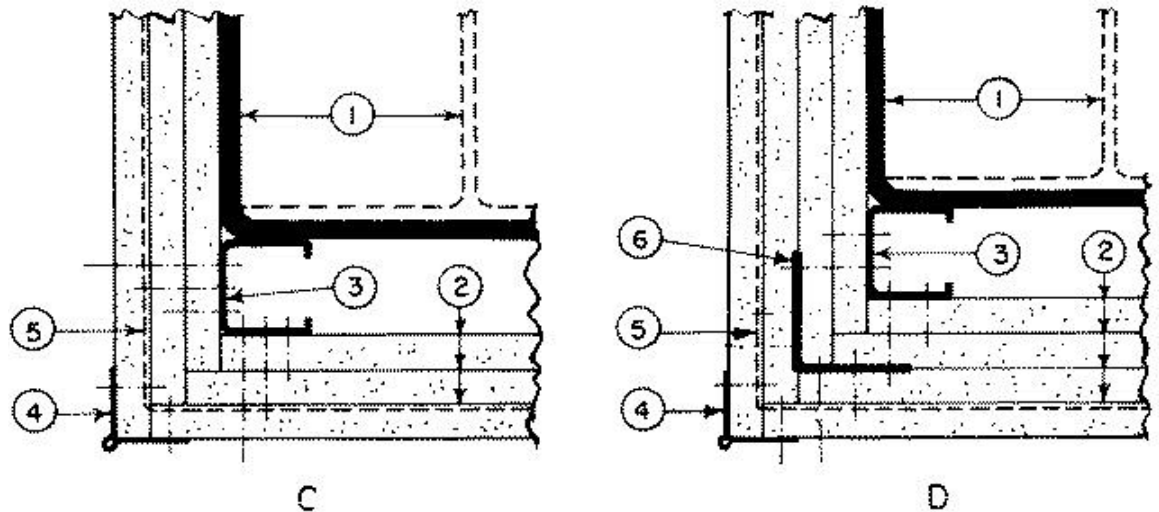


Fire Resistance Ratings - ANSI/UL 263

Design No. X528

May 29, 2001

Ratings — 1, 2 and 3 Hr.



CORNER DETAILS OF WALLBOARD SUPPORT SYSTEMS WITHOUT STEEL COVERS

1. **Steel Column** — Min sizes of W-shaped and tubular steel columns which appear in the AISC Steel Construction Manual as shown under Item 2.
2. **Gypsum Board*** — For 1 Hr rating, any 5/8 in. or 1/2 in. thick gypsum wallboard Classified for use in fire resistance assemblies. For 2 Hr and 3 Hr ratings, any 5/8 in. or 1/2 in. thick gypsum wallboard Classified for use in other 2 Hr, 3 Hr or 4 Hr Column Designs. Min total thickness of layers in inches for the various ratings and min column sizes are as follows:

| W Shaped Column Min Column Size | Rating (Hr) | | | Corner Details For Various Rating | | |
|---------------------------------|-----------------------|-------|-------|-----------------------------------|------|------|
| | 1 | 2 | 3 | 1 Hr | 2 Hr | 3 Hr |
| | Total thickness (In.) | | | | | |
| W4x13 | 1 | 1-1/2 | 2-1/4 | B | C | D |

| | | | | | | |
|---------------------|-----|-----------|-----------|---|---|---|
| W6x15.5 | 1 | 1- 1/2 | 2- 1/4 | B | C | D |
| W10x49 | 1/2 | 1- 1/8 | 1- 7/8 | A | B | C |
| Tube Shaped columns | | | | | | |
| TS 4 by 4 | | | | | | |
| by 0.188 | 1 | 1- 5/8 | 2- 1/2 | B | C | D |
| TS 8 by 8 | | | | | | |
| by 0.250 | 5/8 | 1- 5/8 | 2- 1/2 | A | C | D |

Applied in layers as noted in the above illustrations. Boards are to be applied vertically without horizontal joints.

See **Gypsum Board (CKNX)** category for names of manufacturers.

2A. Gypsum Board* — As an alternate to Item 2- 3/4 in. thick gypsum wallboard. For 2 Hr rating, 1-1/2 in. total thickness, installed in accordance with corner detail B. For 3 Hr rating, 2-1/4 in. total thickness installed in accordance with corner detail C. Boards are to be applied vertically without horizontal joints.

CANADIAN GYPSUM COMPANY — Type IP-X3, ULTRACODE, ULTRACODE SHC or ULTRACODE WRC.

UNITED STATES GYPSUM CO — Type IP-X3, ULTRACODE, ULTRACODE SHC or ULTRACODE WRC.

USG MEXICO S A DE C V — Type IP-X3, ULTRACODE, ULTRACODE SHC or ULTRACODE WRC.

3. Steel Stud — 1-5/8 in. wide with 1-5/16 and 1-7/16 in. legs having a 1/4 in. folded flange, fabricated from No. 25 MSG galv steel. Length to be 1/2 in. less than the assembly height.

3A. As an alternate to Item 3 Steel Framing Members* — galv. steel clips spaced 4 ft OC and 1-1/4 in. from top and bottem of column. A No. 28 MSG galv steel support angle with 1-1/4 in. length shall be placed over clips and secured with screws attaching the wallboard. The angle cut 1 in. less than assembly height splices in angle to occur over clips. The clips for use with wide flange columns only.

JOHN WAGNER ASSOCIATE INC, DBA

GRABBER — Types CB, CB1Clips.

4. **Corner Beads** — No. 28 MSG galv steel, 1-1/4 in. legs to be attached to the wallboard with No. 6 by 1 in. screws spaced 12 in. OC max.

5. **Tie Wire** — No. 18 SWG steel wire spaced 24 in. OC used with second layer of wallboard.

6. **Screws** — For attaching first layer of wallboard to steel studs, and third layer of wallboard to 2 in. by 2 in. steel angle (25 Ga) to be No. 6 by 1 in. (or 1-1/4 in. for 3/4 in. thick wallboard) Phillips head self-drilling, self-tapping double lead screws spaced 24 in. OC For attaching second layer of wallboard to steel studs and fourth layer of wallboard to 2 in. by 2 in. steel angle (25 Ga) to be No. 6 by 1-3/4 in. (or 2-1/4 in. for 3/4 in. thick wallboard) steel screws of the same type spaced 12 in. OC For attaching third layer of wallboard to steel studs to be No. 8 by 2-1/4 in. screws of the same type spaced 12 in. OC

7. **Finishing System** — (Not Shown) — Joint compound applied over corner beads to a thickness of 1/16 in.

*Bearing the UL Classification Mark

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