

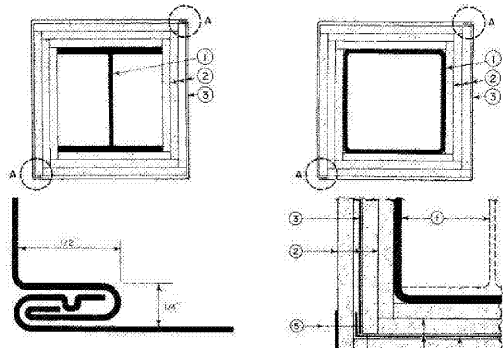
1 HOUR RATED STEEL COLUMNS

BXUV - Fire Resistance Ratings - ANSIIUL 263
BXUV7 - Fire Resistance Ratings - CANULC-S101 Certified for Canada
 See General Information for Fire Resistance Ratings - ANSIIUL 263
 See General Information for Fire Resistance Ratings - CANULC-S101 Certified for Canada

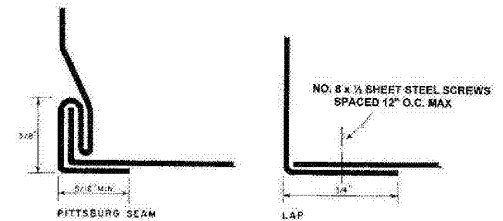
Design No. X526

March 14, 2014
 Ratings — 1, 2, 3 and 4 Hr.

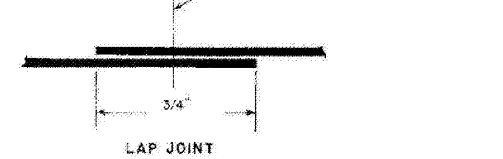
When used in Canada it is required that all materials included within the UL design are also cUL certified.



SNAP-LOCK



NO. 8 x 1/2 SHEET STEEL SCREWS SPACED 12" O.C. MAX



LAP JOINT

- Steel Column** — Min size of W shape and tubular steel column is the AISI Steel Construction Manual as shown under Item 2.
- Gypsum Board** — Any 1/2 in. thick UL Classified Gypsum Board that is eligible for use in Design No. X515. Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design No. X511, C512 or U520. Min 5/8 in. thick or 1/2 in. thick gypsum board. Min total thicknesses of layers in inches for the various ratings and min. column sizes are as follows:

W Shape Columns	Min Column Size	Rating Hr			
		1	2	3	4
		Outside Dimensions In.	Flange Thkns In.	Web Thkns In.	In ² Area
W4x13	4-10x4	0.345	0.280	3.82	1 2 3 4
W6x15.5	6x6	0.209	0.235	4.56	1 2 3 4
W10x49	10x10	0.558	0.340	14.4	1 2 3 4

Tubular Shape Columns

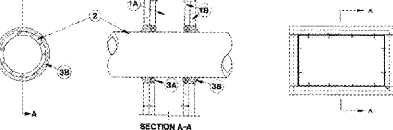
Min Column Size	Rating Hr				
	1	2	3	4	
	Outside Dimensions In.	In.	In.	In ² Area	
TS4X4X0.188	4x4x	0.188	0.188	4	1 2 3 4
TS6X6X0.25	6x6x	0.25	0.25	6	1 2 3 4
TS8X8X0.312	8x8x	0.312	0.312	8	1 2 3 4

Each layer held together with paper masking tape to prevent separation of succeeding layers.
 Minimum rating of 1/2 hr or less, one layer of gypsum board may be applied to the outer surface of the column. The remaining layers, without horizontal joints, attached to the inner surface of the column, shall be in the U.S.

- ACME GYPSUM WALL SUPPLIES LTD (View Classification) — CNKXR23370
- AMERICAN GYPSUM CO (View Classification) — CNKXR14186
- BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CNKXR19374

1 HOUR WALL PENETRATIONS

System No. W-L-1312
 January 01, 2010
 F Rating — 1 Hr (See Item 3)
 T Rating — 1 Hr



1. Wall Assembly — The 1 or 2 fire-rated gypsum board units shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Wall framing may consist of either wood stud or metal channel stud. Wood studs shall consist of 2x4 or 2x6 (No. 2 max) lumber spaced 16 in. O.C. Metal studs shall be 1 1/2 in. wide and spaced 24 in. O.C.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

2. Framing System — The wall framing system shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Wall framing may consist of either wood stud or metal channel stud. Wood studs shall consist of 2x4 or 2x6 (No. 2 max) lumber spaced 16 in. O.C. Metal studs shall be 1 1/2 in. wide and spaced 24 in. O.C.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

3. Panel Rev S A (View Classification) — CNKXR21786

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CNKXR19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CNKXR27817

UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

USG MEXICO S A DE C V (View Classification) — CNKXR10689

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994

PANEL REV S A (View Classification) — CNKXR21786

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CNKXR19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CNKXR27817

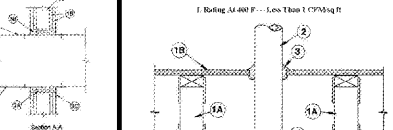
UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

USG MEXICO S A DE C V (View Classification) — CNKXR10689

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994

System No. W-L-7009
 November 21, 2011
 F Rating — 1 Hr (See Item 3)
 T Rating — 1 Hr



1. Wall Assembly — The 1 or 2 fire-rated gypsum board units shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Wall framing may consist of either wood stud or metal channel stud. Wood studs shall consist of 2x4 or 2x6 (No. 2 max) lumber spaced 16 in. O.C. Metal studs shall be 1 1/2 in. wide and spaced 24 in. O.C.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

2. Framing System — The wall framing system shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Wall framing may consist of either wood stud or metal channel stud. Wood studs shall consist of 2x4 or 2x6 (No. 2 max) lumber spaced 16 in. O.C. Metal studs shall be 1 1/2 in. wide and spaced 24 in. O.C.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

3. Panel Rev S A (View Classification) — CNKXR21786

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CNKXR19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CNKXR27817

UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

USG MEXICO S A DE C V (View Classification) — CNKXR10689

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994

PANEL REV S A (View Classification) — CNKXR21786

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CNKXR19262

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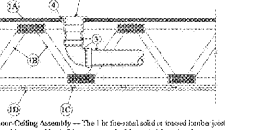
USG MEXICO S A DE C V (View Classification) — CNKXR10689

USG MEXICO S A DE C V (View Classification) — CNKXR10689

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994

1 HOUR FLOOR/CEILING PENETRATIONS

System No. F-C-1006
 April 01, 2007
 F Rating — 1 Hr
 T Rating — 1 Hr



1. Floor/Ceiling Assembly — The 1 fire-rated solid or cross-laminated panel shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Framing System — Lumber or ground treated wood joist floor or ceiling framing system shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 1. Wood Joist — No. 2 (No. 1 max) 2x12 spaced 16 in. O.C. with top edge tapered. The joist shall be supported by a metal hanger, steel joist hanger or metal joist hanger with a metal strap.
 2. Floor/Ceiling Decking — 1 1/2 in. thick solid wood joist, veneered or cross-laminated wood and shall meet the minimum requirements of the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Decking shall be finished with a minimum of two coats of a penetrating sealer.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

2. Framing System — The framing system shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Decking shall be finished with a minimum of two coats of a penetrating sealer.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

3. Panel Rev S A (View Classification) — CNKXR21786

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CNKXR19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CNKXR27817

UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

USG MEXICO S A DE C V (View Classification) — CNKXR10689

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994

PANEL REV S A (View Classification) — CNKXR21786

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THAI GYPSUM PRODUCTS PCL (View Classification) — CNKXR27817

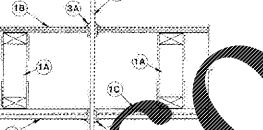
UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

USG MEXICO S A DE C V (View Classification) — CNKXR10689

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994

System No. F-C-2278
 June 23, 2011
 F Rating — 1 Hr
 T Rating — 1 Hr



1. Floor/Ceiling Assembly — The 1 fire-rated solid or cross-laminated panel shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Framing System — Lumber or ground treated wood joist floor or ceiling framing system shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 1. Wood Joist — No. 2 (No. 1 max) 2x12 spaced 16 in. O.C. with top edge tapered. The joist shall be supported by a metal hanger, steel joist hanger or metal joist hanger with a metal strap.
 2. Floor/Ceiling Decking — 1 1/2 in. thick solid wood joist, veneered or cross-laminated wood and shall meet the minimum requirements of the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Decking shall be finished with a minimum of two coats of a penetrating sealer.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

2. Framing System — The framing system shall be constructed of the materials and in the manner specified in the individual UL or E-Listed Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Finish — Decking shall be finished with a minimum of two coats of a penetrating sealer.
 B. Gypsum Board — 5/8 in. thick, 4 in. wide with tapered edges. The gypsum board type, thickness, number of layers, fastener type and fastener spacing shall be specified in the individual UL or E-Listed Design.
 C. Joints — Gypsum board joints shall be staggered and shall be finished with a joint compound and sandpaper.

3. Panel Rev S A (View Classification) — CNKXR21786

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CNKXR19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CNKXR27817

UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

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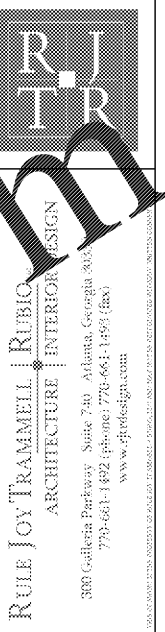
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UNITED STATES GYPSUM CO (View Classification) — CNKXR1319

USG MEXICO S A DE C V (View Classification) — CNKXR10689

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PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CNKXR7994



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