

#### GUESTROOM/CORRIDOR GUESTROOM SEPARATION WALL

BASED ON U.L. NO U452; STC 58 (RAL-TL-83-215) OMIT 3 1/2" STUDS, PROVIDE 3 5/8" STUDS (5 7/8")

OMIT 3 5/8" STUDS, PROVIDE 6" STUDS (8 1/2")

OMIT 3 5/8" STUDS, PROVIDE 8" STUDS (10 1/2")

Design No. U452

### Nonbearing Wall Rating - 1 1/2 HR

1. Studs -- Channel-shaped, 3-5/8 in. wide by 1-1/4 in. deep with 5/16 in. folded back return flange legs. Fabricated from No. 20 MSG galv steel. Max stud spacing 24 in. OC. Studs to be cut 1 in. less than assembly

2. Floor and Ceiling Runners (Not Shown) —Channel-shaped runners, 3-5/8 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.

3. Furring Channel —Resilient 25 MSG galv steel furring 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.

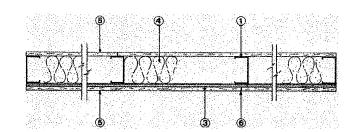
4. Batts and Blankets — Placed in stud cavity, 3 in. min thickness.

5. Gypsum Board -5/8 in. thick, 4 ft wide. Screw attached one side to furring channels with 1 in. long, type 5 steel screws spaced 12 in. OC. Wallboard on direct attached side, base layer attached 1 in. long type S-12 steel screws spaced 24 in. OC, face layer attached 1-5/8 in. long type S-12 screws spaced 12 in. OC. Wallboard joints oriented vertically, located over studs and offset between layers.

6. 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, norn 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints

7. Caulking and Sealants\* — (Optional, not shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.

#### \*Bearing the UL Classification Mark



### CORRIDOR WALL - PUBLIC SPACE

2 BASED ON U.L. NO U451, STC 54 (RAL-TL-83-216) (5 3/8")

2A OMIT 3 5/8" STUDS, PROVIDE 6" STUDS (7 3/4")

#### Design No. U451 Nonbearing Wall Rating - 1 Hr

1. Studs — Channel-shaped, 3-5/8 in. wide by 1-1/4 in. deep with 5/16 in. folded back return flange legs. Fabricated from No. 20 MSG galv steel, Max stud spacing 24 in. OC. Studs to be cut I in. less than assembly

2. Floor and Ceiling Runners (Not Shown) — Channel-shaped runners, 3-5/8 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.

3. 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.

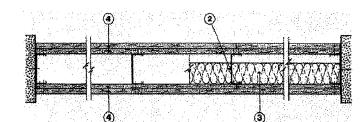
4. Batts and Blankets — Placed in stud cavity, 2-1/2 in. min thickness.

5. Gypsum Board — 5/8 in. thick, 4 ft wide. Screw attached one side to resilient or furring channels with 1 in, long, Type 5 steel screws spaced 12 in, OC. Wallboard on direct attached side secured to study with 1 in. long Type 5-12 steel screws spaced 12 in. Wallboard joints oriented vertically, located over study and offset between lavers.

6. 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, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints

7. Caulking and Sealants\* — (Optional, not shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.

\*Bearing the UL Classification Mark



### 2HR PARTITION WALL

BASED ON U.L. NO U411, STC 56 (USG-840818)

OMIT 3 5/8" STUDS, PROVIDE 6" STUDS (8 1/2")

OMIT 3 5/8" STUDS, PROVIDE 8" STUDS (10 1/2")

#### Design No. U411 Nonbearing Wall Rating - 2Hr

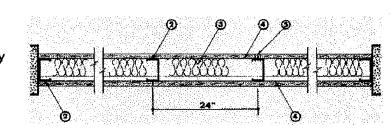
1. Floor and Ceiling Runner — (Not Shown) — Min. 20 MSG galv steel 1 in. high, return leas 3 5/8 in. wide (min), attached to floor and ceiling with fasteners 24 in. OC.

2. Steel Studs —Min 3 5/8 in. wide, 1-1/4 in. legs, 3/8 in. return, formed of min 20 MSG galv steel max stud spacing 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

3. Batts and Blankets\* —Mineral wool or glass fiber batts partially or completely filling stud cavity. Fasten each batt to wallboard base layer with a min 9/16 in, long staple. Use five staples for each 4 ft piece. Drive one staple in the center of each piece and a staple at each corner, approx 3 in. from edges. See Batts and Blankets (BZJZ) category for names of manufacturers.

4. Gypsum Board\* -5/8 in. thick, outer layer paper or vinyl surfaced. (Laminated System) Wallboard applied vertically in two layers. Inner layer attached to study with 1 in. long Type 5 steel screws spaced 8 in. OC along vertical edges, and 12 in. OC in the field and outer layer larminated to inner layer with joint compound, applied with a notched spreader producing continuous beads of compound about 3/8 in. in diameter, spaced not greater than 2 in. OC. Joints of laminated outer layer offset 12 in. from inner layer joints Outer layer wallboard attached to floor and ceiling runner track with 1-5/8 in. long Type S steel screws spaced 12 in. OC.

### \*Bearing the UL Classification Mark



### PARTITION WALL - GUESTROOMS

BASED ON U.L. NO U448 47 STC (SA-831001) (3 3/4")

> OMIT I LAYER GYPSUM BOARD (SHAFT SIDE) (3 1/8")

OMIT INSULATION (3 3/4")

OMIT I LAYER GYPSUM BOARD (SHAFT SIDE) AND INSULATION (3 1/8")

#### Design No. U448 (SA-831001) Bearing Wall Rating - IHR. Nonbearing Wall Rating - IHR

1. Floor and Ceiling Channel -2-1/2 in. wide by 1-3/8 in. deep channel, 0.021 (20 MSG) galvanized steel, attached with screws spaced 24 in. OC.

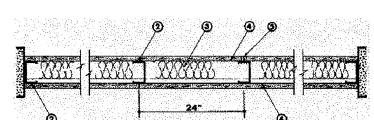
2. Steel Stude -2-1/2 in. wide by 1-3/8 in. deep channel sections with 1/4 in. lip on each flange tip, 0.021 in, (20 MSG) galvanized steel studs spaced 24 in, OC.

3. Batts and Blankets\* -1-1/2 in. thick mineral wool batts supplied in 2 by 4 ft batts; attached to wallboard with staples 18 in, OC.

4. Gypsum Board\* -5/8 in. thick, 4 ft wide, attached to steel study and floor and ceiling track with 0.127 in. diam self-drilling, self-tapping screws, 1 in. long 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.

5. 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.

### \*Bearing the UL Classification Mark



### PARTITION WALL

BASED ON U.L. NO U448 STC 47 (SA-831001) (4 7/8")

OMIT 3 5/8" STUDS, PROVIDE 6" STUDS (7 1/4")

OMIT I LAYER GYPSUM BOARD (SHAFT SIDE) (4 1/4")

OMIT INSULATION (4 7/8") OMIT I LAYER GYPSUM BOARD (SHAFT SIDE)

OMIT 3 5/8" STUDS, PROVIDE 8" STUDS (9 1/4")

AND INSULATION (4 1/4")

OMIT 3 5/8" STUDS, PROVIDE 6" STUDS, OMIT 1 LAYER GYPSUM BOARD AND INSULATION (6 5/8")

#### Design No. U448 (SA-831001) Bearing Wall Rating - IHR. Nonbearing Wall Rating - IHR

1. Floor and Ceiling Channel -3-5/8 in. wide by 1-3/8 in. deep channel, (20 MSG) galvanized steel, attached with screws spaced 24 in. OC.

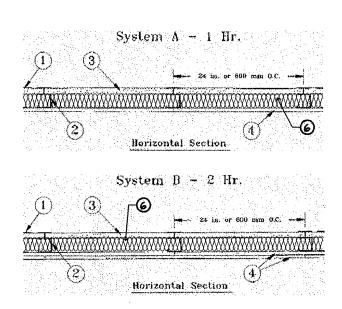
2. Steel Studs -3-5/8 in. wide by 1-3/8 in. deep channel sections with 1/4 in. lip on each flange tip, (20 MSG) galvanized steel studs spaced 24 in. OC.

3. Batts and Blankets\* -2-1/2 in. thick mineral wool batts supplied in 2 by 4 ft batts; attached to wallboard with staples 18 in. OC.

4. Gypsum Board\* -5/8 in. thick, 4 ft wide, attached to steel study and floor and ceiling track with 0.127 in. diam self-drilling, self-tapping screws, 1 in. long 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.

5. 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.

\*Bearing the UL Classification Mark



#### SHAFT/DUCT ENCLOSURE

I HOUR FIRE RATING - SYSTEM "A" (39 STC) (3 1/8")

BASED ON U.L. NO U415 BASED ON U.L. NO U415
2 HOUR FIRE RATING - SYSTEM "B" (49 STC) (3 3/4")

2 HOUR FIRE RATING - SYSTEM "B" - OMIT 2 1 C-H STUD, PROVIDE 6" C-H STUD (7 1/4")

1. Floor, Side and Ceiling Runners --  $^{8}J^{8}$  - shaped runner, min 2-1/2 in. deep with unequal legs of 1 in. and 2 in., fabricated from min 24 MSG (min 20 MSG when Item 4A or 7 are used) 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. from ends and not greater than 24 in. OC. "E" - shaped studs (Item 2A) may be used as side runners in place of "J" - shaped runners.

2. Steel Studs -- "C-H" - shaped studs, min 2-1/2 in deep fabricated from min 25 MSG galv steel. Cut to lengths 3/8 to 1/2 in. less than floor-to-ceiling height and spaced 24 in. or 600 mm OC. 2A. Steel Studs -- (Not Shown) -- "E" - shaped studs installed back to back in place of "C-H" - shaped studs (Item 2) "E" - shaped studs secured together with steel screws spaced a maximum 12 in. OC. Fabricated from min 25 MSG galy steel, min 2-1/2 in. deep with one leg 1 in. long and two legs 3/4 in. long. Shorter legs 1 in. apart to engage gypsum liner panels. Cut to lengths 3/8 to 1/2 in. less than floor to ceiling

3. Gypsum Board\* -- Gypsum liner panels, norn 1 in. thick, 24 in. or 600 mm (for metric spacing) wide. Panels cut I in. less in length than floor to ceiling height. Vertical edges inserted in "H" portion of "C-H" studs or the gap between the two 3/4 in. legs of the "E" studs. Free edge of end panels attached to long leg of vertical "J" - runners with 1-5/8 in. long Type 5 steel screws spaced not greater than 12 in. OC. When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing.

#### 4. Gypsum Board\* ---System A - 1 Hr

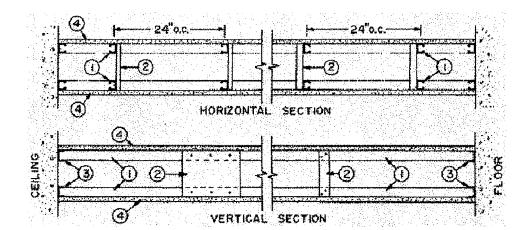
Gypsum panels, with beveled, square or tapered edges, norn 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to study with 1 in. long Type S steel screws spaced 12 in. when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel framing.

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type 5 steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to study with 1-5/8 in. long Type 5 steel screws spaced 12 in. OC when installed vertically and staggered 12 in, from base layer screws or 8 in. OC when installed horizontally and staggered 8 in, from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over study and staggered 24 in.

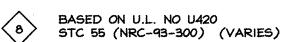
### 5. Joint Tape and Compound -- (Not Shown)

Systems A, B Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound.

6. Batts and Blankets\* - Glass fiber batts may be installed in the interior in the interior or wall cavity. 3½" batt for walls with I hour assembly ratings. Attached to wallboard with wire staples spaced horizontally 12" O.C. and vertically 24" O.C.



## PARTITION WALL



1. Studs —Channel —shaped 1 5/8 in. wide with 1 3/8 in. legs and 1/4 in. stiffening flanges. Fabricated from No. 20 MSG galv steel. Studs to be cut 1/4 in, less than assembly height.

2. Bracing —Cut from the steel runners, min. 4-1/4 in. long, fastened to the studs with two No. 8 by 1/2 in. long self-drilling, self-tapping steel screws in each stud. As an alternate, but limits the stud cavity depth to maximum 9-1/2 in., cut from the gypsum wallboard, 9-1/2 in. long and 12 in. wide, fastened to the studs with three Type 5 wallboard screws in each stud. Vertical spacing of bracing not to exceed 48 in. OC.

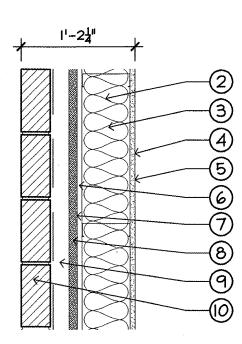
3. Floor and Ceiling Runners —Channel —shaped 1 5/8 in. wide with 1 in. legs, fabricated from No. 25 MSG galv steel. Attached to floor and ceiling with fasteners spaced 24 in. OC.

4. Gypsum Board\* - Any 5/8 in. thick wallboard for fire resistance Classified with beveled, square, or tapered edges. For SCT requirements —One layer of wallboard to be used on each side. Applied vertically with joints centered over studs. Fastened to studs with I in. long, Type S, wallboard screws spaced

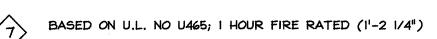
8 in. OC at the joints, located 3/8 in. from the edges, and 12 in. OC in the field. Fasteners to be spaced 8 in. OC at the runners. Fasteners to be spaced 8 in. OC at the runners. Joints to be staggered 24 in. from the inner layer.

5. Joint Tape and Compound -- Vinyl or casein, 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.

6. Batts and Blankets\* — (Not shown, but required for STC rating) Glass fiber batts may be installed in the interior or wall cavity. The max thickness of the batts shall be 2 1/2 in. Attached to wallboard with wire staples spaced horizontally 12 in. OC and vertically 24 in. OC. \*Bearing the UL Classification Mark



### EXTERIOR WALL





 Floor and Ceiling Runners — (not shown) — Channel shaped runners, 6 in. wide (min), 1-1/4 in. legs, formed from min No. 20 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

2. Steel Studs —Channel shaped, 6 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 20 MSG galv steel spaced 24 in. OC max.

3. Batts and Blankets\* -6" Mineral wool or glass fiber batts partially or completely filling stud cavity.

4. Gypsum Board\* -5/8 in. thick, 4 ft wide, attached to steel study and floor and ceiling track with 1 in. long, Type 5 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) or 6A (furring channels), wallboard is screw attached to furring channels with 1 in. long, Type 5 steel screws spaced 12 in. OC.

5. 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 amitted when gypsum boards are supplied with square edges.

6. 5/8" thick Dens Glass, all joints taped with peel and stick membrane.

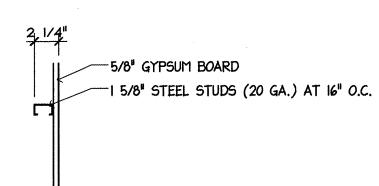
7. #15 building felt continuous over dens glass sheathing as drainage plain

8. 1 Rigid Insulation

### 9. 2" Air Barrier

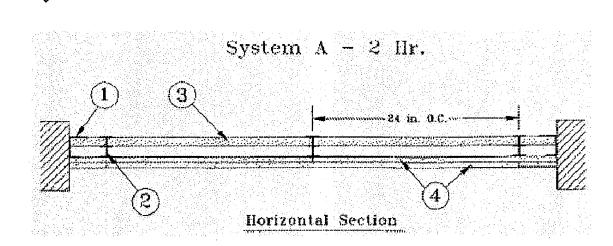
10. Brick Veneer

\*Bearing the UL Classification Mark



### FURRING/COLUMN WRAP





### HORIZONTAL PARTITION



BASED ON U.L. NO U417 2 HOUR RATING SYSTEM "A" (WHI 651- 0306.4 1989) (3 3/4")

1. Floor, Side and Ceiling Runners — "J" -shaped runner, min 2-1/2 in. deep, with unequal legs of 1-1/8 in. and 2-1/8 in., fabricated from min 25 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. from ends and not greater than 24 in, OC.

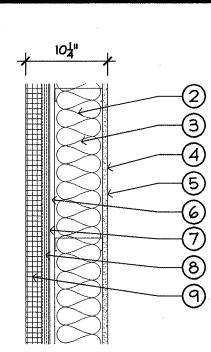
2. Steel Studs — (Systems A, B, E, G and 1) "I" -shaped studs fabricated from min 25 MSG galv steel. min 2-1/2 in. deep, 1-1/2 in. wide. Studs contain 3/4 in. wide by 2-1/4 in. high holding tabs spaced 2-3/4 in. OC. Cut to lengths 5/8 in. less than floor-to-ceiling height and spaced 24 in.

3. Gypsum Board\* — Gypsum liner panels, nom 1 in. thick, 24 in. wide. Panels cut max 1 in. less in length than floor to ceiling height. Vertical edges inserted in "T" -shaped section of "C-T" studs or tabs holding tabs of "I" studs. Free edge of end panels attached to long leg of "J" -runners with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced not greater than 12 in. OC.

4. Gypsum Board\* — (Systems A and C) Gypsum panels, nom 1/2 or 5/8 in. thick, 48 in. wide, applied in one of the following methods. Method I —Base layer installed horizontally to steel studs with I in. long Type 5 self-drilling, self-tapping bugle head steel screws spaced 24 in. OC. Face layer installed vertically to steel studs with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 24 in. OC, staggered 12 in. from base layer screws. Method 2 —Base layer installed vertically to steel studs with 1 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 24 in. OC. Face layer installed horizontally to steel studs with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 24 in. OC, staggered 12 in. from base layer screws. Additionally, Type G screws to be installed at the center of each stud cavity, 1-1/2 in. from both sides of the horizontal joint. For the 1/2 in. thick and 5/8 in. thick boards, the Type G screw length shall be 1-1/4 in. and 1-1/2 in. long, respectively.

5. Joint Tape and Compound — (Not shown) — Joints covered with joint compound and paper or mesh tape. Screw heads covered with joint compound.

\*Bearing the UL Classification Mark





BASED ON U.L. NO U465; 1 HOUR FIRE RATED (10 1/4")



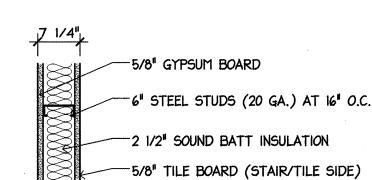
1-5 same as 7 and 7A

6. 5/8" thick Dens Glass, all joints taped with peel and stick membrane.

7. Air Barrier compatible with EIFS system

8, 1" Drain Board

9. 2" EIFS system



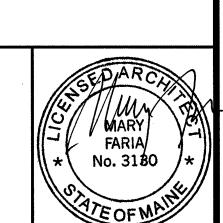
### MONUMENTAL STAIR WALL



OMIT 6" STUDS, PROVIDE 12" STUDS (13 1/4")

# PERMIT ISSUE $= \frac{100}{27}$

NO.	REVIS	SION	DATE
SCALE: As Noted		DRAWN BY: AVS	
DATE:		CHECKED BY: JR	



**PROJECT** 

# RESIDENCE INN BY MARRIOTT

PORTLAND, ME

JOB# 802

WALL TYPE LEGEND

UL ASSEMBLIES

GROUP ONE 21 W. THIRD STREET. BOSTON, MA 02127 TEL (617)268-7000 FAX: (617)268-0209



DRAWING NO.