for nom 3-1/2 in. (89 mm) and 4 in. (102 mm) diam through penetrants. Last Updated on 2015-01-20 +Bearing the UL Recognized Component Mark *Bearing the UL Classification Mark *Bearing the UL Classification Marking +Bearing the UL Listing Mark Last Updated on 2015-01-21 Last Updated on 2008-12-08

A0.36

IL REFERENCE DIRECTORY

- FLOOR PENETRATIONS

PERMIT REVIEW STAMP

ISSUE HISTORY

1 7/21/2017 50% DESIGN DEVELOPMENT SET

2 11/10/2017 75%-90% REVIEW COORD. SET

REVISION HISTORY

FUGLEBERG KOCH

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

MICHAEL E. GOVE

SUMMER BAY

LAKE COUNTY, FL

Description

Date

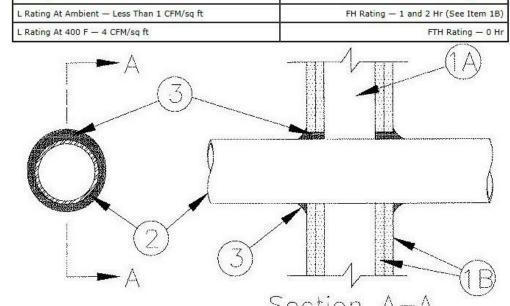
Date

www. fuglebergkoch.com

3 12/20/2017 100% PERMIT SET

PLOTTED: 11/30/ 6:19:1

Approver Issue Date



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs 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. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

B. **Gypsum Board*** — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum wallboard type, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 13-1/4 in. (337 mm). Diam of circular opening cut through gypsum wallboard on each side of wall assembly to be min 1/4 in. (6 mm) to max 1/2 in. (13 mm) larger than outside diam of through penetrant (Item 2).

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrants** — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The annular space between the through-penetrant and the periphery of the opening shall be min 0 in. to max 1/4 in. (6 mm). The following types and sizes of metallic pipes, conduits or tubing may be used: A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe. B. Iron Pipe — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe. C. Conduit — Nom 6 in. (152 mm) diam (or smaller) steel electrical metallic tubing or steel conduit. D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.

3. Fill, Void or Cavity Material* — Sealant — Fill material to be forced into the annulus to maximum extent possible. Additional fill material to be installed such that a min 1/2 in. (13 mm) crown is formed around the penetrating item and lapping 1/4 in. (6 mm) beyond the periphery of the opening.

E. **Copper Pipe** — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant, 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.



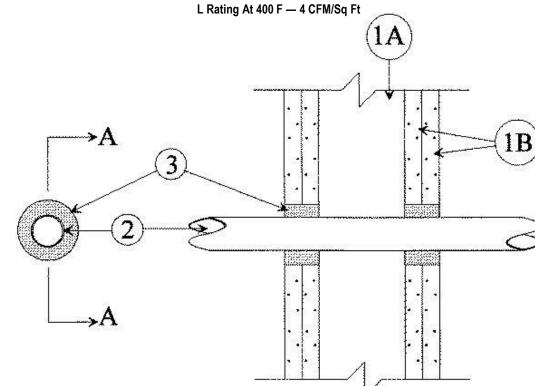
which it is installed.

Last Updated on 1999-11-24

January 26, 2015 F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 1 and 2 Hr (See Item 1)

L Rating At Ambient — Less Than 1 CFM/Sq F



SECTION A-A

1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs 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. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC. B. **Gypsum Board*** — 5/8 in. thick, 4 ft wide with square or tappered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 4-3/8 in. The hourly F and T Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in

2. **Through Penetrants** — One nonmetallic pipe installed within the firestop system. Pipe to be rigidly supported on both sides of floor or wall assembly. The space between pipe and periphery of opening shall be min 3/4 in. to max 1-1/4 in. Pipe to be rigidly supported on both sides of the floor or wall assembly. The following types and sizes of nonmetallic pipes may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) piping system. B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. diam (or smaller) SDR17 CPVC pipe for use in

closed (process or supply) piping systems. 3. Fill, Void or Cavity Materials* — Sealant — Installed to completely fill the annular space between the pipes and gypsum wallboard on both sides of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant

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

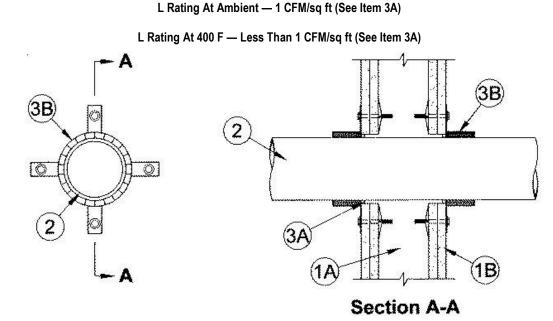
Last Updated on 2003-01-09

Design No. W-L-2029

November 26, 2012

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

T Ratings — 1, 1-1/2 and 2 Hr (See Item 3B)



1. Wall Assembly — The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Designs 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. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm)

wide and spaced max 24 in. (610 mm) OC. B. **Gypsum Board*** — 5/8 in. (16 mm) thick, 4 ft (1.2 m) 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, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5 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 Penetrants** — One nonmetallic pipe or conduit to be centered within the firestop system. A nom annular space of 1/4 in. (6 mm) is required within the firestop system. Pipe or conduit to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used: A. Polyvinyl Chloride (PVC) Pipe — Nom 4 in. (102 mm) 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 system. B. Rigid Nonmetallic Conduit+ — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 80 PVC conduit

installed in accordance with the National Electrical Code (NFPA No. 70). C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 4 in. (102 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process of supply) piping systems.

D. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or foamed core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. E. Fire Retardant Polypropylene (FRPP) Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 40 FRPP pipe for 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:

A. Fill, Void or Cavity Material* — Caulk — (Optional) - Caulk forced into annular space to max extent possible. Caulk shall be installed flush with both surfaces of wall assembly. L Ratings apply only when caulk SPECIFIED TECHNOLOGIES INC — SpecSeal 100, 101, 102, 120, 129 or 105 Sealant, SpecSeal LCI

Sealant, Pensil 300 Sealant or SpecSeal Series SIL300 Sealant B. Firestop Device* — 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.

The F and T Rating of the firestop system is dependent upon the fire rating of the wall and size of the firestop

Fire Rating of Wall Hr	Nom Device Size In.	F Rating Hr	T Rating Hr
1	1-1/2	1	1
2	1-1/2	2	1-1/2
1	2	1	1
2	2	2	1-1/2
			100

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. The T Rating equals the hourly F Rating when SpecSeal LCC Collar is used.

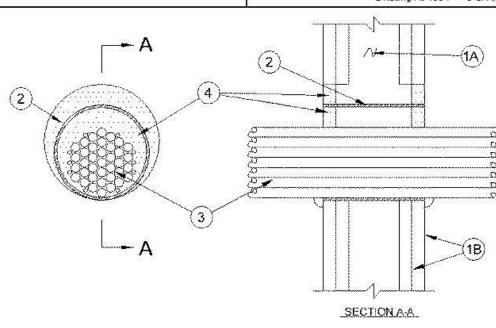
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2012-11-26

Design No. W-L-3065

January 23, 2015

F Rating — 1 and 2 Hr (See Item 1)
FT Rating — 0 and 3/4 Hr (See item 3)
FH Rating — 1 and 2 Hr (See Item 1)
TH Rating — 0 and 3/4 Hr (See item 3)
L Rating At Ambient — 15 CFM/sq ft
L Rating At 400 F — 8 CFM/sq ft



1. Wall Assembly — The 1 or 2 fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction

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

B. Gypsum Board* — Nom 5/8 in. (16 mm) thick gypsum board, 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 Wall and Partition Design in the UL Fire Resistance Directory. Max diam of opening is 5-1/2 in. (138 mm) when sleeve (Item 2) is employed. Max diam of opening is 4 in. (102 mm) when sleeve (Item 2) is not employed.

The F, FH Ratings of the firestop system are equal to the fire rating of the wall assembly.

2. Metallic Sleeve — (Optional) - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or Schedule 5 (or heavier) steel pipe or min 0.016 in. thick (0.41 mm, No. 28 ga) galv steel sleeve installed flush with wall surfaces. The annular space between steel sleeve and periphery of opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25mm). When Schedule 5 steel pipe or EMT is used, sleeve may extend up to 18 in. (457 mm) beyond the wall surfaces. As an option when Schedule 5 steel pipe or EMT is used, sleeve may extend continuously beyond one wall surface. When cable bundle penetrates wall assembly at an angle of 45 degrees, no metallic sleeve is used.

3. Cables — Aggregate cross-sectional area of cable in opening to be max 45 percent of the crosssectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (point contact) to max 1 in. (25 mm). When sleeve is continuous on one side of wall (see Item 2), the cable fill may be 0 to 45% and the max annular space is not limited. Cables to be rigidly supported on both sides of the wall assembly. Cable bundle, using cables described below, may penetrate the wall at an angle not greater than 45 degrees. Any combination of the following types and sizes of copper conductor cables may be used:

A. Max 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket. B. Max 25 pair No. 24 AWG telephone cable with PVC insulation and jacket. B1. Max 4 pr No. 22 AWG Cat 5 or Cat 6 computer cables.

C1. Max RG 6/U coaxial cable with fluorinated ethylene insulation and jacketing.

C. Type RG/U coaxial cable with polyethylene (PE) insulation and PVC jacket having a max outside diameter of ½ in. (13 mm).

D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 5/8 in. (16

E. Through Penetrating Products*— Max three copper conductor No. 8 AWG .Metal-Clad Cable+. AFC CABLE SYSTEMS INC F. Max 3/C (with ground)(or smaller) No. 8 AWG copper conductor cable with PVC insulation and

G. Max 3/4 in. (19 mm) diam copper ground cable with or without a PVC jacket. H. Fire Resistive Cables* - Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other types of

I. Max 4/C with ground 300 kcmil (or smaller) aluminum SER cable with PVC insulation and jacket. J. Through Penetrating Product* - Any cables, Metal-Clad Cable+ or Armored Cable+ currently

Classified under the Through Penetrating Products category. K. Maximum 3/C No. 8 AWG metal-clad cable. L. Maximum 5/8 diam fiber-optic cable with PVC jacket.

For cable bundle penetrating the wall assembly at an angle of 45 degrees, the T, FT, FTH Ratings are 0 hr and 3/4 hr for 1 and 2 hr wall assemblies, respectively. See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of

4. Fill, Void or Cavity Material*— Sealant or Putty — Fill material applied within the annulus, flush with each end of the steel sleeve or wall surface. Fill material installed symmetrically on both sides of the wall. A min 5/8 in. (16 mm) thickness of sealant is required for the 1 or 2 hr F Rating . An additional 1/2 in. (13 mm) diam bead of fill material shall be applied at the interface of sleeve with gypsum board. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP601S, CP606, FS-One Sealants or FS-ONE MAX Intumescent Sealantor or CP618 Putty

5. Packing Material — (Optional, Not Shown) — Mineral wool forming material may be used as a backer for the fill material (Item 4). When used, it shall be firmly packed into annular space within the sleeve as a permanent form and recessed from end of sleeve to accommodate the required thickness of fill

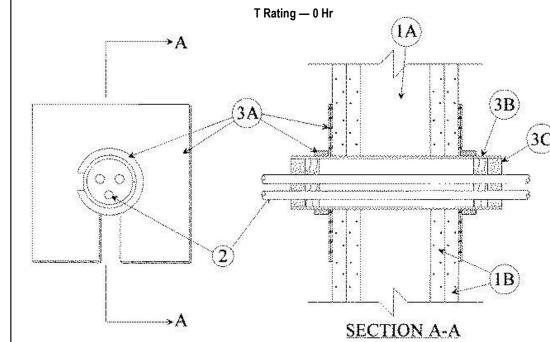
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

+Bearing the UL Listing Mark

Last Updated on 2015-01-23

Design No. W-L-3068

August 24, 2011 F Rating — 2 Hr



1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs 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. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC. B. Gypsum Board* — Two layers of nom 5/8 in, thick gypsum wallboard, as specified in the individual Wall and Partition Design.

2. Cables — Aggregate cross-sectional area of cables in Split Sleeve to be min 8 percent to max 36 percent of the aggregate cross-sectional area of the Split Sleeve. Cables to be rigidly supported on both sides of wall assembly. Any combination of the following types and sizes of copper conductor cable may be used: A. Max 350 kcmil single conductor Type XHHW power cables; cross-linked polyethylene (XLPE) insulation. B. Max 150 pair No. 24 AWG conductor telecommunication cables; polyvinyl chloride (PVC) insulation and

C. Max No. 12 AWG multiconductor Type TC power and control cables; Type XHHW conductors XLPE

insulation with XLPE or PVC jacket. 3. **Firestop System** — The firestop system shall consist of the following:

A. Firestop Device* — Threaded steel sleeve halves incorporating split nuts and split washers sized to fit the specific diam of the opening. Device shall be installed around cables in accordance with the accompanying installation instructions. Device provided in nom 1, 2 and 4 in. sizes. Max diam of opening in wall for 1, 2 and 4 in. size devices are 1-1/4, 2-7/16 and 4-1/2 in., respectively. **UNIQUE FIRE STOP PRODUCTS INC** — Split Sleeve

B. Packing Material — Min 1 in. thickness of min 4.0 pcf mineral wool batt insulation firmly packed into Split Sleeve as a permanent form. Packing material to be recessed from each end of Split Sleeve as required to

accommodate the required thickness of fill material. C. Fill, Void or Cavity Material* — Caulk, Sealant or Putty — Min 1 in. thickness of fill material applied within the Split Sleeve, flush with both ends. **3M COMPANY** — CP 25WB+ Caulk, MPS-2+ Putty or FB-3000 WT Sealant

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

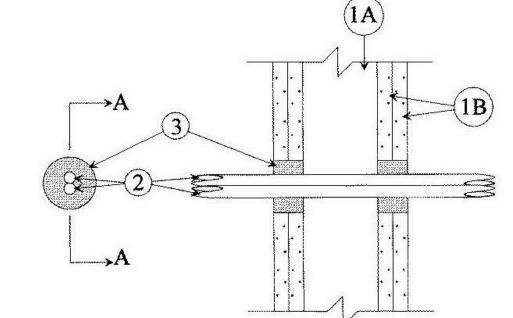
UL or cUL Certification (such as Canada), respectively.

Last Updated on 2011-08-24



Design No. W-L-3071

ANSI/UL1479 (ASTM E814)	CAN/ULC S115			
F Rating — 1 and 2 Hr (See Item 1)	F Rating — 1 and 2 Hr (See Item 1)			
T Rating — 1/4 and 3/4 Hr (See Item 1)	FT Rating — 1/4 and 3/4 Hr (See Item 1)			
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 1 and 2 Hr (See Item 1)			
L Rating At 400 F — 4 CFM/sq ft	FTH Rating — 1/4 and 3/4 Hr (See Item 1			
	L Rating At Ambient — Less Than 1 CFM/sq ft			
	L Rating At 400 F — 4 CFM/sq ft			



SECTION A-A

1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs 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. (51 by 102 mm) lumber spaced 16 in. (405 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. B. **Gypsum Board*** — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tappered edges. The gypsum

wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 3 in. (76 mm). The hourly F, FH Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T, FT, FTH Rating of the firestop system is 1/4 and 3/4 hr for 1 and 2 hr rated wall assemblies, respectively.

2. Cables — Max two 3/C with ground No. 2/0 AWG aluminum or copper Type SER cable with polyvinyl chloride (PVC) insulation. Cable to be rigidly supported on both sides of wall assembly. The annular space between the cables and the periphery of opening shall be min 1/2 in. to max 1-1/2 in. (13 to 38 mm).

3. Fill, Void or Cavity Material* — Sealant — Installed to completely fill the annular space between the cables and gypsum wallboard on both sides of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-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 2015-01-23

F Ratings — 1 and 2 Hr (See Item 1B) T Ratings — 1/2, 1 and 2 Hr (See Item 3) L Rating At Ambient — 8 CFM/sq ft L Rating At 400 F — Less Than 1 CFM/sq ft

Design No. W-L-3117

November 20, 1999

SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs 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. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC. B. **Gypsum Board*** — 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard 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 2-1/2 in.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is 2. Through-Penetrating Product* — Max four copper conductor No. 2/0 AWG (or smaller) aluminum or steel Metal-Clad Cable+ or max four copper conductor No. 1 AWG (or smaller) aluminum Armored Cable# . Max one cable to be installed either concentrically or eccentricity within the firestop system. The annular space within the firestop system shall be a min 0 in. (point contact) to a max 3/8 in. Through-penetrating product to be

rigidly supported on both sides of wall assembly. SOUTHWIRE CO 2A. Cables — As an alternate to Item 2, one cable to be installed either concentrically or eccentricity within the firestop system. The annular space within the firestop system shall be a min 0 in. (point contact) to a max 1/4 in. Cable to be rigidly supported on both sides of wall assembly. The following types and sizes of cables may

A. Max 50 pair No. 24 AWG (or smaller) copper conductor telephone cables with polyvinyl chloride (PVC) insulation and jacket materials B. Max 3/C (with ground) — No. 10 AWG (or smaller) PVC insulated and jacketed nonmetallic sheathed

(Romex) cable. C. Max 3/C (with ground) No. 2/0 AWG aluminum conductor service entrance cable with PVC insulation and jacket materials.

3. Fill, Void or Cavity Material* — Sealant or Putty — Fill material applied within the annulus, flush with both surfaces of wall. Additional fill material to be installed such that a crown is formed around the penetrating item. The T Rating of the firestop system is dependent upon the hourly rating of the wall, type of through penetrant and type and thickness of fill material as tabulated below:

Rating of Wall Hr	Type of Through Penetrant	Type of Fill Mtl	Thkns of Fill Mtl In.	Thkns of Fill Mtl Crown In.	T Rating Hr		
1	Telephone Cable	Sealant	5/8	1/4	1		
2	Telephone Cable Sealant 5/8		5/8	1/4	2		
1	Telephone Cable		Telephone Cable Putty 5		5/8	3/8	1
2	Telephone Cable	Putty	3/4	1/4	2		
1	Romex Cable	Sealant	5/8	3/8	1		
2	Romex Cable	Sealant	3/4	1/4	2		
1	Romex Cable	Putty	5/8	3/8	1		
2	Romex Cable	Putty	3/4	1/4	2		
2	Service Cable	Sealant	5/8	1/4	1/2		
1	Service Cable	Sealant	5/8	1/4	1/2		
2	Metal Clad or Armored Cable	Sealant	5/8	1/4	1/2		
1	Metal Clad or Armored Cable	Sealant	5/8	1/4	1/2		

SPECIFIED TECHNOLOGIES INC — SpecSeal 100, 101, 102 or 105 Sealant or SpecSeal Putty

*Bearing the UL Classification Marking

+Bearing the UL Listing Mark

Last Updated on 1999-11-20

PERMIT REVIEW STAMP ISSUE HISTORY 1 7/21/2017 50% DESIGN DEVELOPMENT SET 2 11/10/2017 75%-90% REVIEW COORD. SET

REVISION HISTORY

Description

3 | 12/20/2017 | 100% PERMIT SET

Date

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

FUGLEBERG KOCH

MICHAEL E. GOVE

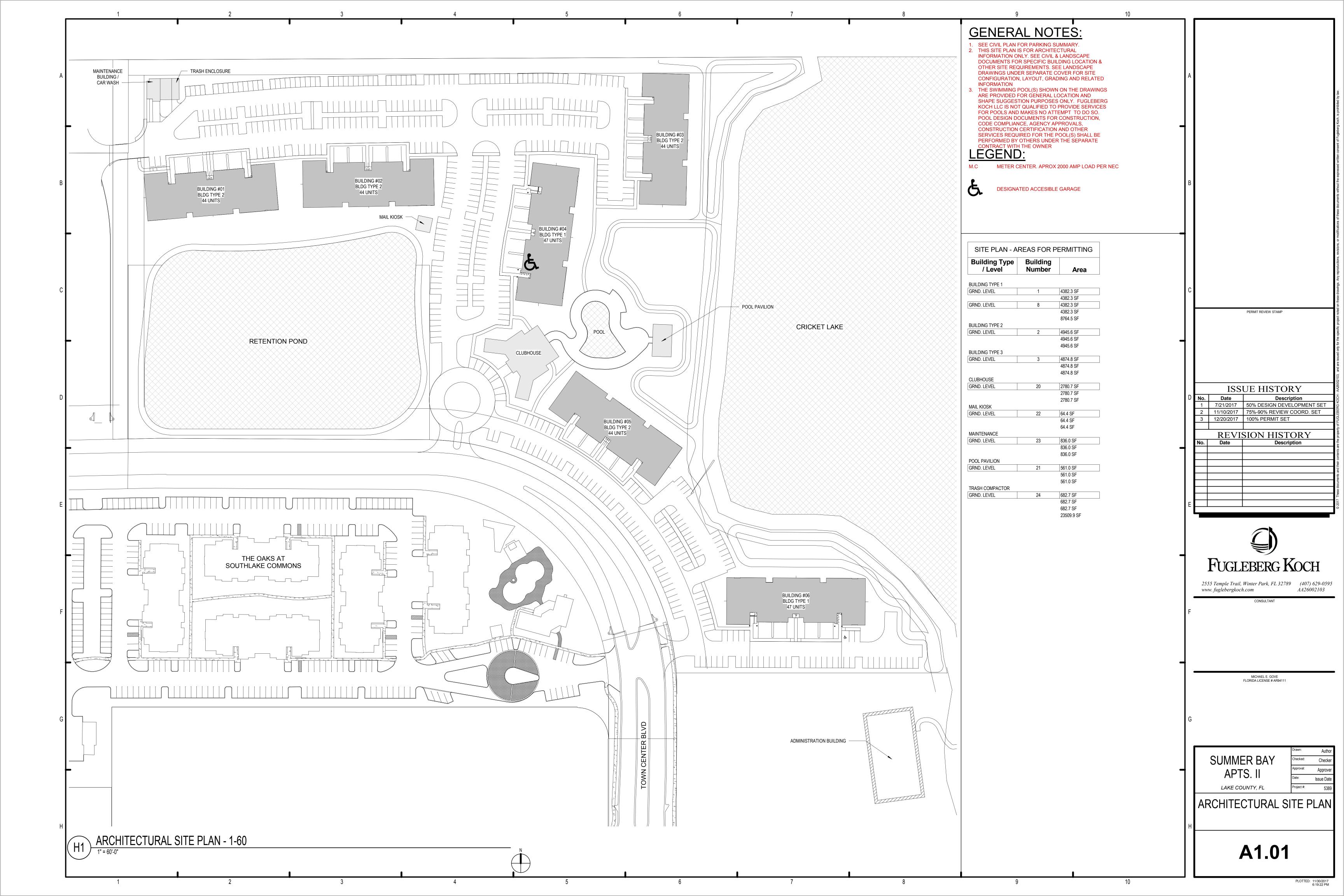
SUMMER BAY

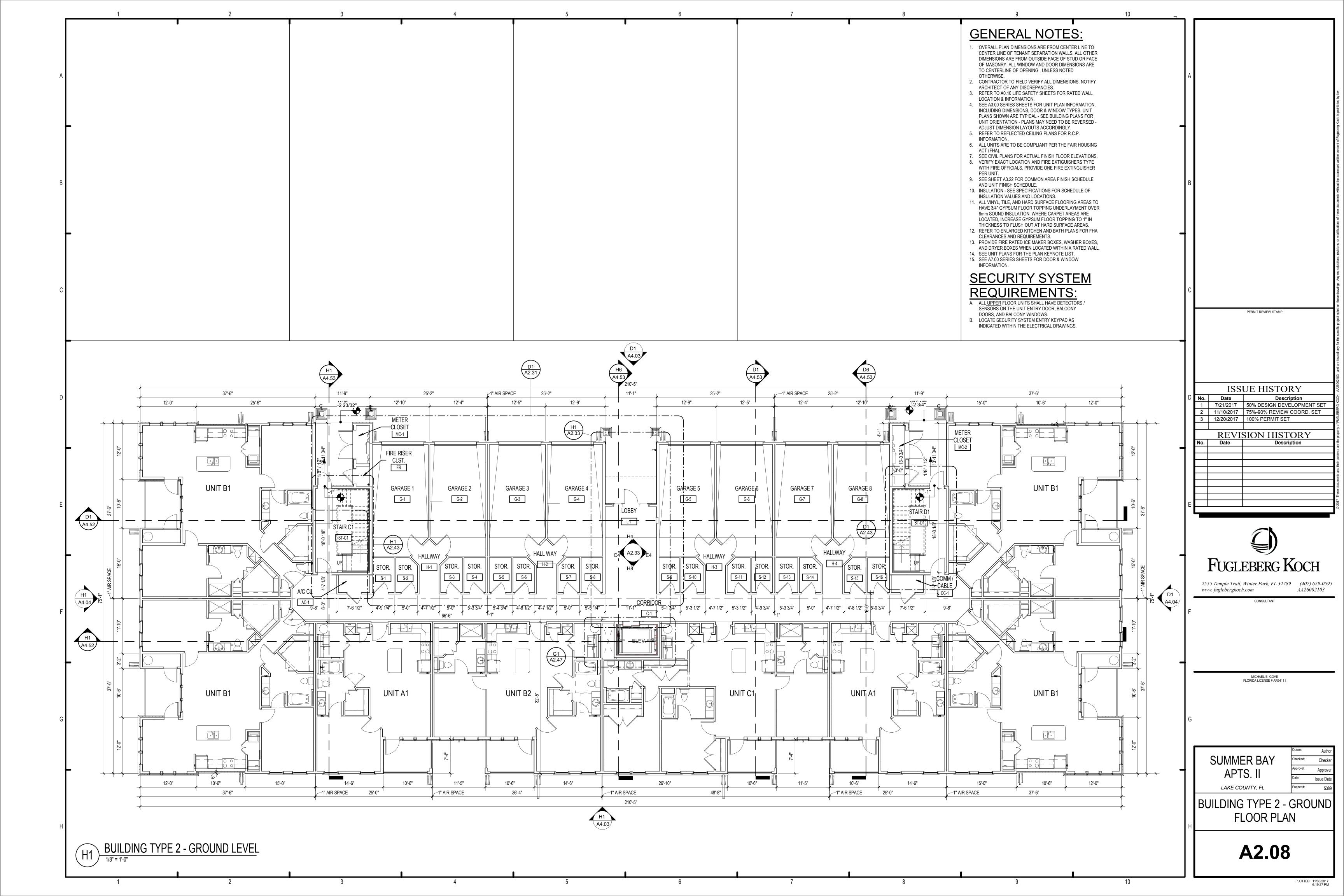
LAKE COUNTY, FL

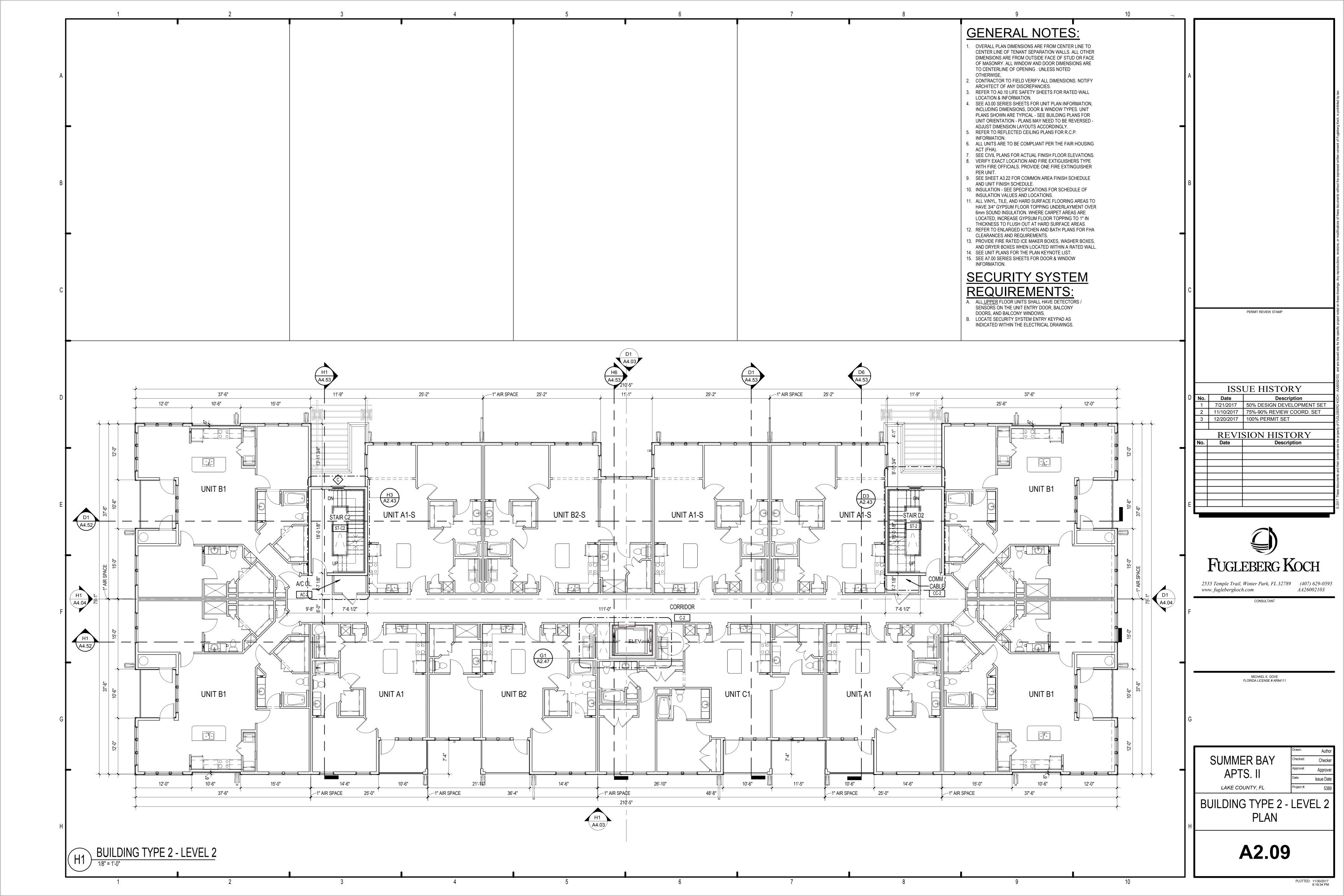
IL REFERENCE DIRECTOR' - WALL PENETRATIONS

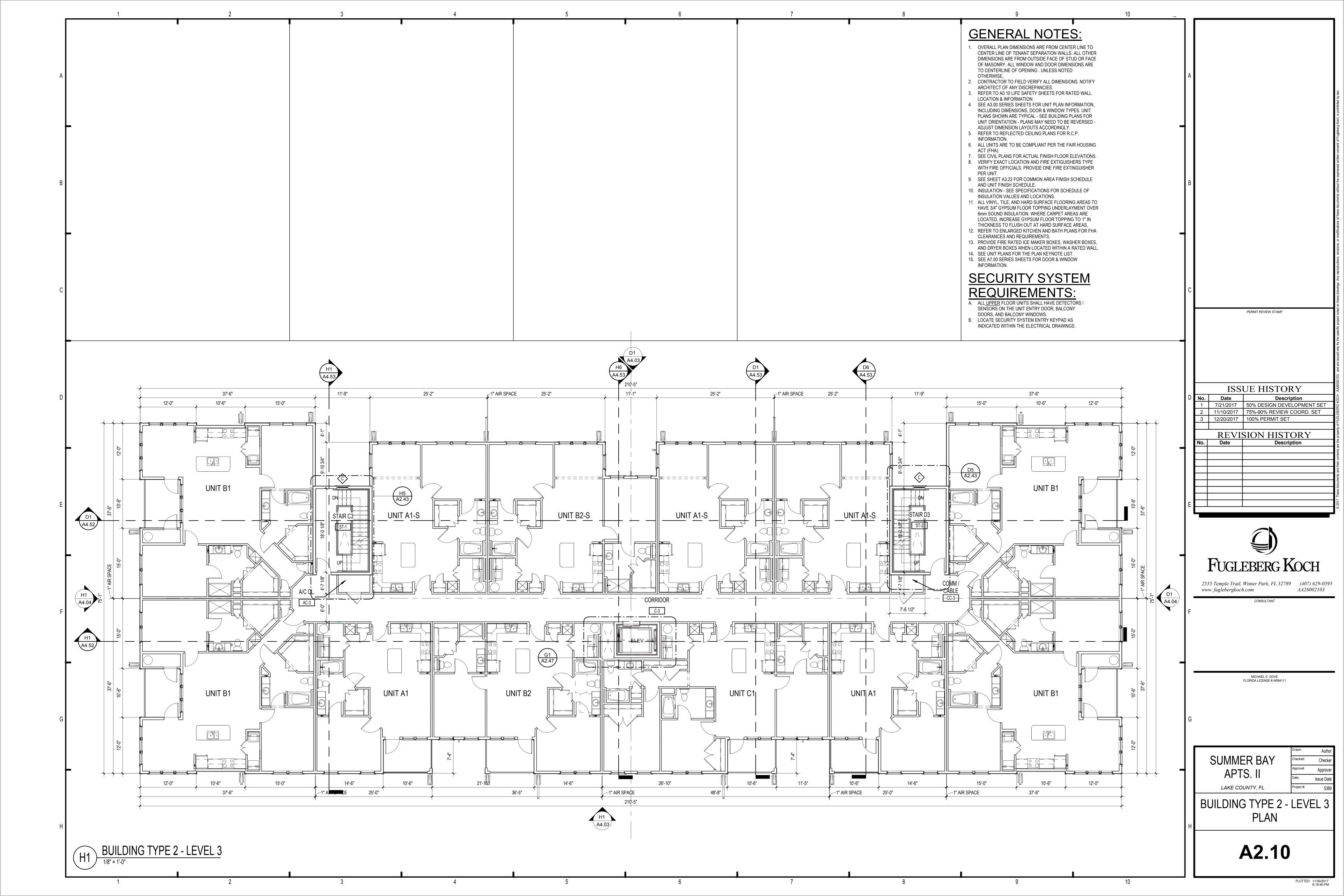
A0.37

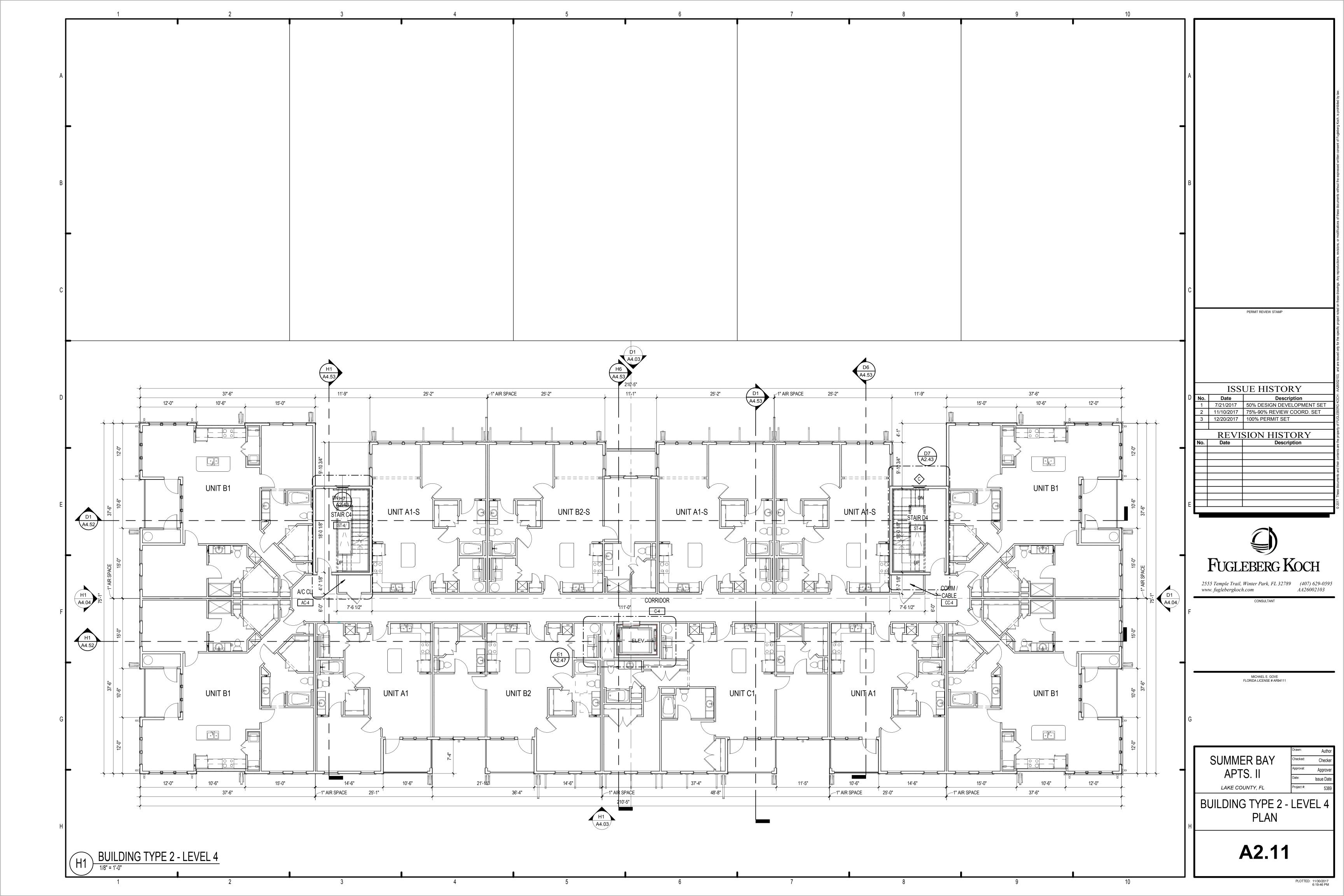
Approve

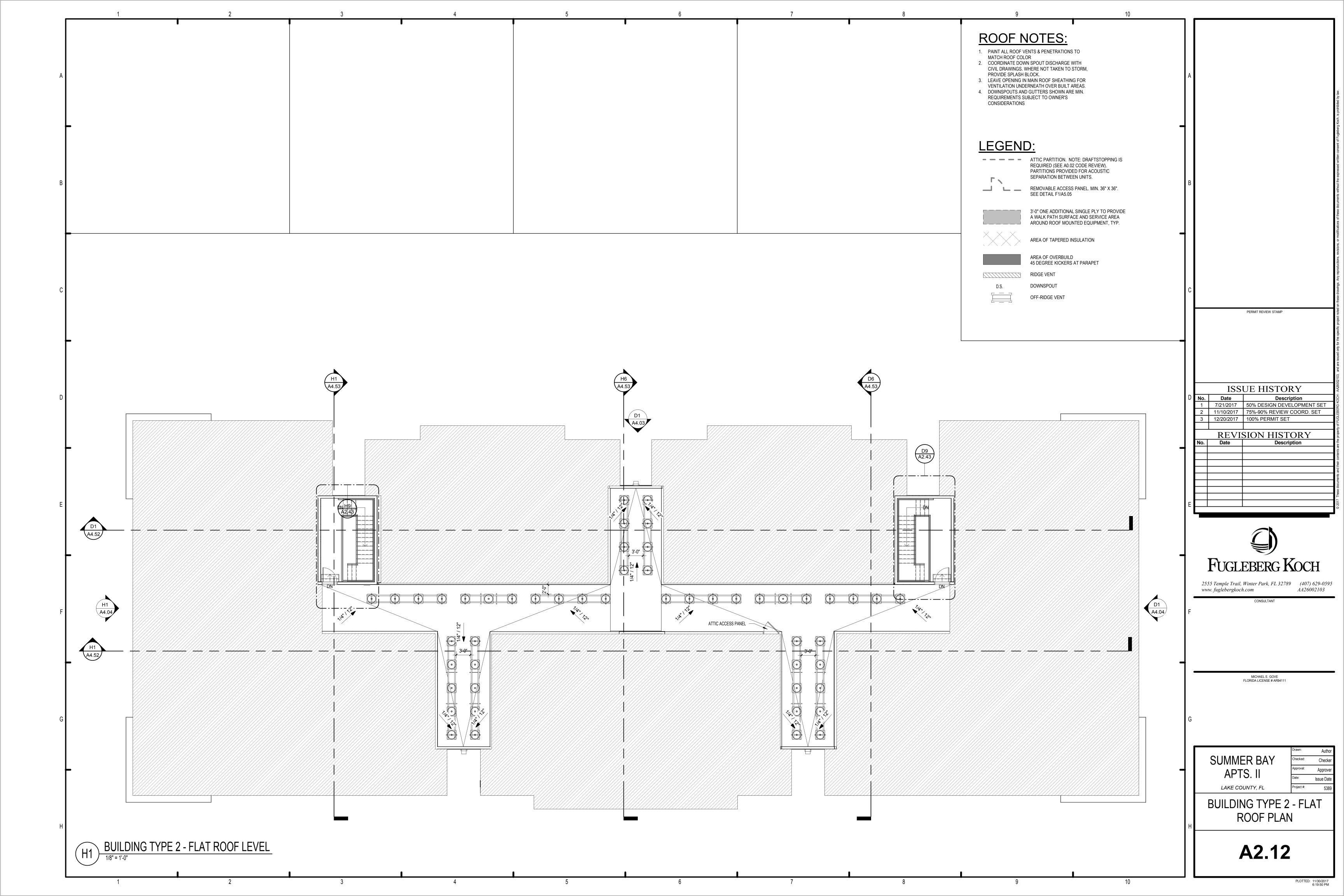


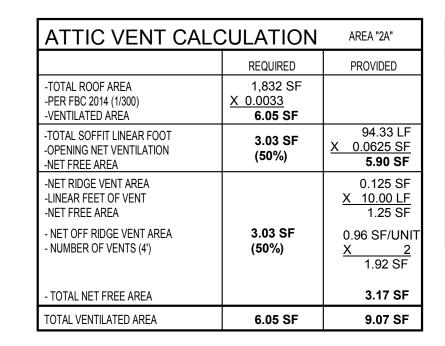












ATTIC VENT CALCULATION

-TOTAL ROOF AREA

-PER FBC 2014 (1/300)

-TOTAL SOFFIT LINEAR FOOT

-OPENING NET VENTILATION

-NET RIDGE VENT AREA

TOTAL VENTILATED AREA

-LINEAR FEET OF VENT

-VENTILATED AREA

-NET FREE AREA

-NET FREE AREA

REQUIRED

X 0.0033 8.23 SF

4.12 SF

4.12 SF

8.23 SF

(50%)

(50%)

2,493 SF

AREA "2E"

PROVIDED

0.0625 SF

0.125 SF

X 36.00 LF 4.50 SF

11.79 SF

7.29 SF

-TOTAL ROOF AREA

-PER FBC 2014 (1/300)

-TOTAL SOFFIT LINEAR FOOT

-OPENING NET VENTILATION

-NET RIDGE VENT AREA

TOTAL VENTILATED AREA

-LINEAR FEET OF VENT

-VENTILATED AREA

-NET FREE AREA

-NET FREE AREA

ATTIC VENT CALC	AREA "2B"	
	REQUIRED	PROVIDED
-TOTAL ROOF AREA -PER FBC 2014 (1/300) -VENTILATED AREA	1,740 SF <u>X 0.0033</u> 5.74 SF	
-TOTAL SOFFIT LINEAR FOOT -OPENING NET VENTILATION -NET FREE AREA	2.87 SF (50%)	72.25 LF X 0.0625 SF 4.52 SF
-NET RIDGE VENT AREA -LINEAR FEET OF VENT -NET FREE AREA	2.87 SF (50%)	0.125 SF X 32.00 LF 4.00 SF
TOTAL VENTILATED AREA	5.74 SF	8.52 SF

ATTIC VENT CALCULATION AREA "2F"

REQUIRED

2,415 SF

3.99 SF

3.99 SF

(50%)

7.97 SF

X 0.0033 7.97 SF

PROVIDED

0.0625 SF

5.22 SF

0.125 SF

4.50 SF

9.72 SF

36.00 LF

-TOTAL ROOF AREA

-PER FBC 2014 (1/300)

-TOTAL SOFFIT LINEAR FOOT

-OPENING NET VENTILATION

-NET RIDGE VENT AREA

TOTAL VENTILATED AREA

-LINEAR FEET OF VENT

-VENTILATED AREA

-NET FREE AREA

-NET FREE AREA

		_			
ATTIC VENT CALCULATION AREA "2C"					
REQUIRED	PROVIDED				
1,748 SF X 0.0033 5.77 SF		-	-TO -PE -VE		
2.89 SF (50%)	72.25 LF X 0.0625 SF 4.52 SF	- -	-TO -OP -NE		
2.89 SF (50%)	0.125 SF X 32.00 LF 4.00 SF	-	-NE -LIN -NE		
5.96 SF	8.52 SF		- NE		
0.00 01	0.02 01		- N		
	1,748 SF X 0.0033 5.77 SF 2.89 SF (50%) 2.89 SF (50%)	REQUIRED PROVIDED 1,748 SF X 0.0033 5.77 SF 2.89 SF (50%) 2.89 SF (50%) 2.89 SF (50%) 0.125 SF X 32.00 LF 4.00 SF	REQUIRED PROVIDED 1,748 SF X 0.0033 5.77 SF 2.89 SF (50%) 2.89 SF (50%) 2.89 SF (50%) 2.89 SF (50%) 3.125 SF X 32.00 LF 4.00 SF 5.96 SF 8.52 SF		

ATTIC VENT CALCULATION AREA "2G"

REQUIRED

X 0.0033 8.23 SF

4.12 SF

4.12 SF

8.23 SF

2,493 SF

PROVIDED

0.0625 SF

0.125 SF

X 36.00 LF 4.50 SF

11.79 SF

7.**29 SF**

ATTIC VENT CALCULATION AREA "2D"				VENTILATION SCHEDULE			
	REQUIRED	PROVIDED		ROOF VENT	MF'GR & MODEL#	FREE AREA	
-TOTAL ROOF AREA -PER FBC 2014 (1/300) -VENTILATED AREA	1,832 SF <u>X 0.0033</u> 6.05 SF			RIDGE VENT	CRV100 ALUMINUM CONTINUOUS UNFILTERED RIDGE VENT OR SIMILAR	18 NET SQ.IN / LIN. FT= 0.125 SQ. FT. / LIN. FT.	
-TOTAL SOFFIT LINEAR FOOT -OPENING NET VENTILATION -NET FREE AREA	3.03 SF (50%)			SOFFIT VENT AT EAVE	HARDIE VENTED SOFFIT	5 NET SQ.IN. / LIN. FT.= 0.0347 SQ. FT. / LIN. FT.	
-NET RIDGE VENT AREA -LINEAR FEET OF VENT -NET FREE AREA		0.125 SF X 10.00 LF 1.25 SF		SOFFIT VENT AT EAVE	TAMLYN VENTED SOFFIT 2" EZ VENT	9 NET SQ.IN / LIN. FT.= 0.0625 SQ. FT. / LIN. FT.	
- NET OFF RIDGE VENT AREA - NUMBER OF VENTS (4')	3.03 SF (50%)						
- TOTAL NET FREE AREA		3.17 SF	•				
TOTAL VENTILATED AREA	6.05 SF	9.07 SF					

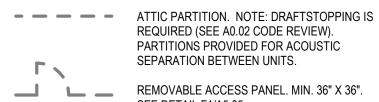
ROOF	NO	ΓES:

- PAINT ALL ROOF VENTS & PENETRATIONS TO MATCH ROOF COLOR
- 2. COORDINATE DOWN SPOUT DISCHARGE WITH CIVIL DRAWINGS. WHERE NOT TAKEN TO STORM,
- PROVIDE SPLASH BLOCK. LEAVE OPENING IN MAIN ROOF SHEATHING FOR VENTILATION UNDERNEATH OVER BUILT AREAS. DOWNSPOUTS AND GUTTERS SHOWN ARE MIN.

REQUIREMENTS SUBJECT TO OWNER'S

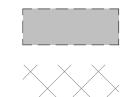
LEGEND:

CONSIDERATIONS





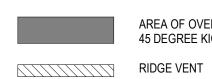
3'-0" ONE ADDITIONAL SINGLE PLY TO PROVIDE



A WALK PATH SURFACE AND SERVICE AREA AROUND ROOF MOUNTED EQUIPMENT, TYP.



AREA OF TAPERED INSULATION

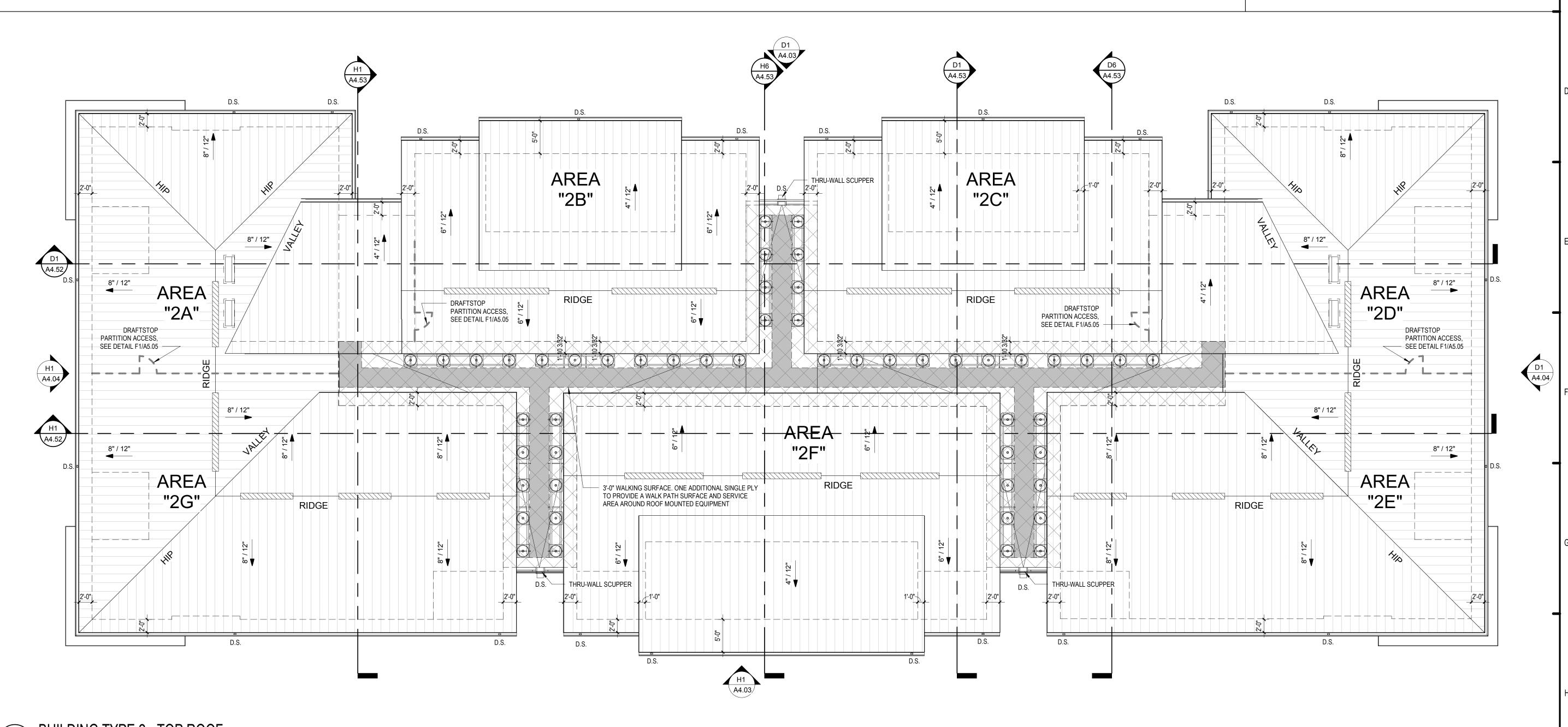


AREA OF OVERBUILD 45 DEGREE KICKERS AT PARAPET



DOWNSPOUT

OFF-RIDGE VENT



SUMMER BAY

APTS. II LAKE COUNTY, FL

BUILDING TYPE 2 - TOP **ROOF PLAN**

PERMIT REVIEW STAMP

ISSUE HISTORY

1 7/21/2017 50% DESIGN DEVELOPMENT SET 2 11/10/2017 75%-90% REVIEW COORD. SET

REVISION HISTORY

FUGLEBERG KOCH

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

 www. fuglebergkoch.com
 AA26002103

MICHAEL E. GOVE FLORIDA LICENSE # AR94111

Description

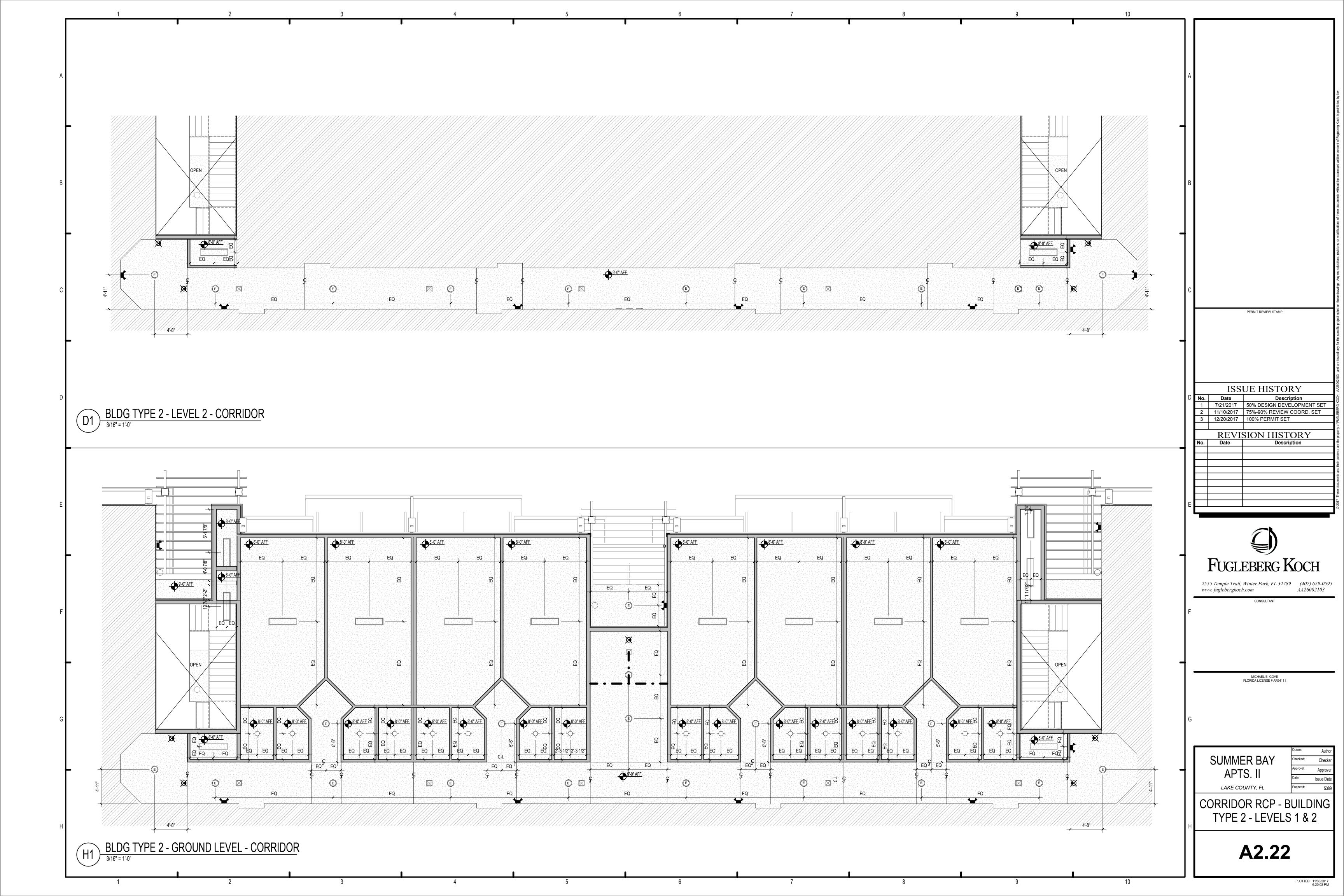
3 12/20/2017 100% PERMIT SET

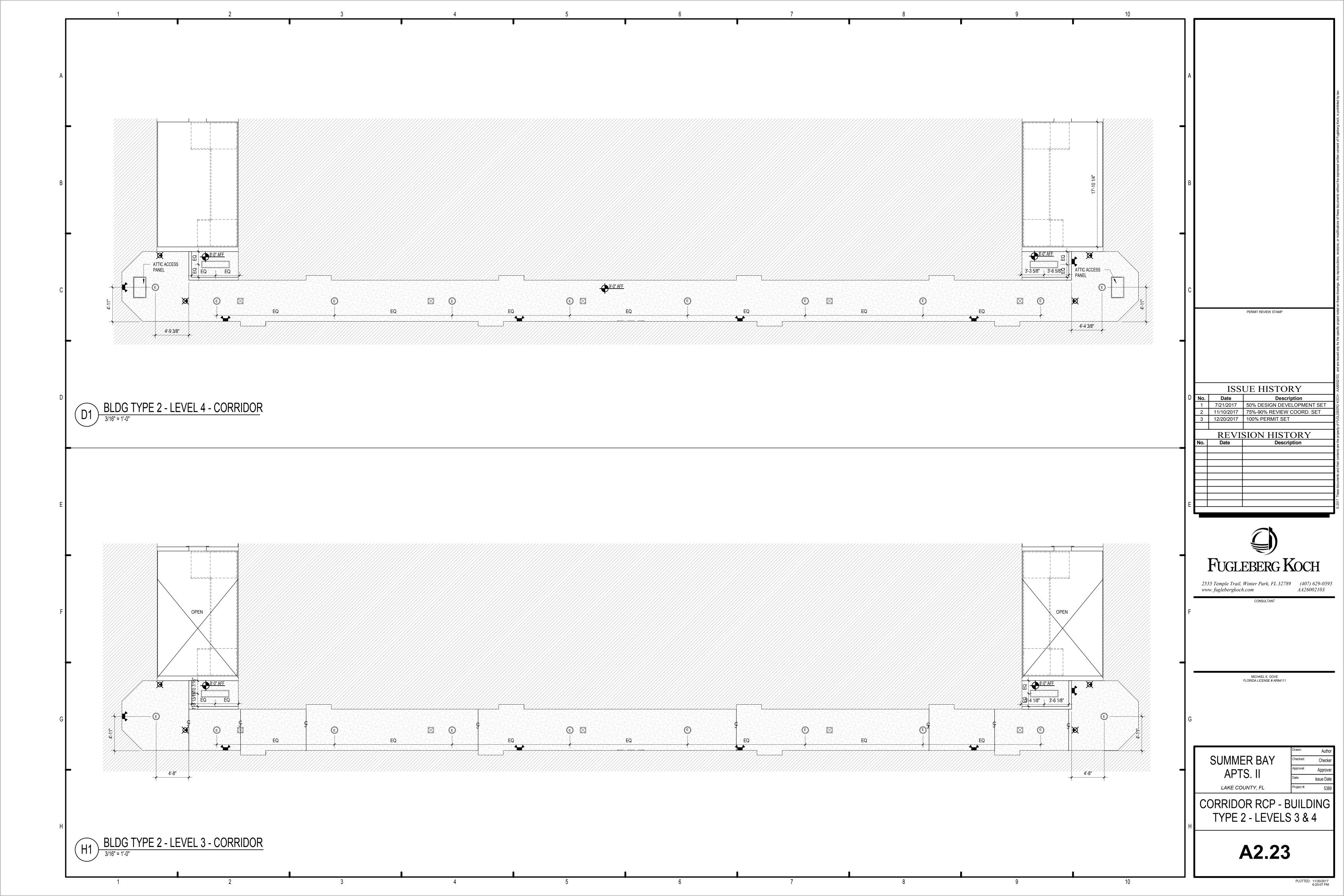
No. Date

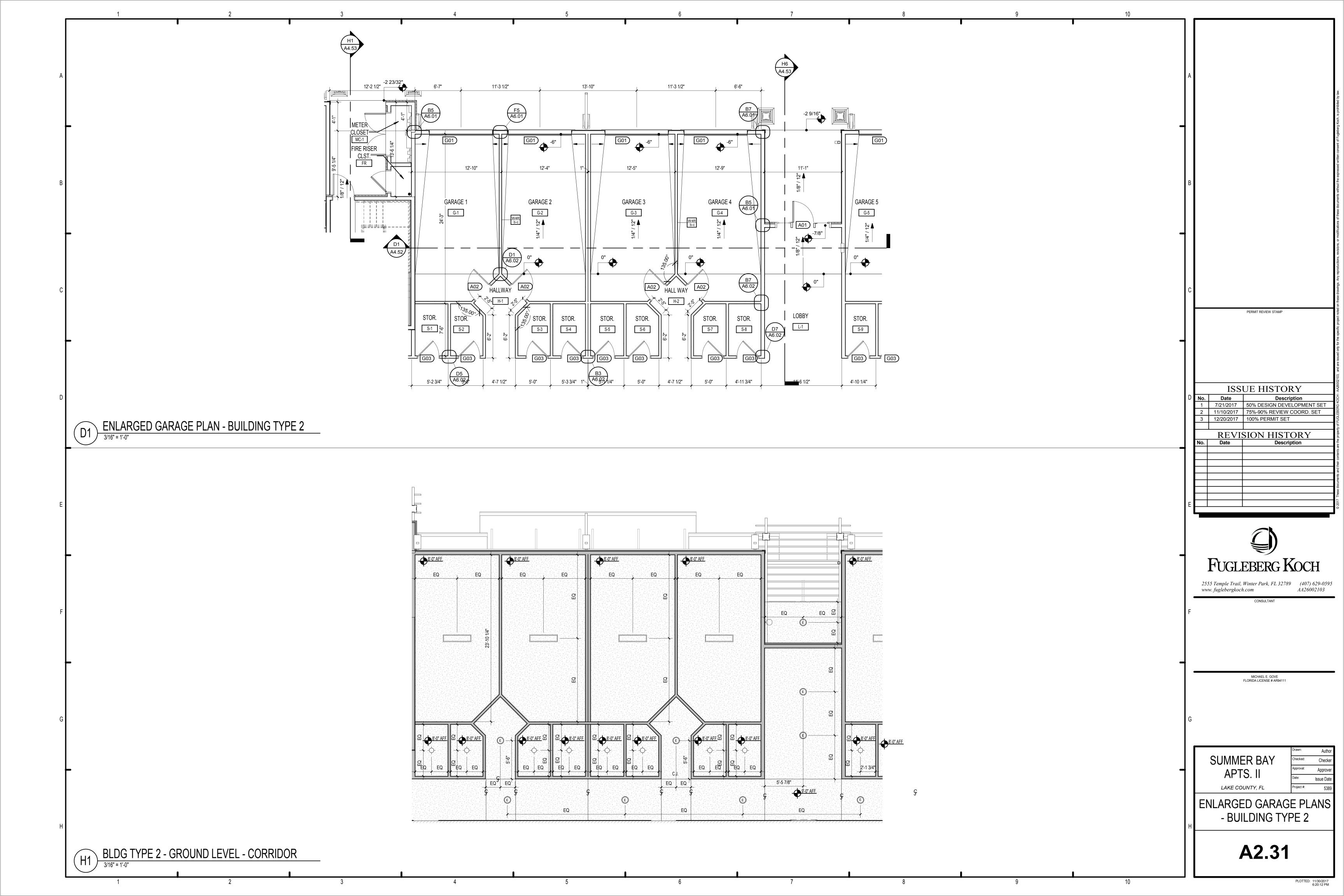
Date

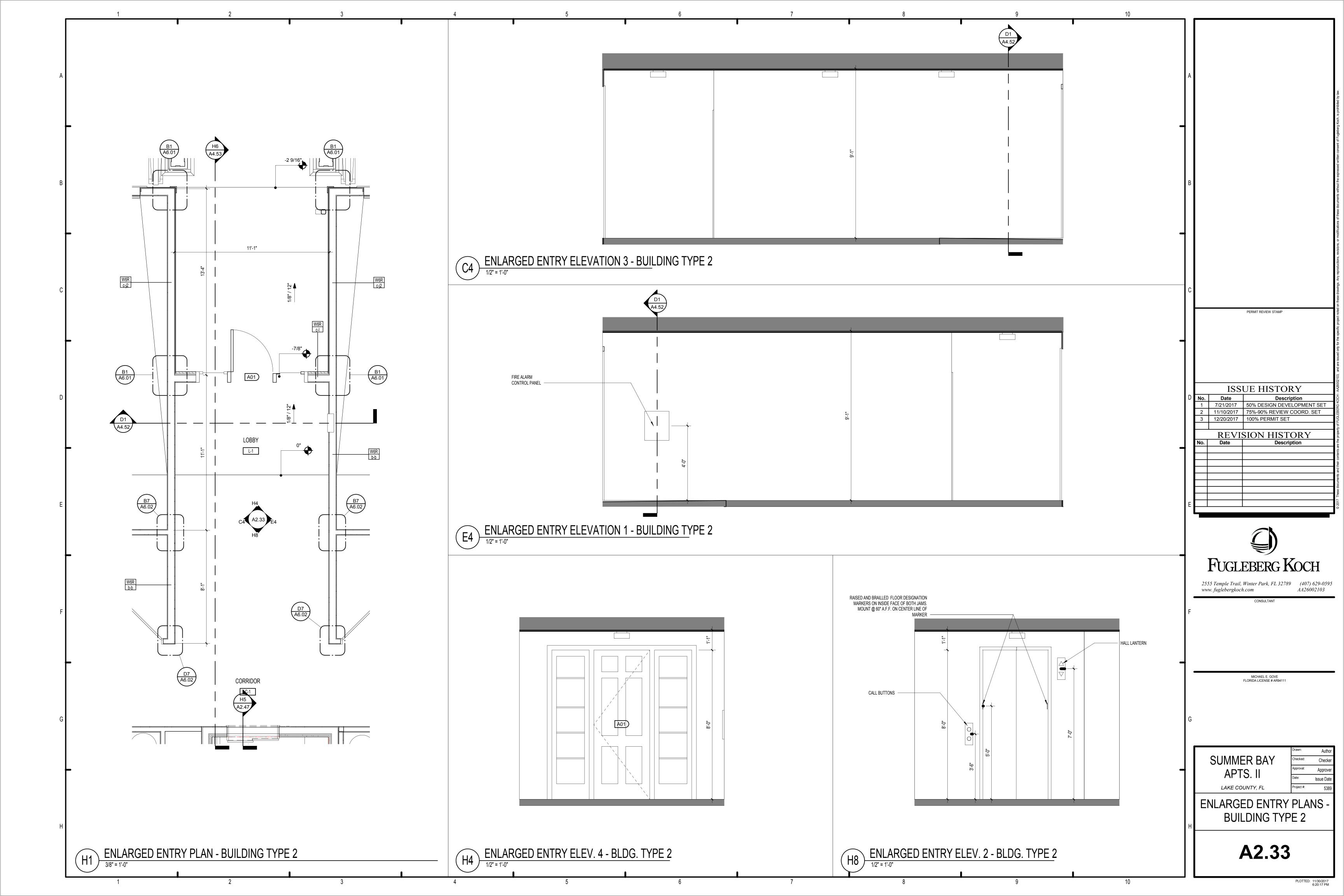
A2.13

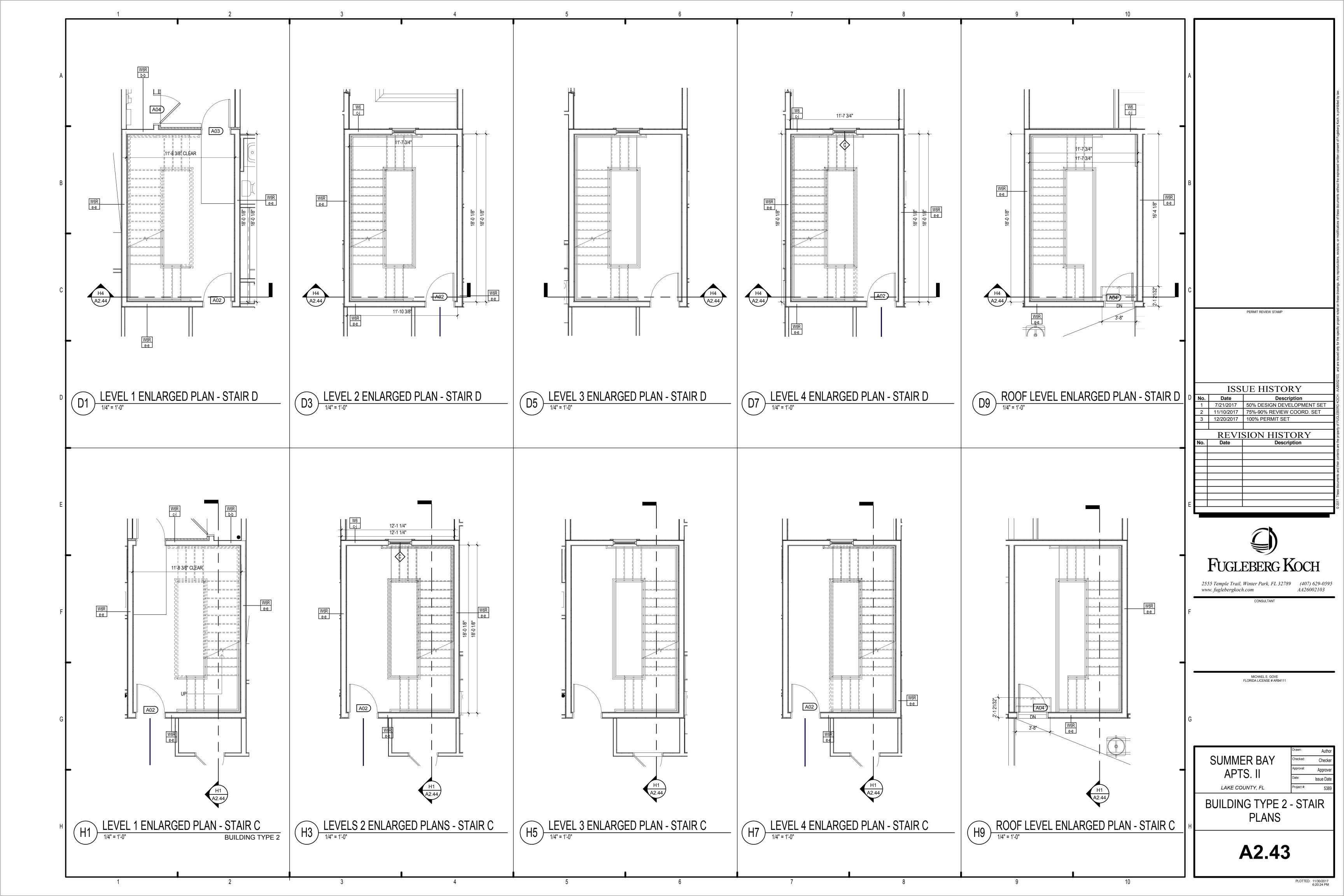
BUILDING TYPE 2 - TOP ROOF

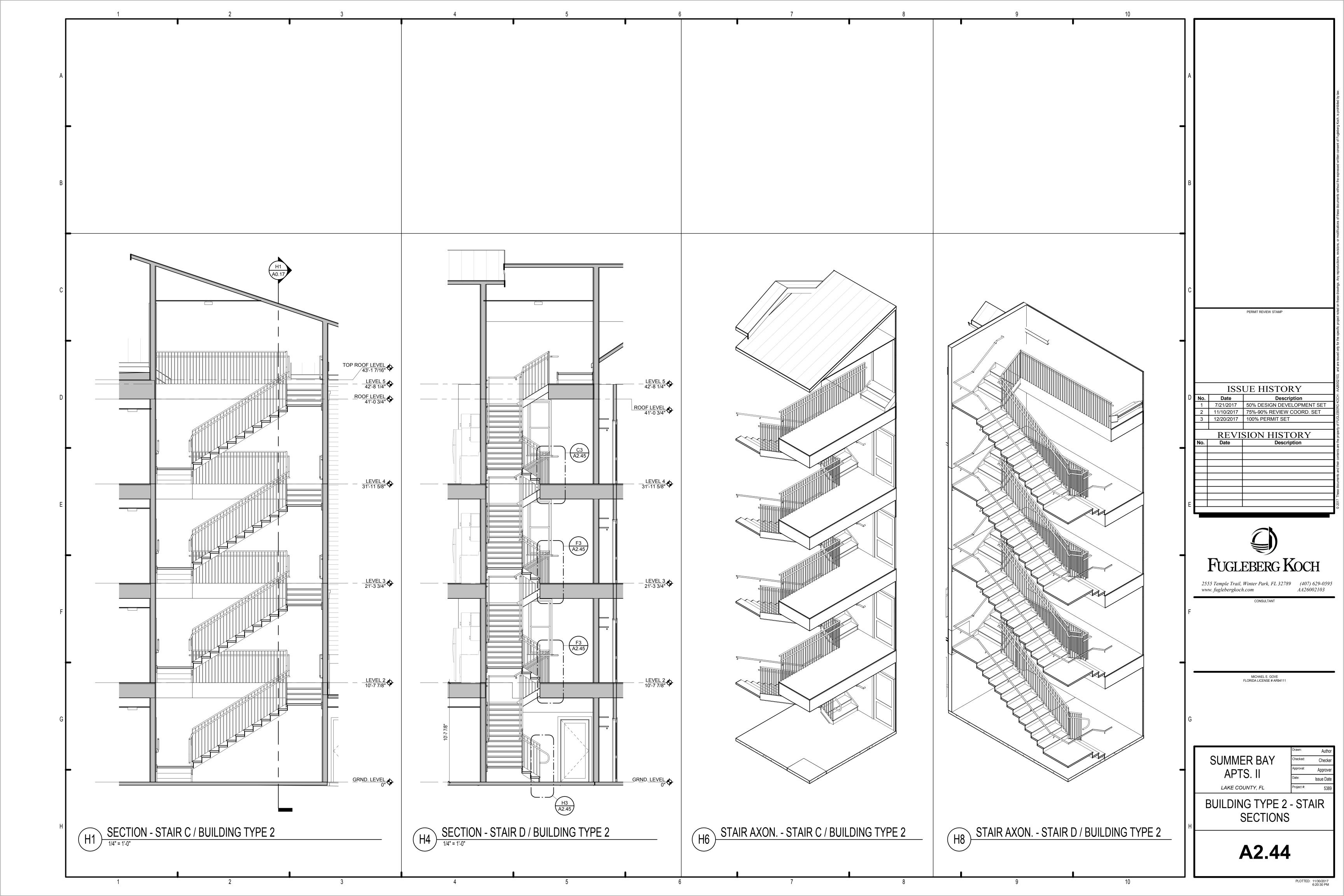


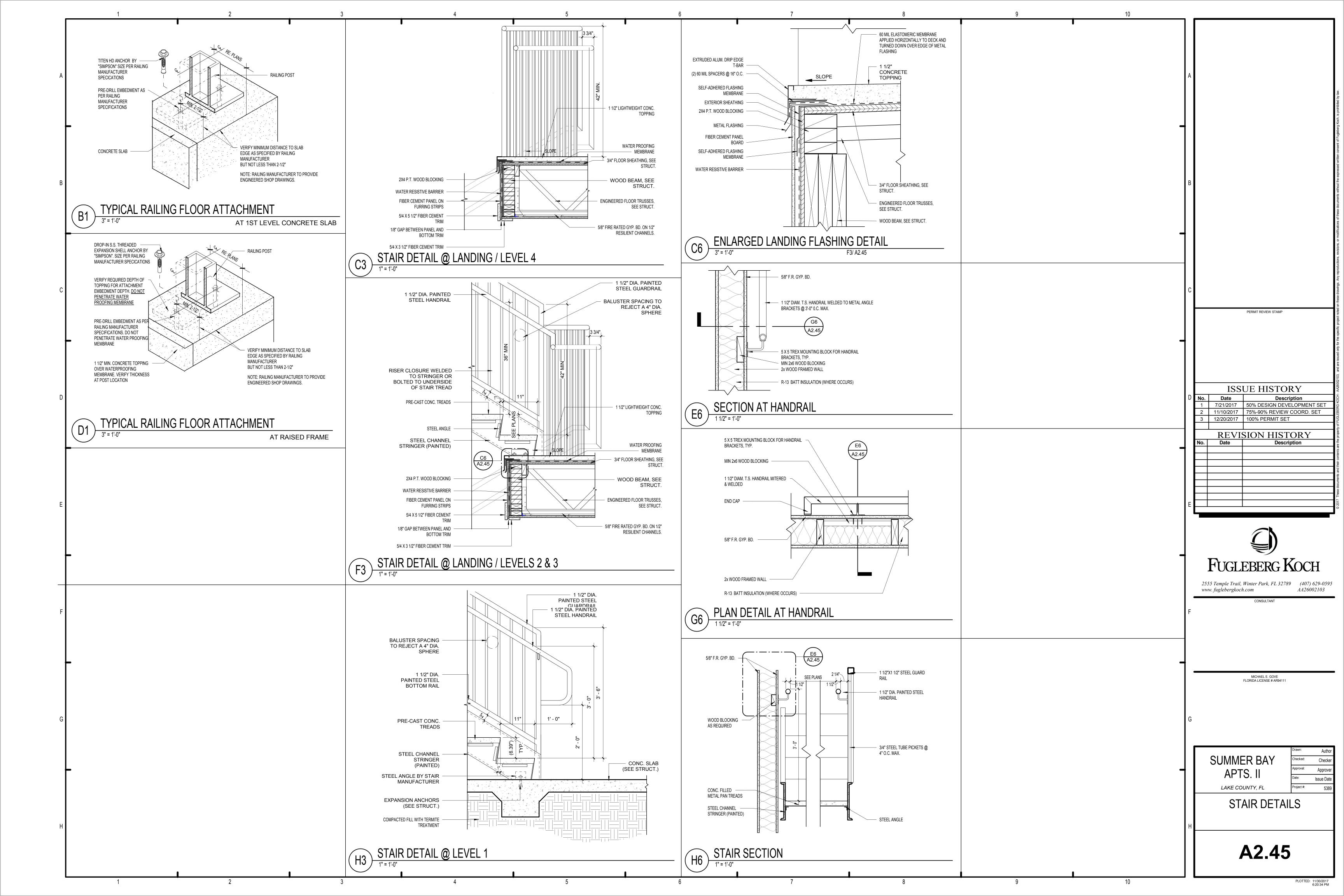


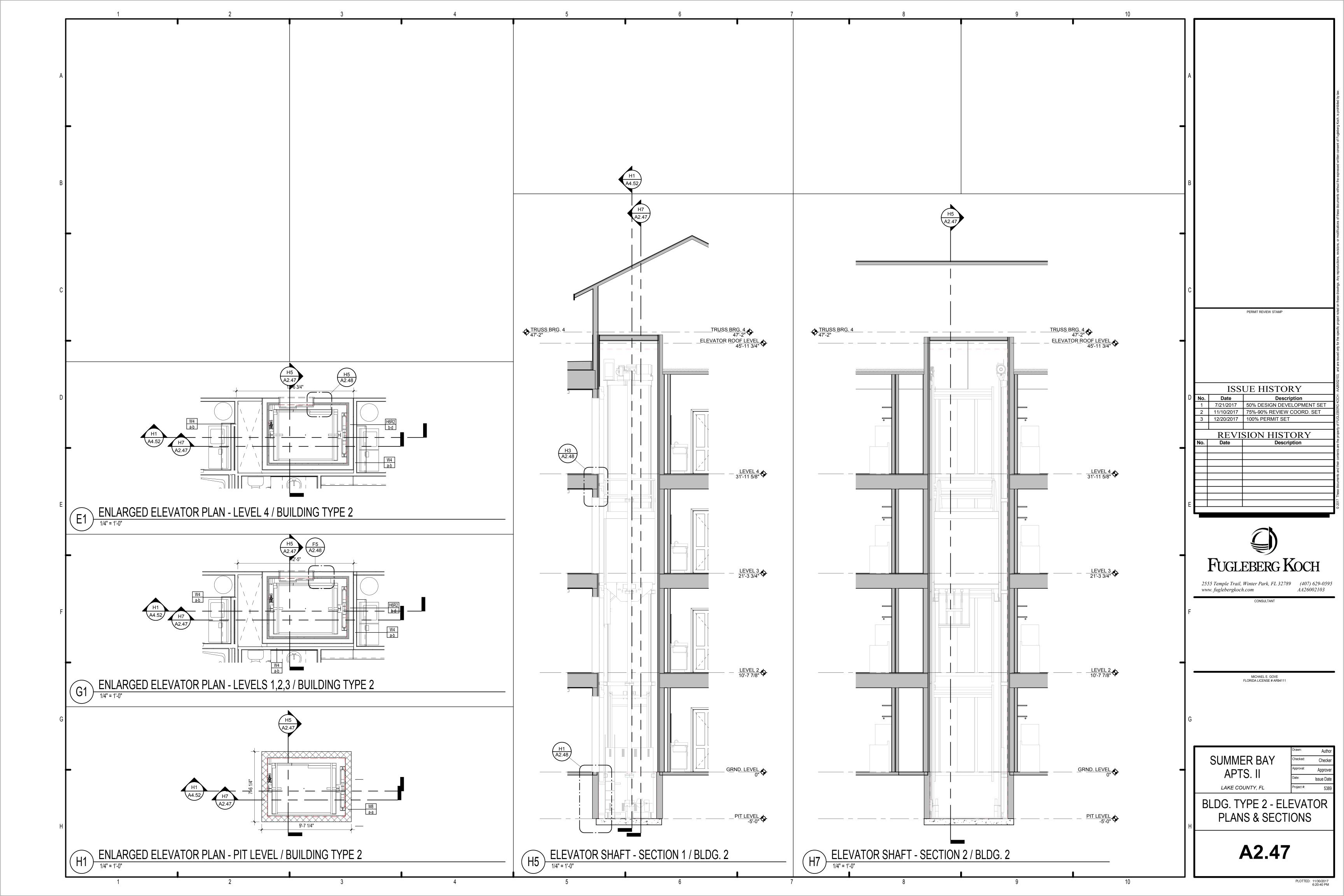


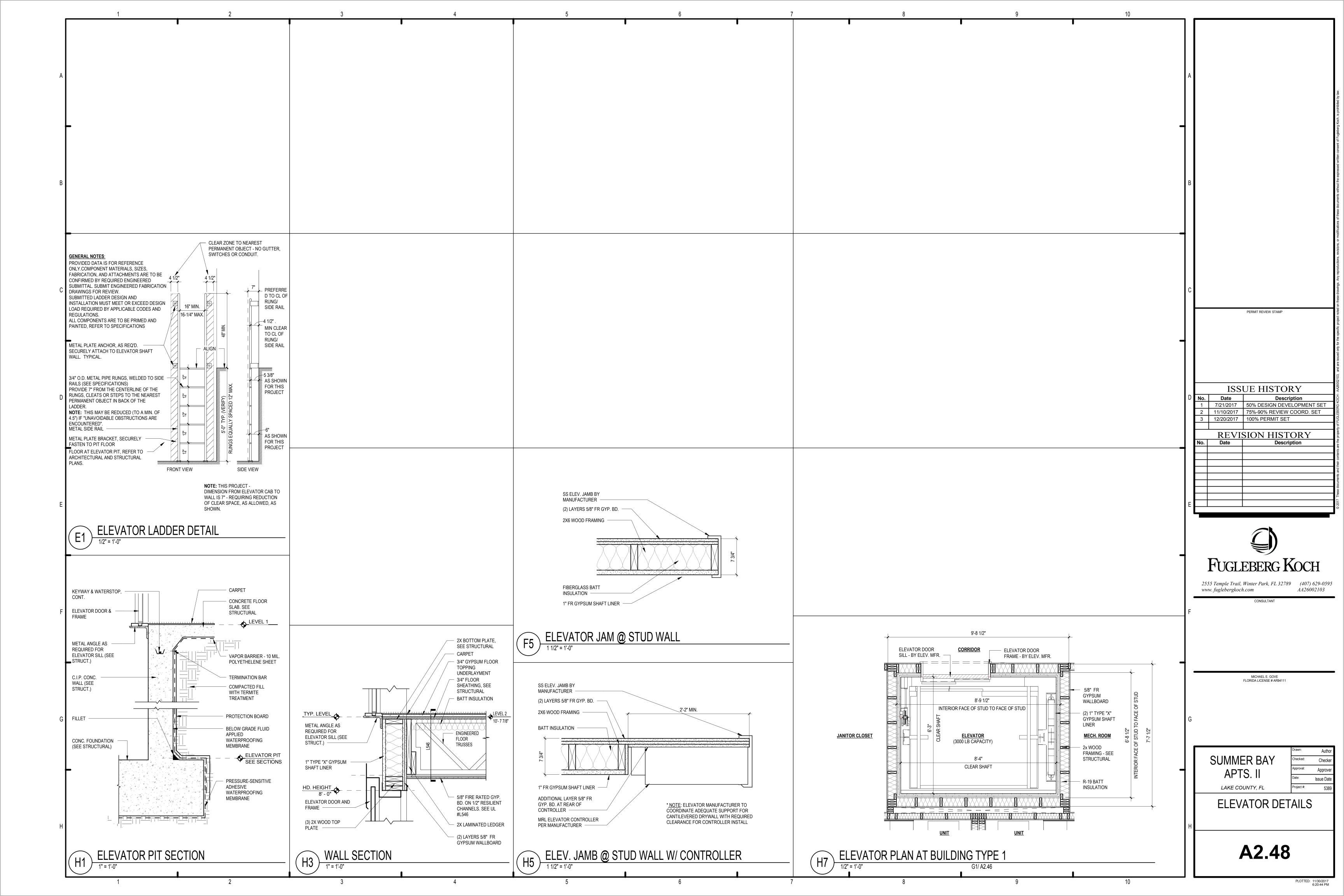


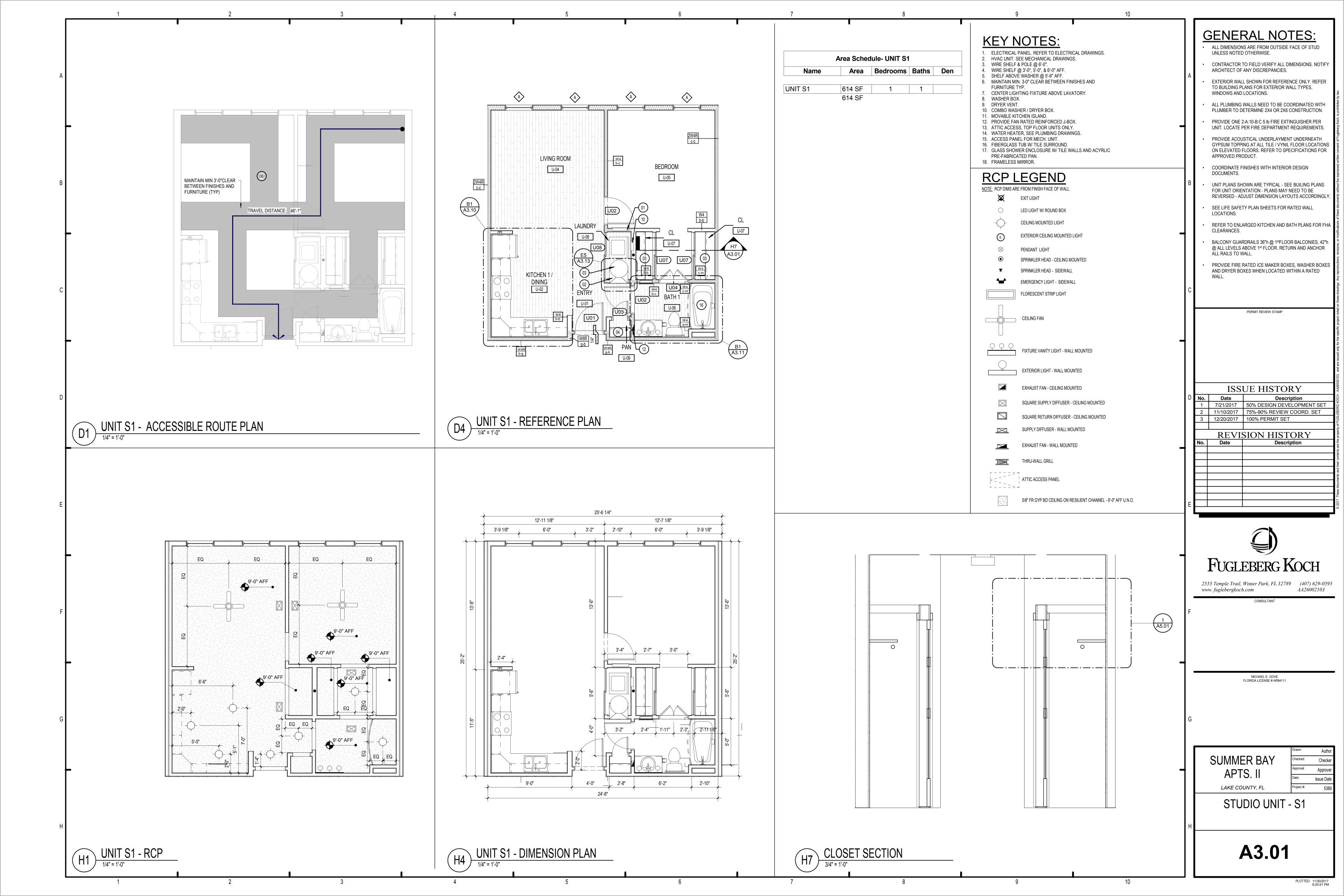


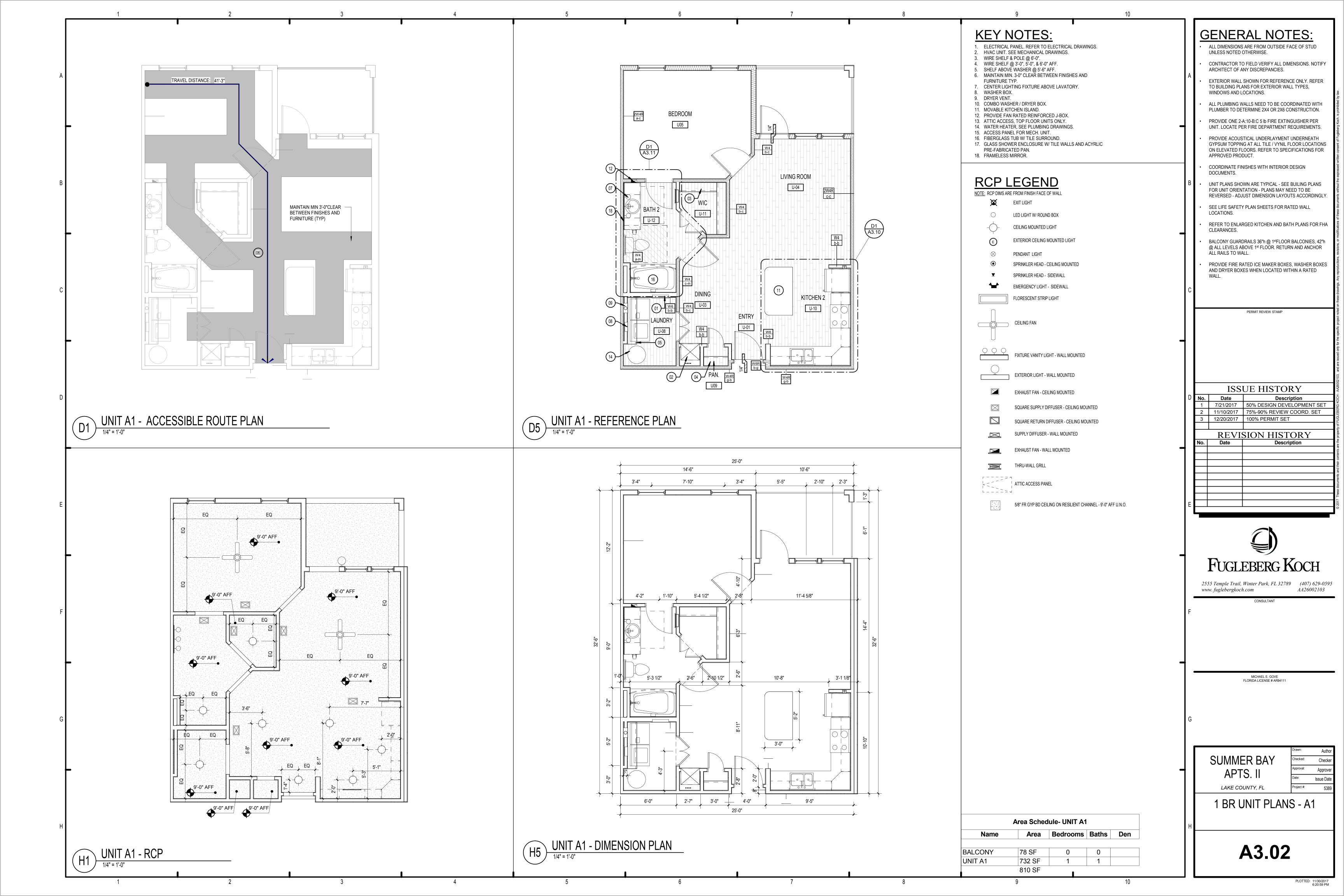


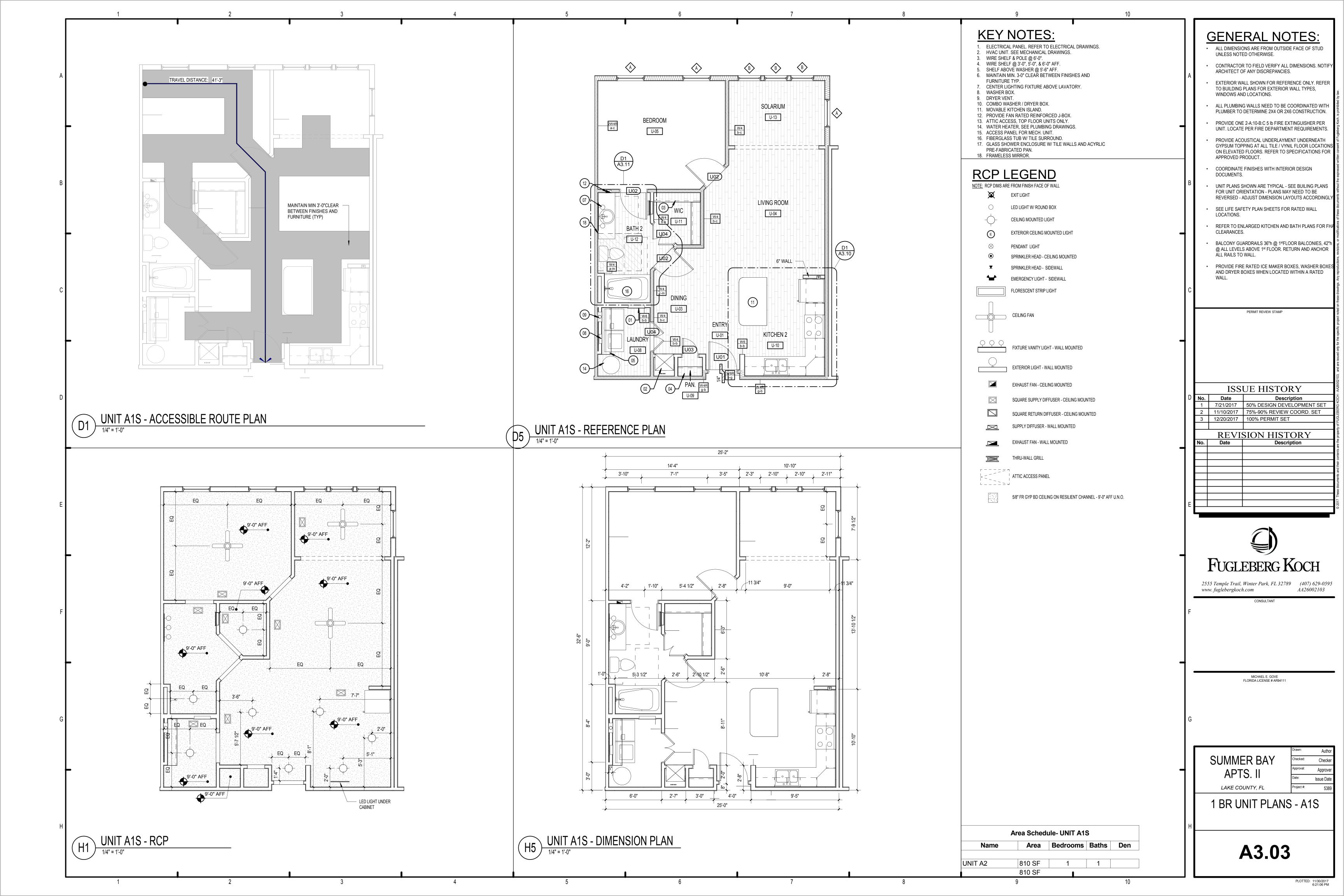


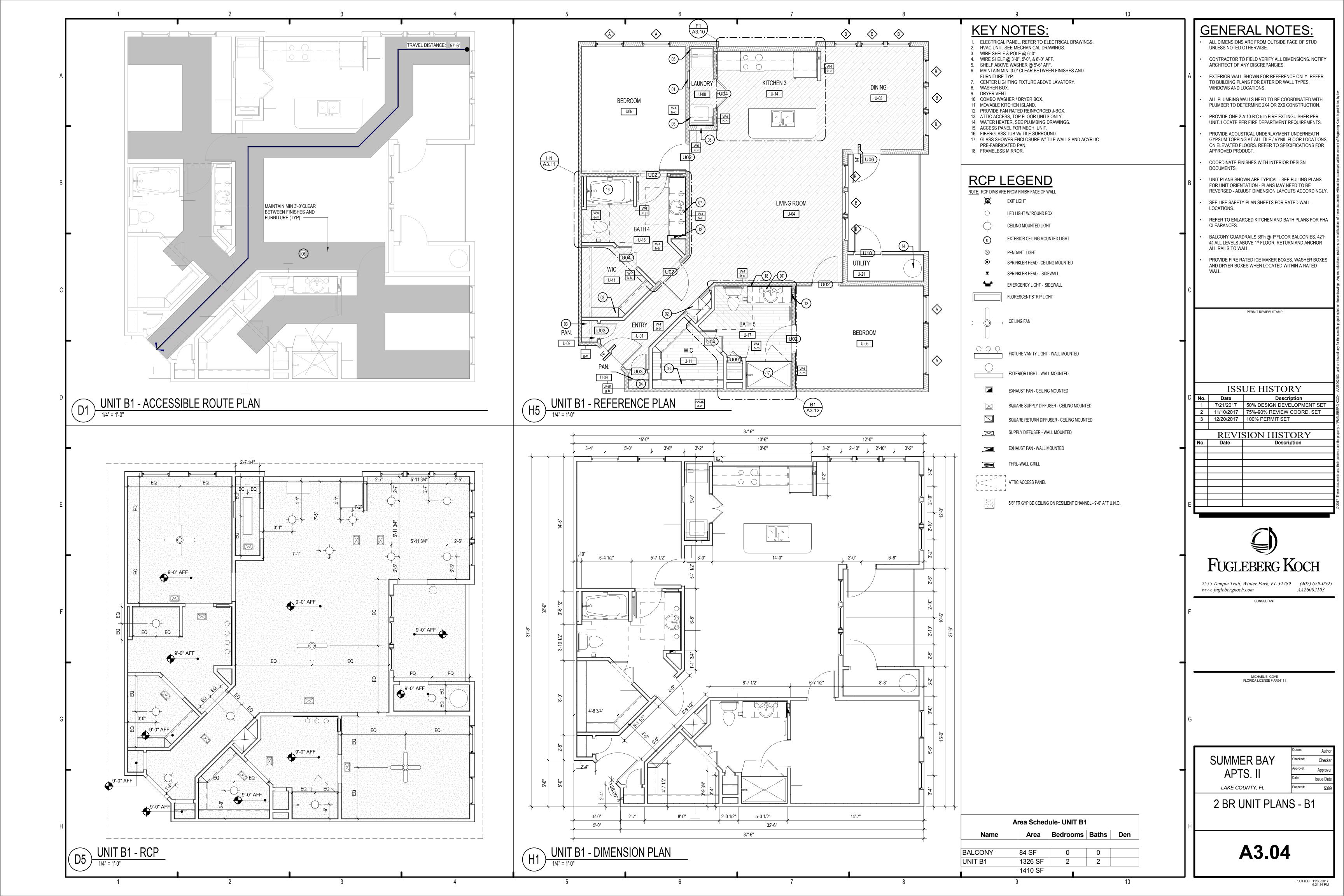


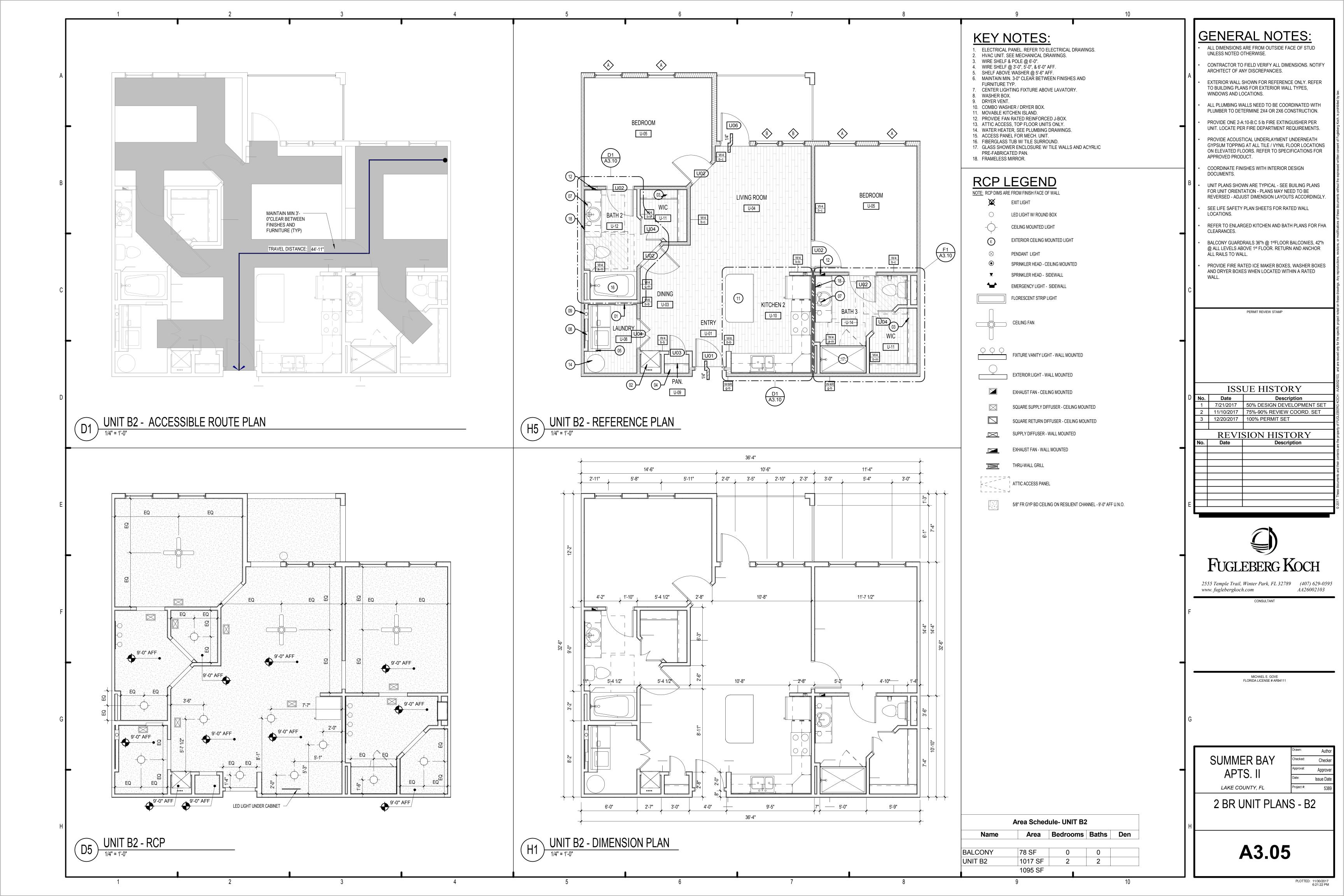


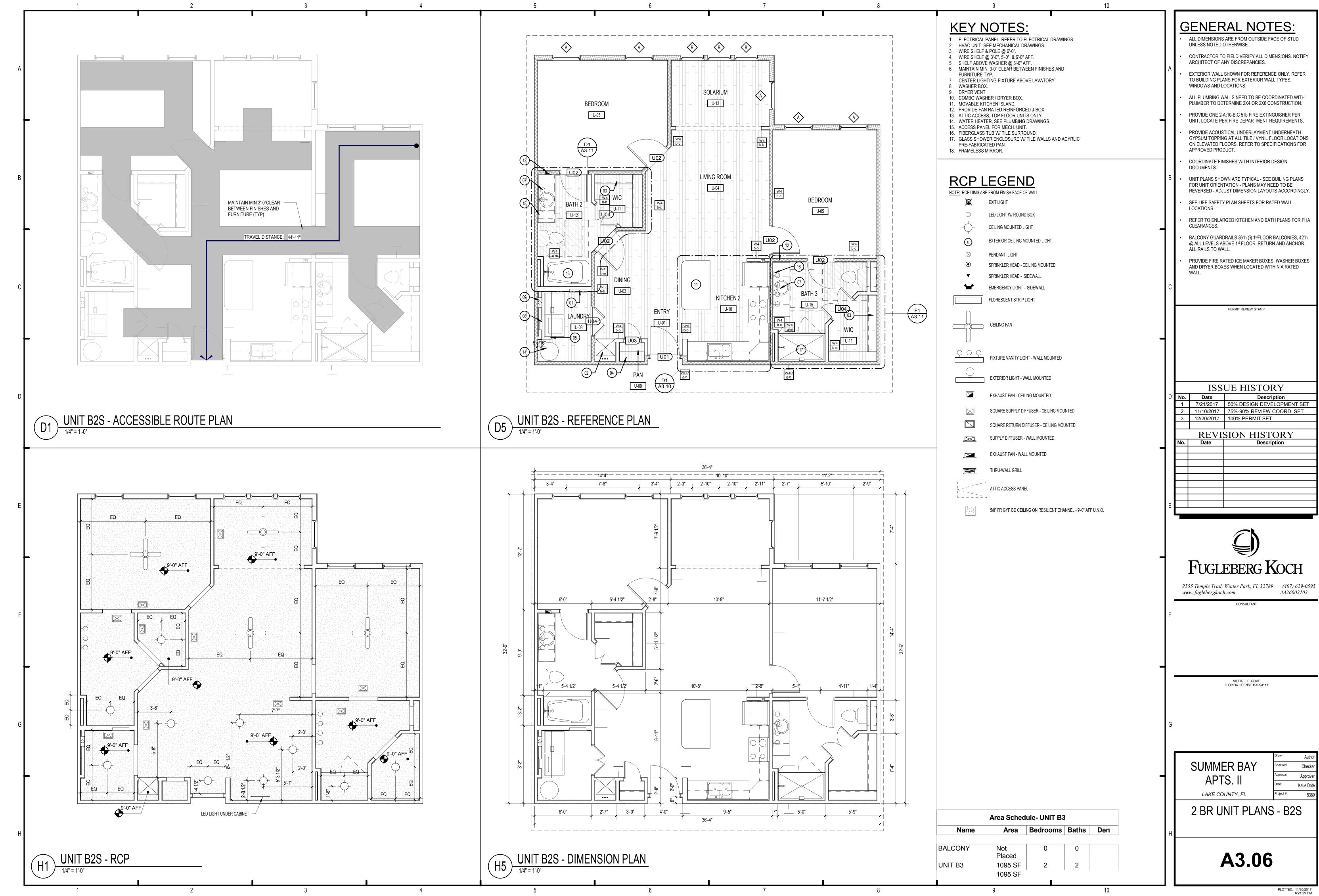


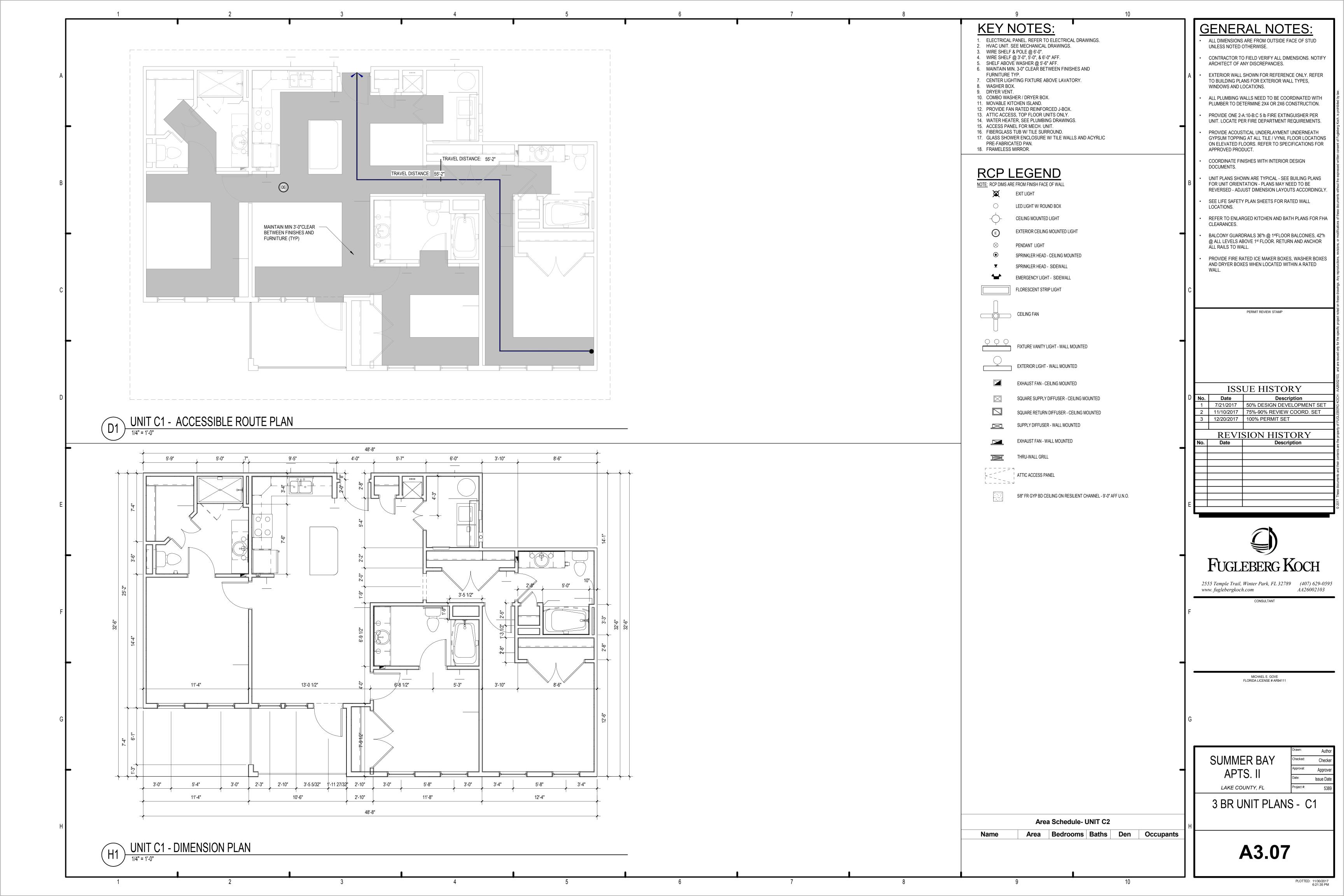


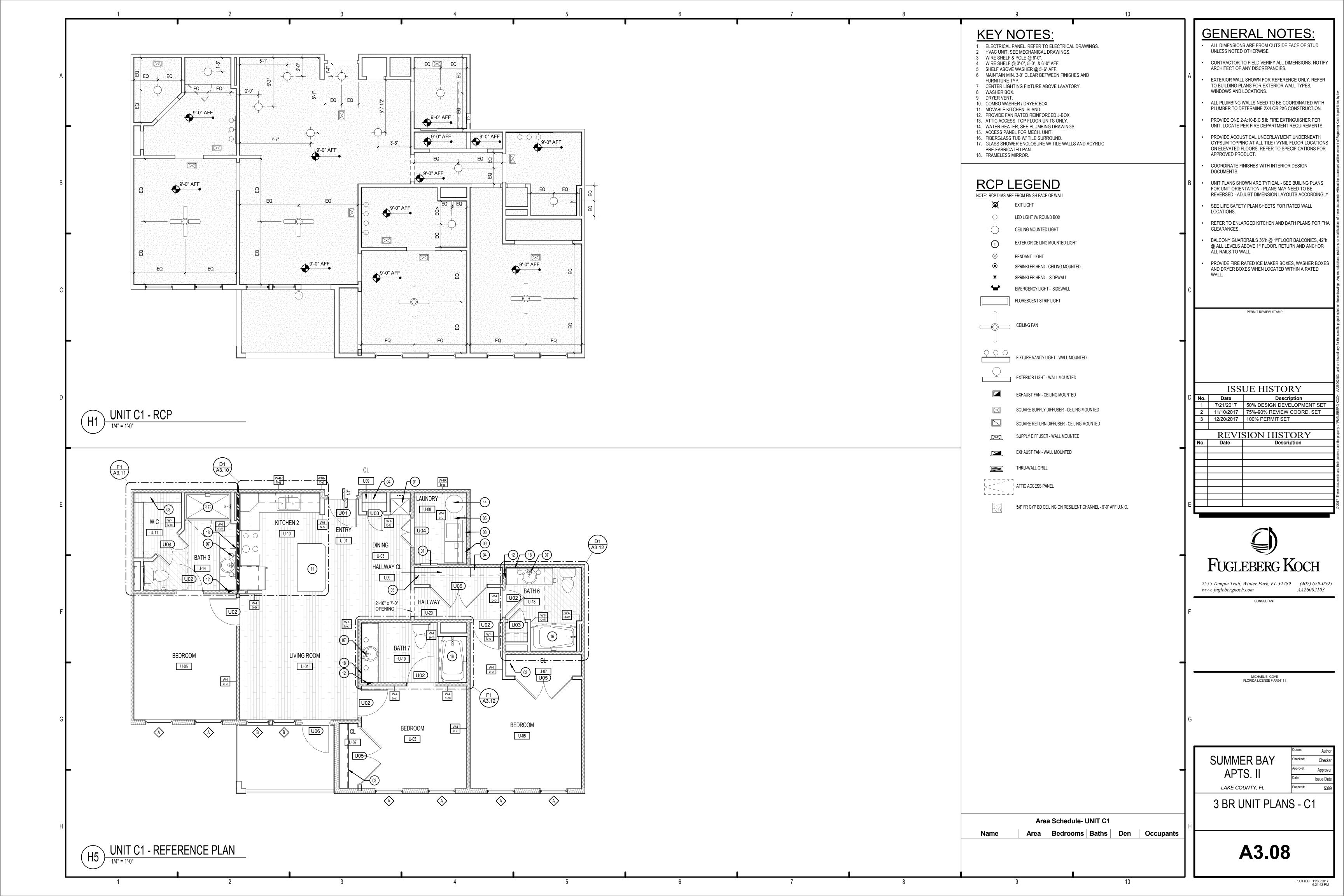


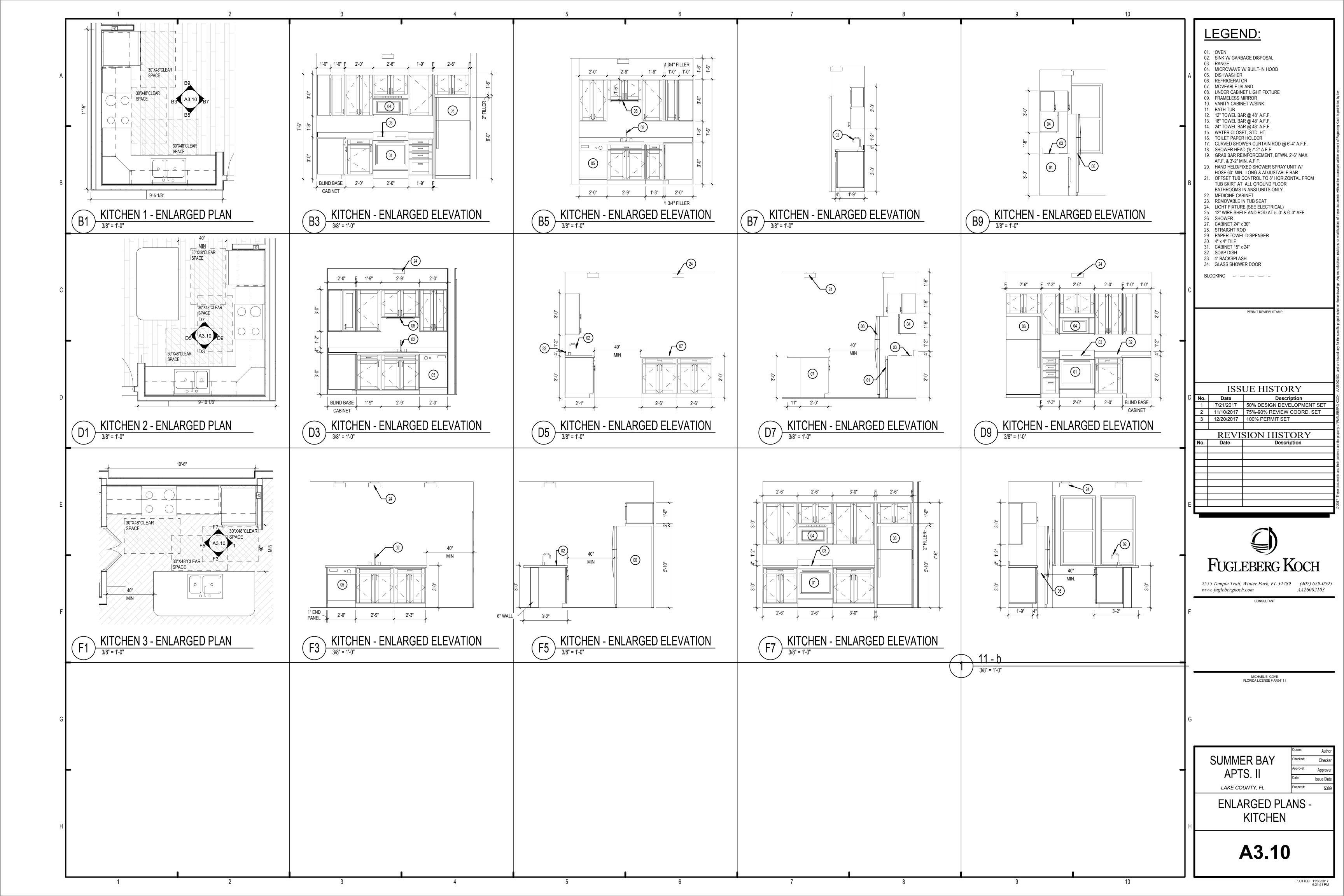


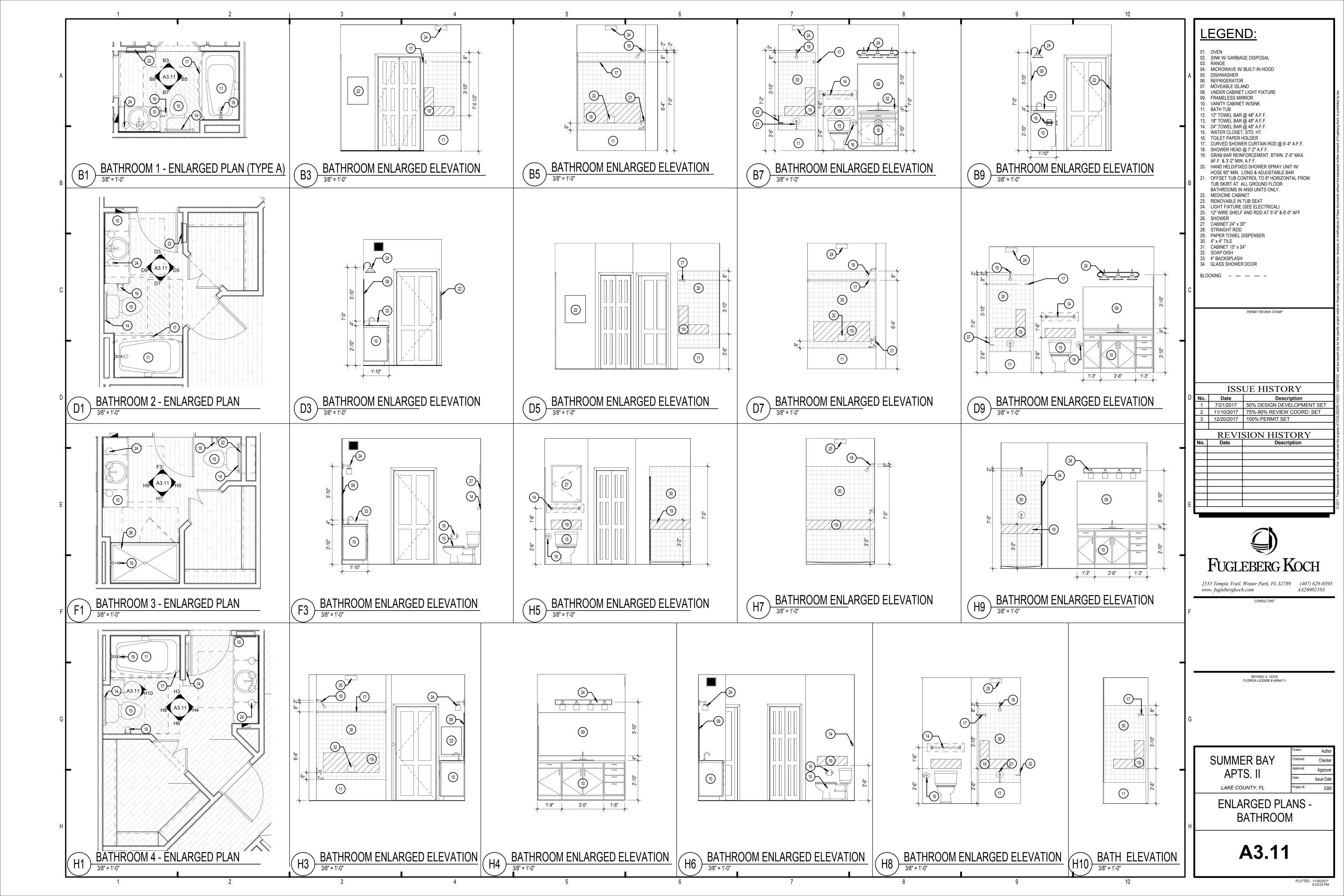


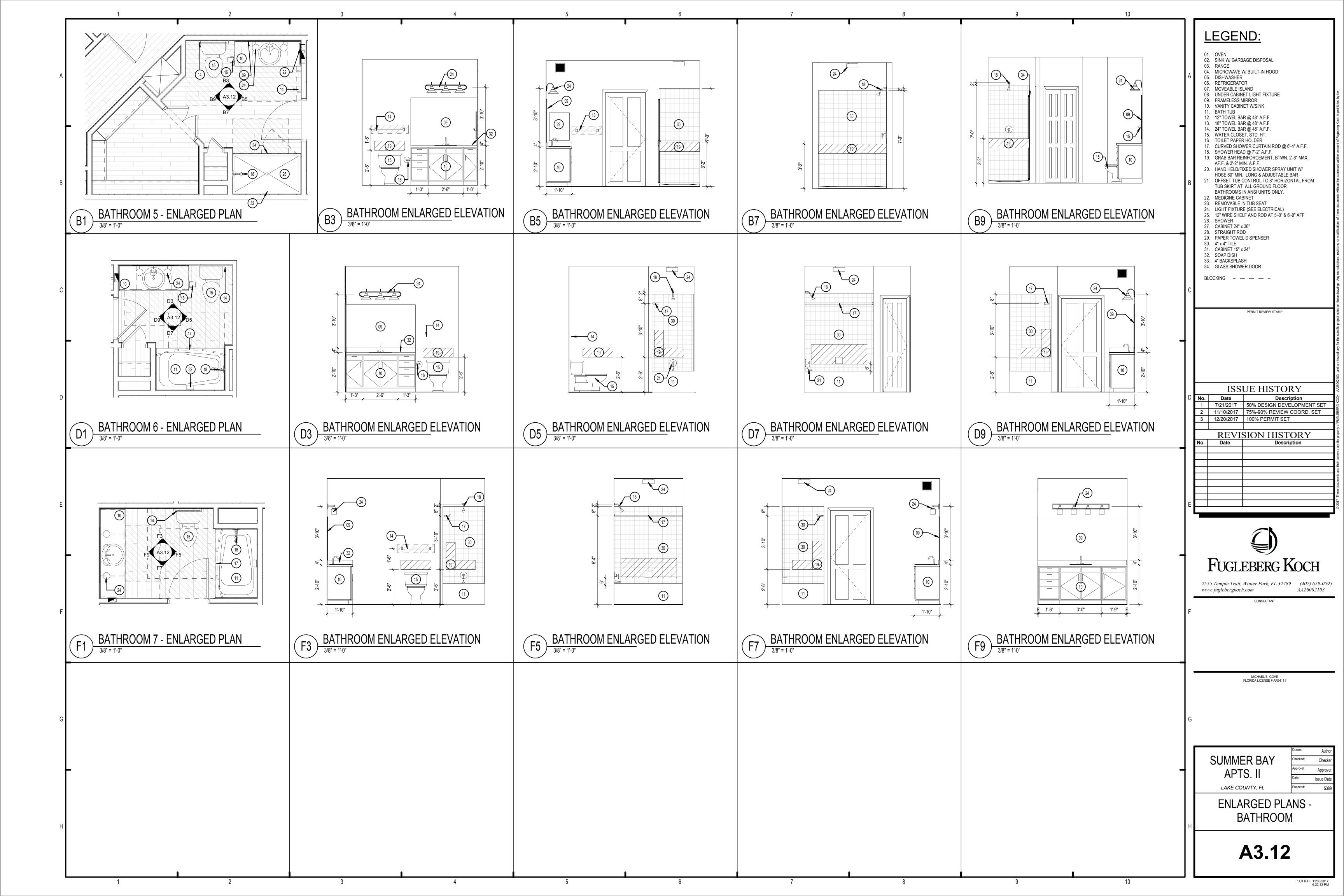


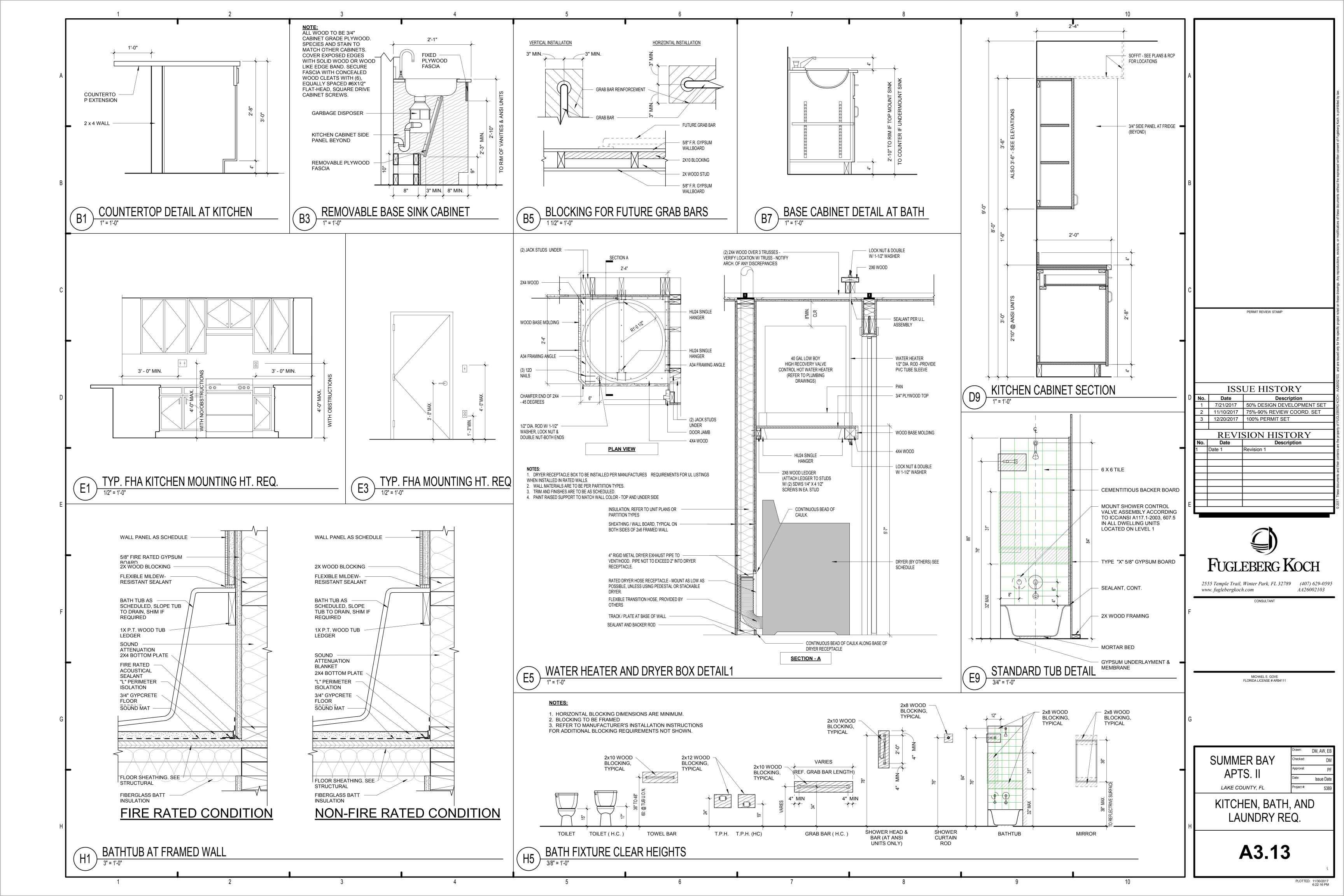












	FINISH SCHEDULE - UNITS														
								WALLS				CEILING			
		FLOOR	BASE	CROWN	NOR	TH	EAS	T	SOUTH		WEST				
MARK	SPACE DESIGNATION	MATERIAL	MATERIAL	MOLDING	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	REMARKS
U-01	ENTRY	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-02	KITCHEN 1 / DINING	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-03	DINING	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-04	LIVING ROOM	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-05	BEDROOM	CPT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-06	BATH 1	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-07	CL	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-08	LAUNDRY	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-09	PAN	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-09	PAN.	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-10	KITCHEN 2	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-11	WIC	CPT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-12	BATH 2	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-13	SOLARIUM	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-14	BATH 3	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-14	KITCHEN 3	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-15	BATH 3	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-16	BATH 4	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-17	BATH 5	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-18	BATH 6	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-19	BATH 7	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-20	HALLWAY	LVT	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		
U-21	UTILITY	CONC	WD		GWB		PNT	PNT	GWB	PNT	GWB	PNT	GWB		

PERMIT REVIEW STAMP

FUGLEBERG KOCH

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 (407) 629-050 (407) 629-050 (407) 629-050 (407) 629-05

MICHAEL E. GOVE FLORIDA LICENSE # AR94111

SUMMER BAY APTS. II

LAKE COUNTY, FL

FINISH SCHEDULES

A3.14





LOTTED: 11/30/201 6:22:45 PI

