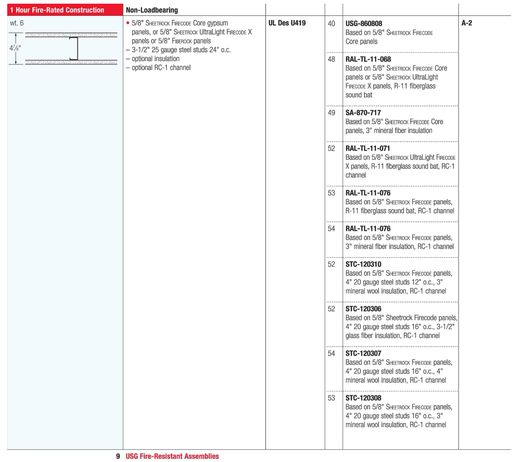


1 Hour Fire-Rated Construction	Non-Loadbearing				
wt. 6	• 5/8" Sheetrock Firecode Core gypsum panels, or 5/8" Sheetrock UltraLight Firecode X panels or 5/8" Firerock panels – 3-1/2" 25 gauge steel studs 24" o.c. – optional insulation – optional RC-1 channel	UL Des U419	40	USG-860808 Based on 5/8" Sheetrock Firecode Core panels	A-2
			48	RAL-TL-11-068 Based on 5/8" Sheetrock Firecode Core panels or 5/8" Sheetrock UltraLight Firecode X panels, R-11 fiberglass sound bat	
			49	SA-870-717 Based on 5/8" Sheetrock Firecode Core panels, 3" mineral fiber insulation	
			52	RAL-TL-11-071 Based on 5/8" Sheetrock UltraLight Firecode X panels, R-11 fiberglass sound bat, RC-1 channel	
			53	RAL-TL-11-076 Based on 5/8" Sheetrock Firecode panels, R-11 fiberglass sound bat, RC-1 channel	
			54	RAL-TL-11-076 Based on 5/8" Sheetrock Firecode panels, 3" mineral fiber insulation, RC-1 channel	
			52	STC-120310 Based on 5/8" Sheetrock Firecode panels, 4" 20 gauge steel studs 12" o.c., 3" mineral wool insulation, RC-1 channel	
			52	STC-120306 Based on 5/8" Sheetrock Firecode panels, 4" 20 gauge steel studs 16" o.c., 3-1/2" glass fiber insulation, RC-1 channel	
			54	STC-120307 Based on 5/8" Sheetrock Firecode panels, 4" 20 gauge steel studs 16" o.c., 4" mineral wool insulation, RC-1 channel	
			53	STC-120308 Based on 5/8" Sheetrock Firecode panels, 4" 20 gauge steel studs 16" o.c., 3" mineral wool insulation, RC-1 channel	

9 USG Fire-Resistant Assemblies

1 *TYPICAL STEEL FIRE RATED PARTITION - UL419*

SCALE : N.T.S

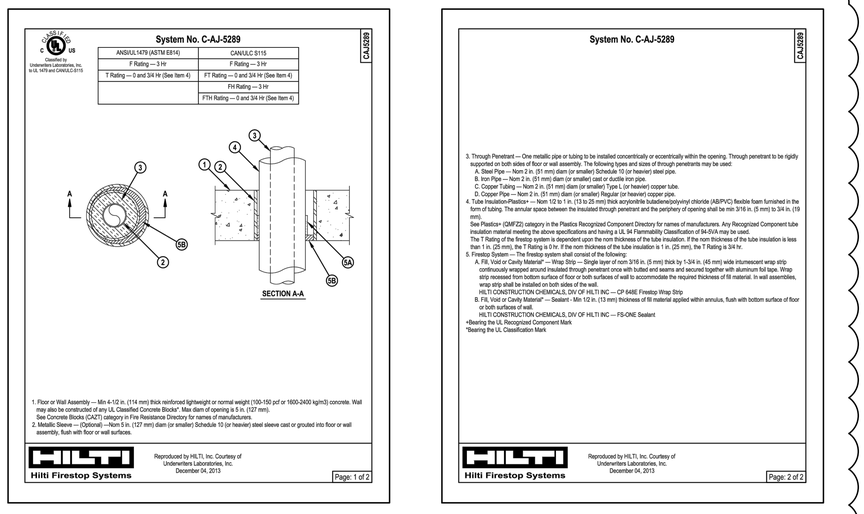
B Floor/Ceilings

Wood Framed

1 Hour Fire-Rated Construction	Dimensional Lumber		Acoustical Performance			Reference
Construction Detail	Description	Test Number	STC	IIC	Test Number	Index
cig. wt. 3	• 5/8" Sheetrock Firecode Core gypsum panels, ceiling – 1" nominal wood sub and finished floor – 2 x 10 wood joist 16" o.c. – joints finished • optional Levelrock floor underlayment • optional SRM-25 or SRB sound mat • optional veneer plaster	UL Des L501	38	32	CK-6412-7 Based on 1-1/4" nominal wood floor	B-52
			39	56	CK-6412-8 Based on 1-1/4" nominal wood floor, 44 oz carpet and 40 oz pad atop flooring	

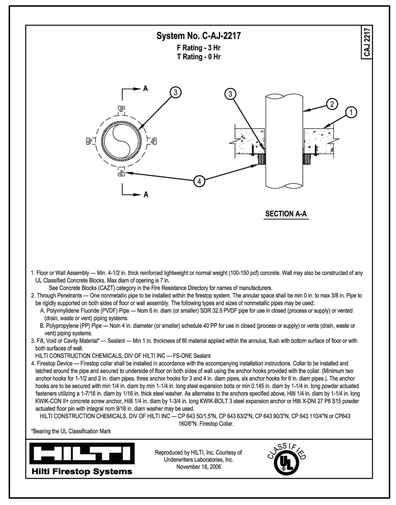
2 *TYPICAL WOOD FRAME FLOOR-CEILING ASSEMBLY - L501*

SCALE : N.T.S



3 *INSULATED PIPE THROUGH CONCRETE FLOOR ASSEMBLY*

SCALE : N.T.S



4 *PLASTIC PIPE THROUGH CONCRETE FLOOR/WALL ASSEMBLY*

SCALE : N.T.S

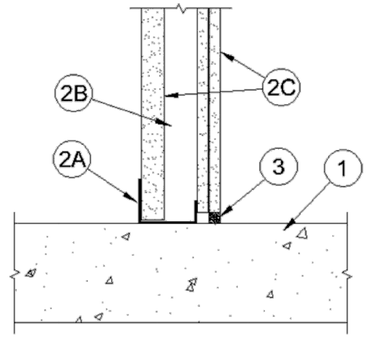
Joint Systems

System No. BW-S-0016

August 07, 2007

Assembly Ratings — 1 and 2 Hr (See Item 2)

Joint Width — 1/2 In. Max



1. **Floor Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) structural concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***.

See **Precast Concrete Units** (CFTV) category in the Fire Resistance Directory for names of manufacturers.

2. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/steel stud shaft wall assembly shall be constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory. In addition, the wall may incorporate a head-of-wall joint system constructed as specified in the HW Series Joint Systems in the UL Fire Resistance Directory. The wall shall include the following construction features:

A. **Steel Floor Runner** — "J"-shaped runners, min 2-1/2 in. (64 mm) deep, with unequal legs of 1 in. (25 mm) and 2 in. (51 mm), fabricated from min 24 MSG galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to structural supports with steel fasteners located not greater than 2 in. (51 mm) from ends and not greater than 24 in. (610 mm) OC.

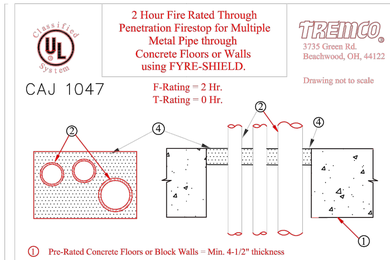
B. **Studs** — "C-II", "E" (back-to-back) or "C-T"-shaped studs, min 2-1/2 in. (64 mm) deep, fabricated from min 25 MSG galv steel. Cut to lengths 3/8 to 1/2 in. (10 to 13 mm) less than floor-to-ceiling height and spaced 24 in. (610 mm) OC.

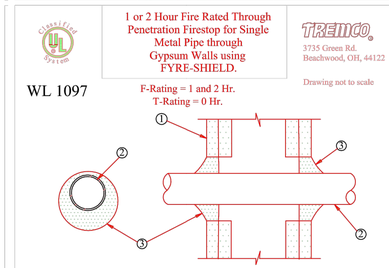
C. **Gypsum Board*** — 1 in. (25 mm) thick gypsum liner panels and 1/2 in., 5/8 in. or 3/4 in. (13, 16 or 19 mm) thick gypsum panels installed as specified in the individual U400 or V400 Series shaft wall designs in the UL Fire Resistance Directory.

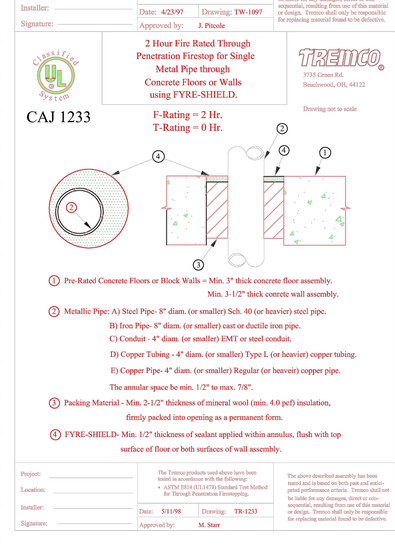
The hourly fire rating of the joint system is equal to the hourly fire rating of the wall.

3. **Fill, Void or Cavity Material* - Sealant —** Max separation between top of floor and bottom of gypsum board on the finish side is 1/2 in. Min 1/2 in. (13 mm) thickness of fill material installed on finish side of the wall between the bottom of the gypsum board and the top of the concrete floor, flush with surface of the finish side of wall.

UNITED STATES GYPSUM CO — Type A or ASP







NOTE: TREMCO BRAND IS SHOWN AS ONE POSSIBLE MANUFACTURER, CONTRACTOR MAY INSTALL APPROVED SUBSTITUTIONS

FIRE DETAIL PENETRATION

CLIENT :

701 4th Street

Interior Renovations

701 4th Street
Miami Beach, FL 33139
Folio: 02-4203-009-3040

CDS
CASTELLANOS DESIGN STUDIO
333 SE 2ND AVENUE, SUITE 2066
MIAMI, FL 33131
Tel: 786.218.5335
License #AA 26002467
WWW.CASTELLANOSDESIGN.COM

No.	DATE	ISSUED / REVISED
1	29 AUG/16	SCHEMATIC DESIGN
2	1 SEP/16	DESIGN REVISION - 1
3	30 SEP/16	CONSTRUCTION DOCUMENTS
4	15 NOV/16	CLIENT REVISION
5	05 DEC/16	PERMITTING REVISION - 1
6	03 FEB/17	PERMITTING REVISION - 2
7	14 MAR/17	PERMITTING REVISION - 3

SEAL :

WESLEY ART CASTELLANOS
FLORIDA ARCHITECT LICENSE AR 96133

PROJECT NO : 2016-17

FIRE PENETRATION & DETAILS

CHECKED BY : WC	SHEET NO :
DRAWN BY : AA	A-5.2
SCALE:	
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