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/sq ft

SECTION A-A

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 features:

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.

3. **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 Sealant or FS-ONE MAX Intumescent Sealant (Note: L Ratings apply only when FS-ONE Sealant 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 2015-01-15

H1 UL F-C-1009
NTS

Design No. F-C-2008

May 20, 2005

F Rating — 1 Hr

T Rating — 1 Hr

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

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

1. **Floor Assembly —** The fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory and shall include the following construction features:
A. **Trusses —** Min 12 in. (305 mm) deep parallel chord trusses fabricated from 2 by 4 in. (51 by 102 mm) lumber in conjunction with galv steel truss plates or **Structural Wood Members*** with bridging as required.
B. **Flooring —** Nom 3/4 in. (19 mm) thick plywood flooring with or without **Floor Topping Mixture*.** Diam of hole-sawed opening in flooring to be 1/2 to 3/4 in. (13 to 19 mm) larger than diam of pipe. Max diam of opening in flooring is 3 in. (76 mm).
C. **Furring Channels —** Rigid or resilient galv steel furring channels installed perpendicular to bottom chord of trusses.
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 tightly-wrapped around nonmetallic pipe (foil side exposed), secured with two steel tie wires and slid into hole-sawed opening in flooring (Item 1B) and in gypsum wallboard ceiling (Item 1D). Bottom edge of wrap strip to project 9/16 to 11/16 in. (14 to 17.5 mm) below bottom surface of flooring and below bottom (ceiling) surface of gypsum board.
3M COMPANY — Type FS-195+
B. **Fill, Void or Cavity Materials* — Caulk, Sealant or Putty —** Nom 1/4 in. (6 mm) thickness of caulk or putty to be applied to the exposed edge of the wrap strip layer (top of flooring and bottom of gypsum board ceiling). Generous application of caulk or putty to be applied to fill all gaps at the wrap strip/flooring and wrap strip/gypsum board ceiling interfaces.
3M COMPANY — CP 25WB+ Caulk, FB-3000 WT Sealant, MP+ Stix Putty (Note: L Ratings apply only when Type CP 25WB+ caulk or FB-3000 WT sealant is used. CP 25WB+ not suitable for use with CPVC pipes.)
*Bearing the UL Classification Mark

Last Updated on 2005-05-20

H3 UL F-C-2008
NTS

Design No. F-C-2024

November 20, 2009

F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 0, 1, 1-1/2 and 2 Hr (See Item 3)

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 firestopped.
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 max 24 in. (610 mm) OC.
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 or conduits may be used:

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 solid-core 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 systems.

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 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:

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

H5 UL F-C-2024
NTS

(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 three screws is required.
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 sheet-steel 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.	F Rating Hr	T Rating Hr	Wrap Strip Width In.	Min Wrap Strip Layers
PVC, CPVC, ABS,	1/2 (13 mm) to 1-1/2 (38 mm)	1	1	1 (25 mm)	1
ccPVC or ccABS (a)					
PVC, CPVC, ABS,	2 (51 mm)to 2-1/2 (64 mm)	1	1	1 (25 mm)	2
ccPVC, or ccABS (a)					
PVC, CPVC, ABS,	3 (76 mm)	1	1	1 (25 mm)	3
ccPVC or ccABS (a)					
PVC, CPVC, ABS,	1/2 (13 mm) to 2 (51 mm)	1	1	2 (51 mm)	1
ccPVC or ccABS (a)					
PVC, CPVC, ABS or ccPVC	2-1/2 (64 mm) to 4 (102 mm)	1	1	2 (51 mm)	2
ccABS (a)	2-1/2 (64 mm) to 3 (76 mm)	1	1/2	2 (51 mm)	2
ccABS (a)	3-1/2 (89 mm) to 4 (102 mm)	1	1/2	2 (51 mm)	3
PVC, CPVC, ABS, or ccPVC	1/2 (13 mm)to 1-1/2 (38 mm)	2	1-1/2	1 (25 mm)	1
ccABS (a)	1/2 (13 mm) to 1-1/2 (38 mm)	2	2	2 (51 mm)	2
ABS, PVC, ccPVC, or CPVC	1/2 (13 mm) to 2 (51 mm)	2	1-1/2	2 (51 mm)	1
ABS, PVC, ccPVC or CPVC	2-1/2 (64 mm) to 3 (76 mm)	2	1-1/2	2 (51 mm)	2
ABS	3-1/2 (89 mm) to 4 (102 mm)	2	1-1/2	2 (51 mm)	3
PVC, ccPVC or CPVC	3-1/2 (89 mm) to 4 (102 mm)	2	2	2 (51 mm)	3

Design No. F-C-2037

November 26, 1997

F Rating — 1 Hr

T Rating — 1 Hr

1. **Floor-Ceiling Assembly —** The fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details of the floor-ceiling assembly are summarized below:
A. **Flooring System —** Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening is 5 in.
B. **Wood Joists —** Nom 2 by 10 in. lumber joists spaced 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required with ends firestopped.
C. **Furring Channels —** Resilient galv steel furring installed perpendicular to wood joists (Item 1B) between wallboard (Item 1D) and wood joists as required in the individual Floor-Ceiling Design.
D. **Gypsum Board*** — Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design. Wallboard secured to wood joists as specified in the individual Floor-Ceiling Design.

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

3. **Firestop System —** The firestop system shall consist of the following:
A. **Fill, Void or Cavity Materials* — Wrap Strip —** Nom 1/4 in. thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. wide strips. Nom 1-1/2 in. wode strips tightly-wrapped around nonmetallic pipe with the edges butted against the underside of flooring and around the entire perimeter of the hole-sawed opening. Two layers of wrap strip are required. Each layer of wrap strip to be installed with butted seam, butted seams in successive layers staggered or aligned. Wrap strip layer(s) temporarily held in position using aluminum foil tape.
SPECIFIED TECHNOLOGIES INC — SpecSeal RED Strip
B. **Steel Collar —** Collar fabricated from coils of precut 0.016 in. thick (30 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be nom 1-1/2 in. deep with min four 1 in. wide by 2 in. long anchor tabs for securement to top surface of flooring. Retainer tabs, 3/4 in. wide tapering down to 1/4 in. wide and located opposite the anchor tabs, are folded 90 degrees toward through-penetrant surface to maintain the annular space around the through-penetrant and to retain the wrap strips. Steel collar wrapped around wrap strips and through-penetrant with a 1 in. wide overlap along its perimeter joint and secured together by means of a min 1/2 in. wide by 0.028 in. thick stainless steel hose clamp at mid-height of the steel collar. As an alternate to the steel hose clamp, the steel collar can be secured together by means of three No. 8 by 3/8 in. long steel sheet metal screws. Anchor tabs of collar bent outwards and secured to top surface of flooring or underside of floor using min 3/4 in. long steel wood screws in conjunction with 1/4 in., by 1-1/4 in. diam steel fender washers.

4. **Closet Flange —** PVC or ABS closet stub sized to accommodate drain pipe. Closet flange installed in hole-sawed opening in flooring system with flange secured to top of flooring with steel screws.

5. **Water Closet —** (Not Shown) — Floor mounted vitreous china water closet.

*Bearing the UL Classification Mark

Last Updated on 1997-11-26

H9 UL F-C-2037
NTS

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	1/18/2018	ISSUE FOR PERMIT

REVISION HISTORY

No.	Date	Description

© 2017 These documents and their contents are the property of FUGLEBERG KOCH ARCHITECTS, and are issued only for the specific project noted on these drawings. Any reproduction, reuse or modifications of these documents without the expressed written consent of Fugleberg Koch, is prohibited by law.

FUGLEBERG KOCH
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com AA26002103

CONSULTANT

MICHAEL E. GOVE
FLORIDA LICENSE # AR94111

STATE OF FLORIDA MICHAEL E. GOVE AR94111 REGISTERED ARCHITECT

Digitally signed by Michael Edwin Gove
Date: 2018.01.22 13:57:12-05'00'

SUMMER BAY APTS. II	Drawn: Author
LAKE COUNTY, FL	Checked: Checker
	Approval: Approver
	Date: Issue Date
	Project #: 5389

UL REFERENCE DIRECTORY - FLOOR PENETRATIONS

A0.35

PLOTTED: 1/22/2018 9:38:16 AM