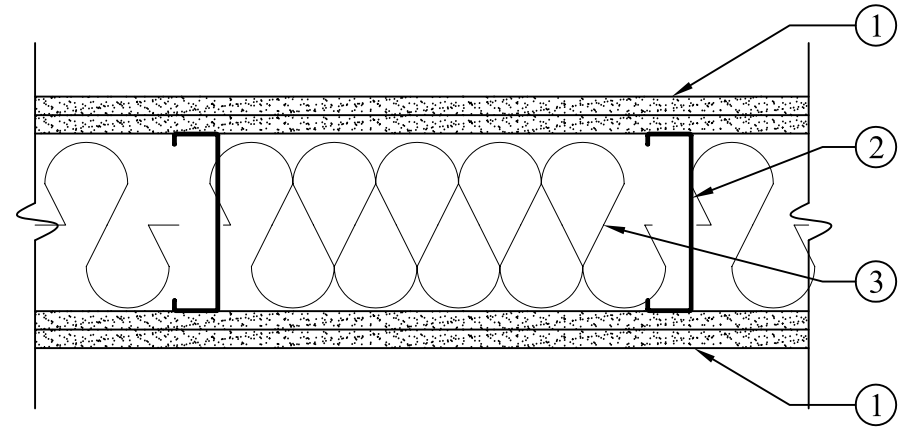


# WALL TYPES

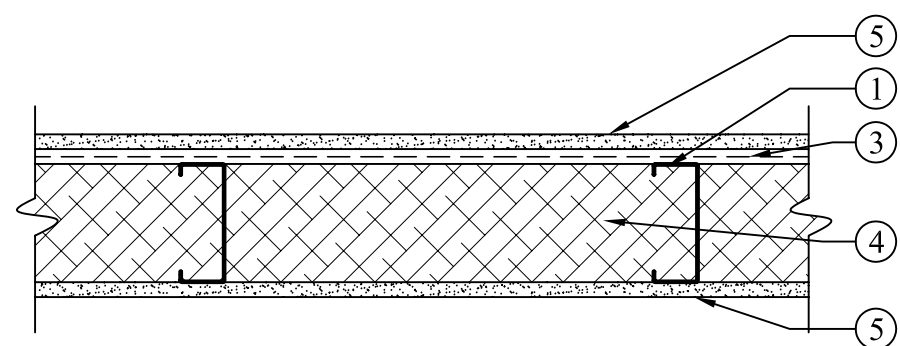
**W1** 2 HOUR BEARING STAIR & ELEVATOR SHAFT WALL



**W1** 2 HOUR BEARING WALL ASSEMBLY  
**GA FILE NO. WP 1521** GENERIC 2 HOUR FIRE - 55 to 59 STC SOUND  
 Fire Test: See WP 1545 (LC, 9-7-64; ULC 807499, 3-26-81, ULC Design W414)  
 Sound Test: NRCC 815-ANV, 2-3-81  
**GYPNUM WALLBOARD, STEEL STUDS (LOAD-BEARING)**

- Gypsum Board - Base layer** 1/2" type X gypsum wallboard or gypsum veneer base applied parallel to each side of steel studs with 1" Type S drywall screws 24" o.c. Face layer 1/2" type X gypsum wallboard or gypsum veneer base applied parallel to each side with 1-5/8" type S drywall screws 12" o.c. Joints staggered 24" each layer and side.
- Steel Studs** - 6" Steel studs (SEE STRUCTURALS FOR SPACING).
- Insulation** - 6" Fiberglass batt insulation friction fit in stud space. (Sound tested with 3-1/2" bats).

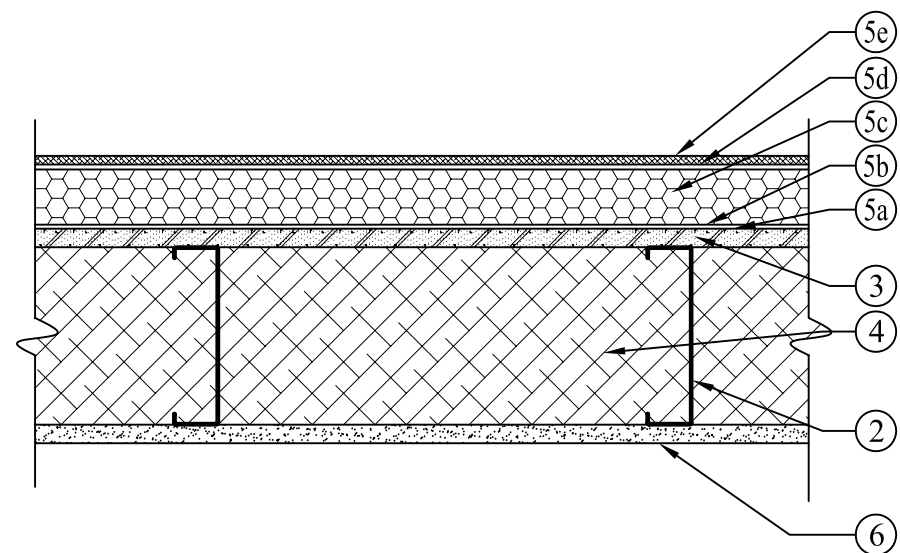
**W2** 1 HOUR CORRIDOR WALL  
 1/2 HOUR REQUIRED



**W2** 1 HOUR CORRIDOR / NON-BEARING WALL ASSEMBLY  
**UL Design U451 - 1 HOUR FIRE - 50 to 54 STC SOUND**  
 Fire Resistance Ratings - ANSUL 263  
 Sound Test: RAL TL83-216, 47 MTC  
**GYPNUM WALLBOARD, STEEL STUDS (NON-LOADBEARING)**

- Studs** - Channel-shaped, 4 in. 20 gauge galvanized steel studs. Max stud spacing 24 in. OC (See Structurals). Stud to be cut 1 in. less than assembly height.
- Floor and Ceiling Runners (Not Shown)** - Channel-shaped runners, 4 in. wide by 1-1/4 in. deep, fabricated from No. 20 MSG galv steel. Attached to floor and ceiling with fasteners, 24 in. OC, max.
- Resilient Channel** - 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long Type S-12 pan head steel screws.
- Fiber, Sprayed** - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.
- Gypsum Board** - 1/2 in. thick, 4 ft wide. Screw attached one side to resilient or furring channels with 1 in. long, Type S steel screws spaced 12 in. OC. Wallboard on direct attached side secured to studs with 1 in. long Type S-12 steel screws spaced 12 in. Wallboard joints oriented vertically, located over studs and offset between layers.
- Joint Tape and Compound** - Vinyl, dry or premixed joint compound, applied to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.
- Caulking and Sealants** - (Not shown) - A bead of acoustical sealant applied around the partition perimeter for sound control.  
**UNITED STATES GYPNUM CO - Type AS.**

**W3** 1 HOUR RATED EXTERIOR NON-LOADBEARING WALL

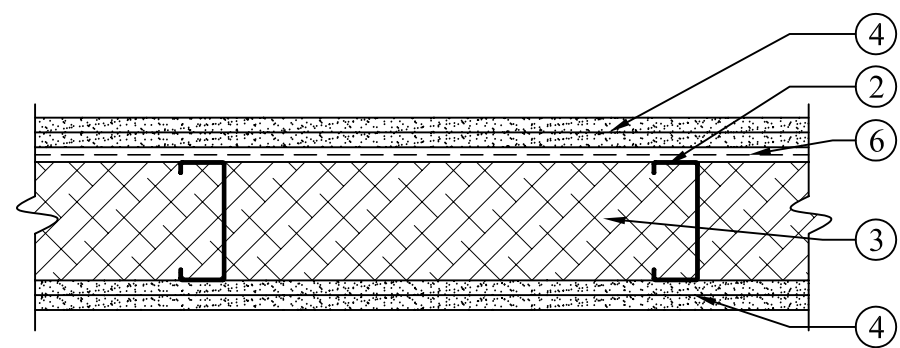


**W3** 1 HOUR RATED EXTERIOR EIFS WALL ASSEMBLY  
**UL Design No. U404 - 1 HOUR FIRE NONBEARING WALL RATING**  
 Fire Resistance Ratings - ANSUL 263  
**GYPNUM WALLBOARD, CEMENTITIOUS BACKER UNITS, STEEL STUDS (NON-LOADBEARING)**

- Steel Floor and Ceiling Runners** - (Not Shown) - Channel shaped, 3-1/2 in. wide by 1-1/4 in. deep, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.
- Steel Studs** - 6 in. wide, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel, spaced max 16 in. OC. Steel studs attached to floor and ceiling runners with 3/8 in. long Type S-12 steel screws on both sides of the studs or by welded or bolted connections designed in accordance with the AISI specifications. For nonbearing walls, studs to be cut 3/8 to 3/4 in. less than assembly height and friction-fitted into floor and ceiling runners.
- Cementitious Backer Units** - 1/2 in. thick, applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with corrosion resistant, chamfered, ribbed wafer head screws with a minimum head diameter of .400 inch. For nonbearing systems, fastened to studs and bottom runners with the uppermost screws placed 1/2 in. to 2 in. below the bottom edge of the leg of the top runner. Horizontal joints need not be backed by framing. **1 Hr System** - Screws shall be min 1-1/4 in. long and spaced a max of 8 in. OC. All vertical joints staggered one stud cavity from gypsum board vertical joints on opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered.

**GEORGIA PACIFIC DENSGLOSS GOLD EXTERIOR SHEATHING**  
**Fiber, Sprayed** - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.  
**Exterior Insulation Finish System (EIFS)** - a. Dryvit water-resistive barrier coating. b. Dryvit adhesive c. 2" OR 3" insulation board (see wall sections for thickness) d. Dryvit reinforcing mesh embedded in base coat e. Dryvit finish coat  
**Gypsum Board** - 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Horizontal joints need not be backed by framing. **1-Hr System** - For vertical application, fastened to studs and runners with 1 in. long screws spaced max 8 in. OC at vertical edges and spaced max 12 in. OC in the field. For horizontal application, fastened to studs and runners with 1 in. long screws spaced max 8 in. OC. Vertical joints staggered one stud cavity from cement board vertical joints on opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered.

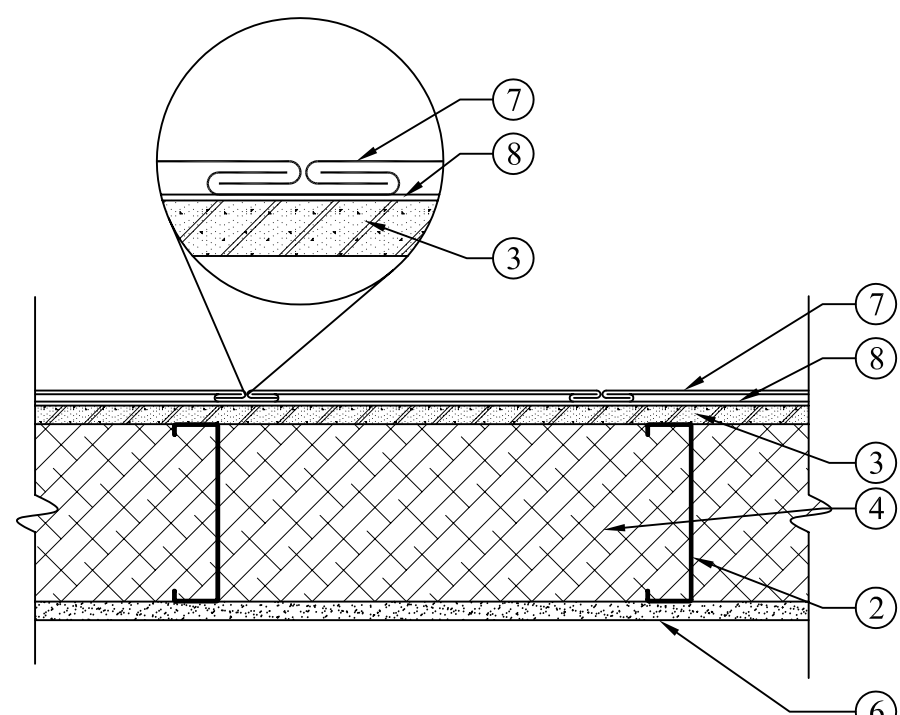
**W4** 1 HOUR DWELLING UNIT PARTY WALL



**W4** 1 HOUR DWELLING UNIT NON-BEARING WALL ASSEMBLY  
**UL Design U465 - 1 HOUR FIRE - 60 STC SOUND**  
 Fire Resistance Ratings - ANSUL 263  
 Sound Test: Riverbank Acoustical Laboratories, NU-Wood Company  
**GYPNUM WALLBOARD, STEEL STUDS (NON-LOADBEARING)**

- Floor and Ceiling Runners** - (not shown) - Channel shaped runners, 3-5/8 in. wide (min), 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
- Steel Studs** - Channel shaped, 3-5/8 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 25 MSG galv steel spaced 24 in. OC max.
- Fiber, Sprayed** - As an alternate to Batts and Blankets (Item 3) - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.
- Gypsum Board** - Double layer 5/8 in. thick (SECOND LAYER ADDED FOR SOUND), 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to item 6 (resilient channels), wallboard is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.
- Joint Tape and Compound** - 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, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges.
- Resilient Channel** - 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 panhead steel screws.

**W5** 1 HOUR RATED EXTERIOR NON-LOADBEARING WALL

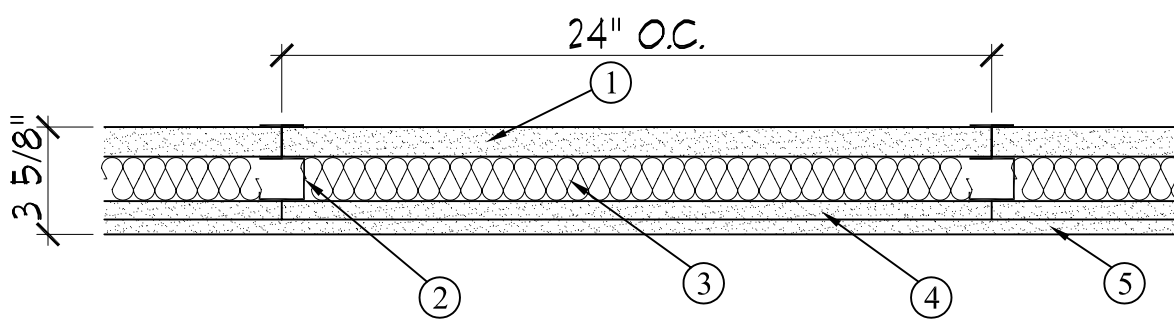


**W5** 1 HOUR RATED EXTERIOR LEAD-COATED COPPER SIDING WALL ASSEMBLY  
**UL Design No. U404 - 1 HOUR FIRE NONBEARING WALL RATING**  
 Fire Resistance Ratings - ANSUL 263  
**GYPNUM WALLBOARD, CEMENTITIOUS BACKER UNITS, STEEL STUDS (NON-LOADBEARING)**

- Steel Floor and Ceiling Runners** - (Not Shown) - Channel shaped, 3-1/2 in. wide by 1-1/4 in. deep, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.
- Steel Studs** - 6 in. wide, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel, spaced max 16 in. OC. Steel studs attached to floor and ceiling runners with 3/8 in. long Type S-12 steel screws on both sides of the studs or by welded or bolted connections designed in accordance with the AISI specifications. For nonbearing walls, studs to be cut 3/8 to 3/4 in. less than assembly height and friction-fitted into floor and ceiling runners.
- Cementitious Backer Units** - 1/2 in. thick, applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with corrosion resistant, chamfered, ribbed wafer head screws with a minimum head diameter of .400 inch. For nonbearing systems, fastened to studs and bottom runners with the uppermost screws placed 1/2 in. to 2 in. below the bottom edge of the leg of the top runner. Horizontal joints need not be backed by framing. **1 Hr System** - Screws shall be min 1-1/4 in. long and spaced a max of 8 in. OC. All vertical joints staggered one stud cavity from gypsum board vertical joints on the opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered.
- Fiber, Sprayed** - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.
- Gypsum Board** - 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Horizontal joints need not be backed by framing. Fastened with Type S-12 screws. **1-Hr System** - For vertical application, fastened to studs and runners with 1 in. long screws spaced max 8 in. OC at vertical edges and spaced max 12 in. OC in the field. For horizontal application, fastened to studs and runners with 1 in. long screws spaced max 8 in. OC. Vertical joints staggered one stud cavity from cement board vertical joints on opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered.
- Exterior Facing** - Lock-seamed lead-coated copper siding.
- Red Rosin Paper (ADDED)**

# WALL TYPES

**W6** 2 HOUR NON-BEARING SHAFT WALL

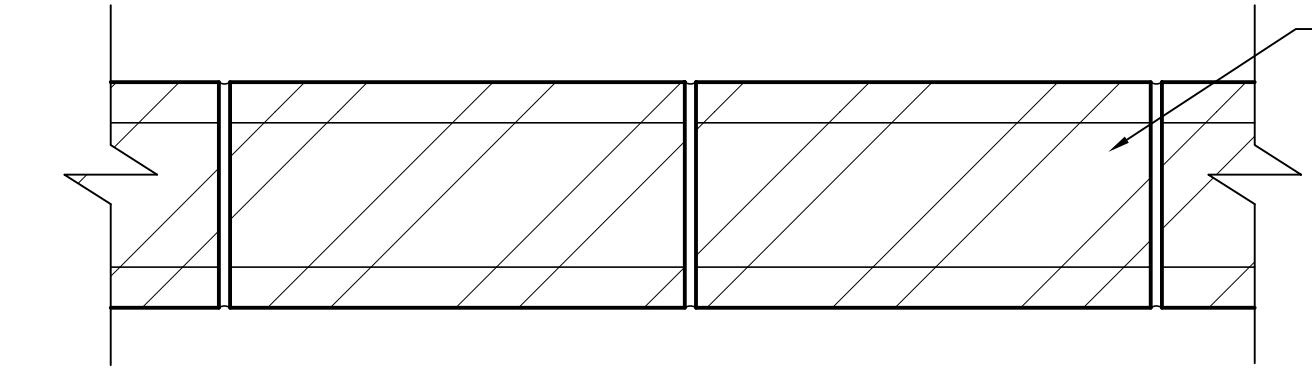


**W6** 2 HR NON-BEARING SHAFT WALL ASSEMBLY 45 to 49 STC  
 G.A. FILE NO. WP7083  
 Fire Test: WHI 495-0569, 11-4-83; 495-0570, 11-7-83  
 Sound Test: WEAL 84-108, 3-16-84

- One layer 1" x 24" proprietary type X gypsum panels
- Gypsum inserted between 2-1/2" floor and ceiling J runners with H section of 2-1/2" 20 gauge proprietary vented C-H steel studs between panels.
- 1-1/2" mineral fiber insulation in stud space.
- Base layer 5/8" proprietary type X gypsum wallboard applied parallel to studs with 1" long Type S-12 drywall screws 24" o.c.
- Face layer 1/2" proprietary cementitious backer units applied parallel or at right angles to studs with 1-5/8" long Type S-12 wafer head screws spaced 8" o.c. and 4" wide strips of ANSI A136.1 Type Y organic adhesive midway between studs applied using a 1-4" notched trowel. Joints offset from base layer joints.

**(N/LB) PROPRIETARY GYPNUM BOARD**  
 - United States Gypsum Company - 5/8" SHEETROCK® Brand Gypsum Panels, FIRECODE® Core  
 - 1" SHEETROCK® Brand Gypsum Liner Panels

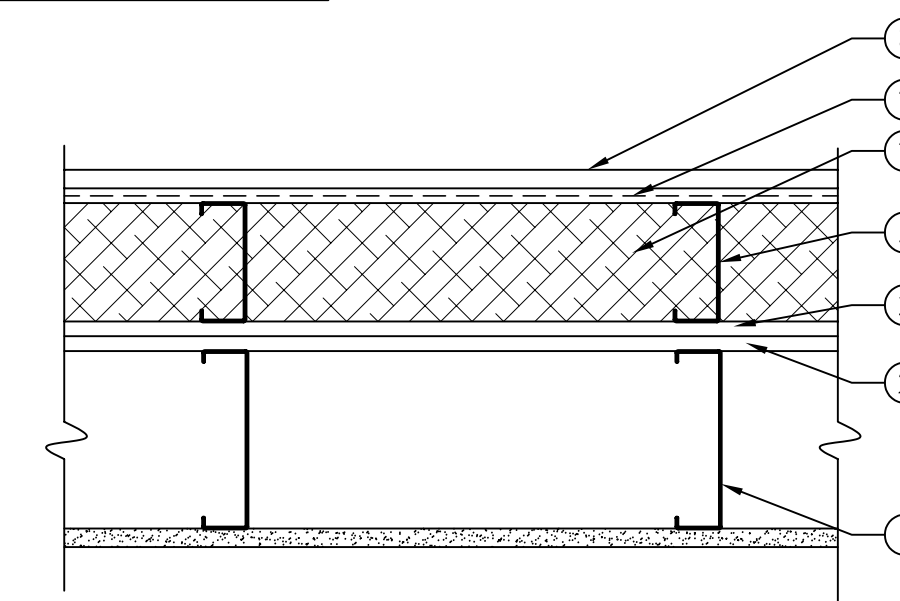
**W7** 3 HOUR WALL ASSEMBLY



**W7** CONCRETE BLOCK FIRE WALL - RATING - 3 HOUR  
 DESIGN NUMBER U.L. U904 BEARING WALL ASSEMBLY

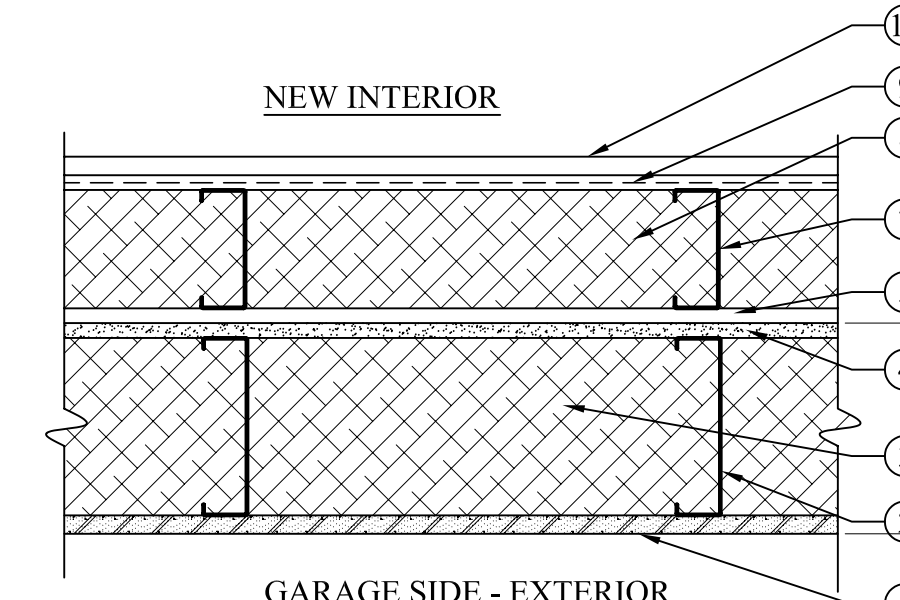
- Concrete Blocks** - Various designs. Classification C-3 (3 hr).
- Mortar** - Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

**W8** UN-RATED STUD WALL ASSEMBLY



- Existing Exterior Stud Wall at Hotel** - Verify stud depth and location of existing stud wall at West wall of Portland Harbor Hotel.
- Existing exterior wall sheathing.
- 1/2" gap between new stud wall and existing exterior wall sheathing.
- Steel Floor and Ceiling Runners** - (Not Shown) - Channel shaped, 4 in. wide by 1-1/4 in. deep, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.
- Steel Studs** - Channel shaped, 4 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 25 MSG galv steel spaced 24 in. OC max.
- Fiber, Sprayed** - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.
- Resilient Channel** - 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 panhead steel screws.
- Gypsum Board** - 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Horizontal joints need not be backed by framing. Fastened with Type S-12 screws

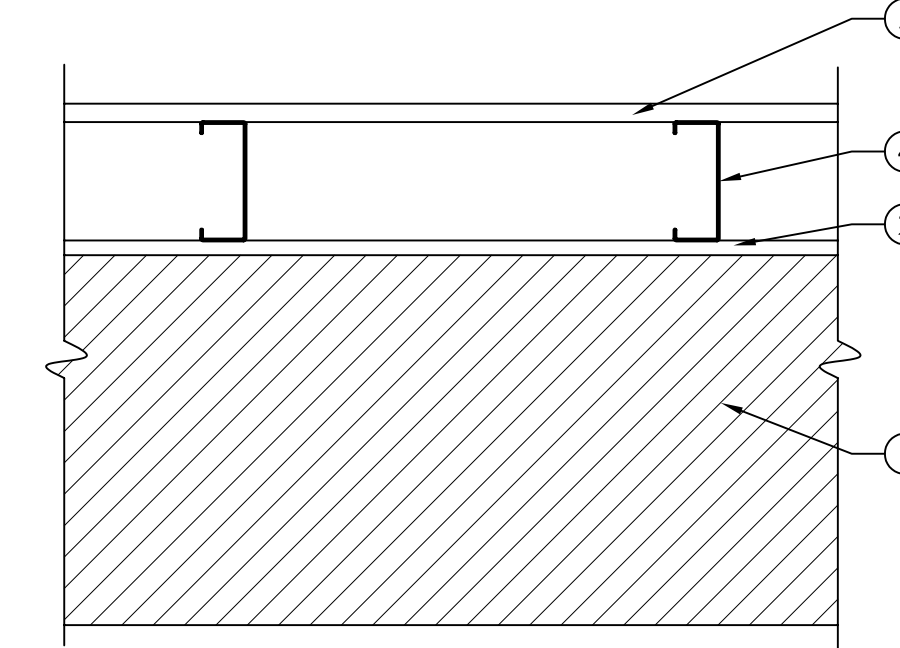
**W8** UN-RATED STUD WALL AGAINST EXISTING HOTEL STUD WALL



**W9** 1-HOUR RATED WALL ASSEMBLY  
**UL Design No. U404 - 1 HOUR FIRE NONBEARING WALL RATING**  
 Fire Resistance Ratings - ANSUL 263  
**GYPNUM WALLBOARD, CEMENTITIOUS BACKER UNITS, STEEL STUDS (NON-LOADBEARING)**

- Cementitious Backer Units** - 1/2 in. thick, applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with corrosion resistant, chamfered, ribbed wafer head screws with a minimum head diameter of .400 inch. For nonbearing systems, fastened to studs and bottom runners with the uppermost screws placed 1/2 in. to 2 in. below the bottom edge of the leg of the top runner. Horizontal joints need not be backed by framing. **1 Hr System** - Screws shall be min 1-1/4 in. long and spaced a max of 8 in. OC. All vertical joints staggered one stud cavity from gypsum board vertical joints on the opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered.
- Existing Exterior Stud Wall at Hotel** - Verify stud depth and location of existing stud wall at West wall of Portland Harbor Hotel.
- Fiber, Sprayed** - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>. APPLIED FROM GARAGE SIDE
- Existing exterior wall sheathing.
- 1/2" gap between new stud wall and existing exterior wall sheathing.
- Steel Floor and Ceiling Runners** - (Not Shown) - Channel shaped, 4 in. wide by 1-1/4 in. deep, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.
- Steel Studs** - Channel shaped, 4 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 25 MSG galv steel spaced 24 in. OC max.
- Fiber, Sprayed** - 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 3.0 lb/ft<sup>3</sup>. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft<sup>3</sup>.
- Resilient Channel** - 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 panhead steel screws.
- Gypsum Board** - 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Horizontal joints need not be backed by framing. Fastened with Type S-12 screws

**W9** 1-HOUR RATED BETWEEN EXISTING GARAGE AND NEW ADDITION



**W10** UN-RATED STUD WALL ASSEMBLY

**W10** UN-RATED STUD WALL AGAINST EXISTING BRICK WALL

- Existing Multi-Wythe brick masonry wall.**
- 1/2" gap between new stud wall and face of masonry.
- Steel Floor and Ceiling Runners** - (Not Shown) - Channel shaped, 4 in. wide by 1-1/4 in. deep, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.
- Steel Studs** - Channel shaped, 4 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 25 MSG galv steel spaced 24 in. OC max.
- Gypsum Board** - 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Horizontal joints need not be backed by framing. Fastened with Type S-12 screws

OWNER:		468 FORE STREET REALTY LLC		FORE STREET PORTLAND, ME 04101	
ARCHETYPE, P.A. ARCHITECTS		48 Union Wharf Portland, Maine 04101		(207) 772-6022 Fax (207) 772-4056	
PORTLAND HARBOR HOTEL ANNEX		468-470 FORE STREET PORTLAND, MAINE			
Project:					
Revisions:					
Scale	Not to Scale				
Date	17 August 2007				
Bid Set - 17 August 2007		Addendum One - 31 August 2007			
WALL ASSEMBLIES		A4.01			