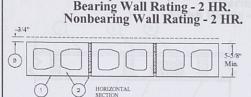
Design No. U906 September 30, 2010



1. Concrete Blocks* - Nominal 6 by 8 by 16 in, hollow or solid. Various designs. Classification

(2 hr).
See Concrete Blocks category for list of eligible manufacturers.
ANCHOR CONCRETE PRODUCTS INC
GAGNE & SON CONCRETE BLOCK INC
GLENWOOD MASONRY PRODUCTS
Allowable compressive stress of 57% of max allowable compressive stress in accordance with the empirical design method.

OLDCASTLE APG SOUTH INC, DBA ADAMS

PRODUCTS
WESTBROOK CONCRETE BLOCK CO INC
Allowable compressive stress of 75.6% of max allowable compressive stress in accordance with
the empirical design method.
2. Mortar — Blocks laid in full bed of mortar, norn. 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.

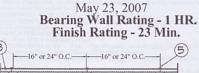
3. Portland Cerment Stucco or Gypsum Plaster — Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1).

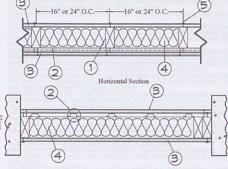
4. Foamed Plastic*— (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

to concrete blocks (Ilem 1).

THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation,
Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation,
Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel and Thermax
Heavy Duty Plus (HDP)

Design No. U311





Wood Studs — Nom 2 by 4 in., spaced 16 or 24. OC. Effectively cross braced.
 Resilient Channel — 23 MSCJ galv steel. Resilient channels spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long Type W come thread gypsum panel steel screws.
 2A. Steel Framing Members (Optional, Not Showm)* — As an alternate to Item 2, furring channels and resilient scords isolation clip as described below:

resilient sound isolation clip as desembed below.

Berufring Channels — Formed of No. 25 MSO galv steel. 2-3/8 in, wide by 7/8 in, deep, spaced 24 in, OC perpendicular to studis. Channels secured to studis as described in Item b. Ends of adjoining channels are overlapped 6 in, and tiet together with double strand ON. 16 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in, and secured together with to was lettered to the contract of the contract

As an internate, class of augustrate drawn and the midpoint of the overlap, with one screw on each flange of paging for famining screws, min. 716 fia. long at the midpoint of the overlap, with one screw on each flange of the state of the paging for the paging f

JOINS MANVILLE INTERNATIONAL INC
ROCKWOOL MALAYSIA SDN BIID — Acoustical Fire Batts
ROXUL INC — Acoustical Fire Batts
THERNATERIER INC — Type SAFB,
4A. Glass Fiber Insulation — (As an alternate to Item 4) — 3 in. thick glass fiber butts bearing the UL
Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall,
attached to the 4 in. face of the studs with studies placed 24 in. OC. See Batts and Blankets (BKNV or BZJZ)
attached to the 4 in. face of the studs with studies placed 24 in. OC. See Batts and Blankets (BKNV or BZJZ)
Categories for manes of Classified companies.
4B. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulous material. The
fiber is applied with the application intructions supplied with the product. Nominal day density of 3.0 b ft.3. Alternate application method: The
fiber is applied with U. S. Creenfiber LLC Type ADIO box braid a flastice at a nominal ratio of one part
adheaves to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application
intruction supplied with the product. Nominal day density of 3.0 b ft.3. Alternate application method: The
fiber is applied with water to completely fill the enclosed cavity in accordance with the application
intruction supplied with the product. Nominal day density of 4.5 ft.8 ft/d.

1. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulous material. The fiber is
applied with water to completely fill the enclosed cavity in accordance with the application intructions
supplied with the product. Nominal day density of 4.5 ft/d.

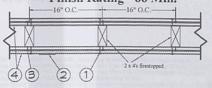
1. VILVAOOL CO INC — Cellulous Insulation
4D. Fiber, Sprayed* — As an alternate, not Batts and Blankets (Item 4) – Spray applied cellulous fiber. The fiber is
applied with the product. The minimum day density of 4.5 ft/d.

1. VILVAOOL CO INC — Cellulous Insulation
4D. Fiber, Sprayed* — As an alternate, not 3.0 ft/d.

1. VILVAOOL CO INC — Cellulous Insulation
4D. Fiber, Sprayed* — As an

Design No. U301

December 15, 2011 Bearing Wall Rating - 2 HR. Finish Rating - 66 Min.



paper tape.

3. Nalls.—6d cement coated nails 1-78 in. long, 0.0915 in. shank diam, 1/4 in. diam heads, and 8d cement coated nails 2-3/8 in. long, 0.113 in. shank diam, 9/32 in. diam heads.

4. Gypaum Baare²⁴.—5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with the 1-7/8 in. mails spaced 6 in. OC. Outer layer attached to studs over inner layer with the 2-3/8 in. long mails spaced 8 in. OC. Vertical joints located over stude. All joints in face layer staggered with joints in buse layers. Joints of each base layer offset with joints of base layer on opposit

olde.

When used in widths other than 48 in., gypsum board to be installed horizontally.

When Steel Framing Members' (Riem 6) are used, base layer attached to farring channels with 1 in. long gyre 5 bugle-head test escrees speed max 24 in. O.C. the layer attached with 1-5/8 in. long Type S cycle-head steel screes speed max 12 in. O.C.

CADIA DRYWALL SEPPLIES I.T.D — Type X.

MICHICAN GYPSUM CO. — Types AGN-1, M-Glass, AG-C, AGX-11.

ELIJING NEW BUILDING MATERIALS FURLEY.

ID CO — Type DBX-I.

ERTAINTEED GYPSUM INC — Types I, FRPC, EGRG, GlasRoc, Type C or Type X.

ERTAINTEED GYPSUM CANADA INC — Type C, Type X, Type Abuse-Resistant.

IGC INC — Types AR, C, IP-AR, IP-XI, IP-X2, IPC-AR, SCX, SHX, ULX, WRC, WRX.

SEORGIA-PACTIFIC GYPSUM L C. C — Type S, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6.

APARGE NORTH AMERICA INC — Types LGFC-C, LGFC2, LGFC2A, LGFC6, LGFC6A, LGFC-V, LGFC-W, LG LAFARGE NORTH AMERICA. IN. — 1998 LUPC-C, LUPC-Z, LUPC-Z, LUPC-D, LOPC-D, LOPC-DA, LUPC-DA, L

PAGE. REY'S A — Types PRC, PRX, RHX, MDX, ETX
PANEL REY'S A — Types PRC, PRX, RHX, MDX, ETX
SIAM GYPSIMI NDUSTRY (SARABURI) CO LTD — Type EX-1
TEMPLE-INLAND — Type TG-C, Type X, Veneer Plaster Base-Type X, Water Rated-Type X,
Sheathing Type-X, Soffit-Type X, (Greefloids Type X,
UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX,
UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX,

MEXICO S A DE C V — Types AR, C, IP-AR, IP-XI, IP-X2, IPC-AR, SCX, SHX, ULX, WRC, VRX.
A. Gypsum Board* — (As an alternate to Item 4) — Nom 3/4 in. thick, installed as described in Item 4.
EGC INC — Types AR, IP-AR.
INITED STATES GYPSUM CO — Types AR, IP-AR.
GG MEYICO S. A DE C V — Types AR. IP-AR.

W.K.

GOC INC — Type AR, IPAR

(GCC INC — Type AR, IPAR

(CCC INC — Type AR, IPAR

(NOTE) AR (IPAR

(NOTE) A

(Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bagle head steel series spaced as described in Item 7.

RAY-BAR ENGINEERING CORP — Type RB-LBG.

4R. O. Gyaum Based? — As an Alternate to Item 4—58 in. thick applied either horizontally or vertically laner layers fastened to framing with 1-1/4 in. long Type Woorse thread gyyaum panel steel scraws spaced amax is in. Oc., with last sever with . from edge of board. Outer layers fastened to framing with 1-7/8 in. long Type Woorse thread gyyaum panel steel screws spaced a max is in. Oc., with last series with . In from edge of board. When used in width softer than 48 in., gyyaum board to be installed horizontally. All joins in face layers also greated with joints in base layers. Joints of each base layer offset with joints of bus layers of morning in the layer of the with joints in base layers.

All Joint to the Input suggest of the Joint in base layers. Joint of each base layer offset with joints of base layer of propiet side.

AMERICAN GYPSUM CO — Types AGN, I. M.Glass, AGC.

AMERICAN GYPSUM CO — Types AGN, I. M.Glass, AGC.

E. Gypsum Baard* — (As an alternate to Items 4 strongs 4PD) — 9/8 in. thick, 4 ft. wide, paper surfaced applied vertically and secured as described in Item 4.

FEMPLE-INLAND — Types Comfortiumed Sound Deadening Oppsum Board.

4F. Gypsum Baard* — (As an alternate to Item 4) — Not to be used with item 6. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically and secured and described in Item 4.

ANTIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board.

4A. Wall and Partition Facings and Accessories* — (As an alternate to Items 4 through 4F) — Nominal 5/8 in. thick, 4 ft. wide panels, applied vertically and secured as described in Item 4.

SERIOUS ENERGY INC — Type Coufficke S2.7

4H. Gypsum Baard* — (As an alternate to Item 4) — Not to be used with item 6.5% in. thick, 4 ft. wide, paper surfaced, applied vertically and secured and described in Item 4.

CERTAINTEED GYPSOM INC — Type SilentIX

4L. Gypsum Baard* — (As in alternate to Item 4) — 5/8 in. thick, two layers applied either horizontally or vertically, inner layer attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to study or with 1-14 in. long Type W steel screws spaced 8 in. OC. Outer Jupy; attached to other or an alternate to the first compound on 3.72 in. thick; very spaced 8 in. OC. Outer Jupy; attached to other down and attached to

wide must be applied horizontally. The SoundBreak XP Type X Oypsum Bound is not to be used with Item 6.

NATIONAL GYPSUM CO — Types FSK, FSK-C, FSK-C, FSW, FSW-S, FSW-5, FSW-6, FSW-C, FSW-C,

when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in lime 4.

MAYCO INDUSTRIES INC — "X-Ray Shielded Cypsum"

K. Gypsum Barat² — For use with lime 7 — 5/8 in. thick, two layers applied vertically. Inner layer attached to realizent channels with 1 in. long steel screws spaced 8 in. CV. Outer layer attached to realizent channels with 1 in. long steel screws spaced 8 in. CV. Outer layer attached to realizent channels over inner layer with 1-5/8 in. long steel screws spaced 8 in. CV. CI aljoints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. Insulation, them 8 or 9 is required. CV. J., M-Glants, AG-C, AGX-11.

MAIGRICAN GTPSUM CO — Types Cold viney is siding mechanically secured over the outer layer to familing numbers in accordance with manufacturer's recommended installation details.

AIDC, DIV OF ASSOCIATED MATERIALS.

INC
GENTEK BUILDING PRODUCTS LTD
VYTEC CORP
NEBRASKA PLASTICS INC
6. Steel Framing Members — (Optional, Not Shown)* - Furring channels and resilient sound isolation

and dearrised below:

A. Furring Channels — Formed of No. 25 MSG galv steel. 2-0.88 in. wide by 7/8 in.

deep, spaced 24 in. OC perpendicular to units. Channels secured to studs as described in

them b. Ends of adjacining channels are overlapped 6 in. and intel organizer with double

strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of

ining channels any be overlapped 6 in. and secured together with two self tapping 86 framing

sw. min. 7/16 in. long at the midopoint of the overlap, with one screw on each

nel. wallboard unmeled to farring channels as described in Item 4.

B. Steel Framing Members* — Resilient sound isolation clip used to attach furring

channels (them 6) to studs. Clips spaced 48 in. OC, and secured to studie with No. 8 x 2
1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted

into clips.

into clips.

PAC INTERNATIONAL INC — Type RSIC-1.

7. Furring (haunel — Optional — Not Shown — For use on one side of the wall with Item 4K — Resilient channels, 25 MSO galv steel, spaced vertically 24 in. Oc, flange portion screw attached to one side of statuk with 1-14 in. long diamond shaped point, double lead Phillips head steel screw. When resilient channels are used, insulation, Item 8 or 9 is required.

8. Batts and Blankset* — Required for use with resilient channels, Item 7, min. 3 in. thick mineral wool buts, placed to fill interior of wall, attached to the nom 4 in. face of the study with staples placed 24 in.

OC.

THERMAFIBER INC — Type SAFB

9. Batts and Blankets* — (As an alternate to Item 8) — min. 3 in thick glass fiber butts bearing the UL

Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall

statched to the nom. 4 in. face of the studs with stuples placed 24 in OC. See Batts and Blanket (BKN2)

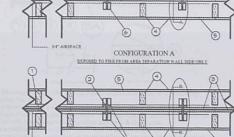
or BZZ2/Categories for names of Classified companies.

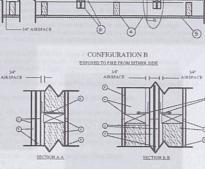
10. Wall and Partition Pacings and Accessaries* — (Optional, Not shown) — Nominal 1/2 in. thick, 4

fl wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels statched
in accordance with manufactures* recommendations. When the QR-5 to panel is institled between the
wood framing and the UL Classified gypsum bound, the required UL Classified gypsum bord layer(s)
issure to be installed as indicated as to Instatter type and spacing, except that the required fistener length
shall be increased by a maintam of 1/2 in. Not evaluated or intended as a substitute for the required layer
(s) of UL Classified Gypsum Booth

Design No. U347

November 16, 2011 Wall Rating - 2 Hr Finish Rating - 120 Min. STC Rating - 61 (See Item 7)





4. Wood Studs.— For Benning or Nonberning Wall Rating. Nom 2 by 4 in mass specing 24 in. OC. Studs cross braced at mid-height where necessary for cily attendment. Min 34 in. separation between wood framing and fire separation wall. Finish training evaluated for wood studs only.

4.A. Steel Studs.— (As an alternate to Item 4, not thown) — For Benring Wall Rating. C-crossion protected steel studs, min No. 20 MSG (0.029 in, min bare metal thickness) steel or min 3-1/2 in. wide, man No. 20 (SG (0.036 in. hick) galv steel or No. 20 MSG (0.033 in. hick) prime steel, cold formed, shall be designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Itou and Steel Institute. All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing of wall assemblies shall not exceed 24 in. OC. Studs strached to floor and ceiling tracks with 12 in. long Type S-12 steel screws on both sides of studs or by welded or holded connections designed in accordance with the AISI specifications. Top and bottom tracks shall consist of steel members, min No. 20 MSG (0.0329 in., min bure metal fluckness) steel or min No. 20 OSG (0.0036 in. thick) gain steel or No. 20 MSG (0.0039 in. min bure metal fluckness) steel or min No. 20 OSG (0.0036 in. mink) primed steel, that provide a soon disructural connection between steel studs, and to adjacent assemblies such as a floor, extending such other walls. Attached to floor and ceiling assemblies with steel fastemen specied out greater than 12 in. Co. Studs cross-braced with stud framing at middle grant on the ceiling and or other walls. Attached to floor and ceiling assemblies with set fastemen specied order, min 3-1/1 in. expension between steel framing and area separation wall. Finish rating has not been evalua

Sized Studis.

5. Gypsum Board — Classified or Unclassified — Min 1/2 in, thick, 4 ft wide, applied horizontally or vertically. Wallboard attached to wood studis (ftem 4) with 1-1/4 in, long steed drywall screws spaced 12 in, OC, Wetrical Joints Household to steel unds (ftem 4 Ao r 4B) with 1 in, long Type 5 rates as revers spaced 12 in, OC, Vertical joints located over studis. Horizontal joints shall be bunted sight to form a closed joint, 4s an option, joints located over studis. Horizontal joints shall be bunted sight to form a closed joint, 4s an option, joints of the first compound.

5A. Plywood Sheathing or OSB — flort shown) — As an alternate to litten 5, Min 1/2 in, thick plywood or OSB applied horizontally or vertically to wood or steel studis. Vertical joints located over studis. Horizontal joints shall be bunted sight to form a closed joint: Fastened to studis with malls or screws of sufficient length, spaced 12 in. OC. Joints and fastener heads are not required to be treated. Alaminum clips shall be spaced as described in them 6.

described in Item 6.

SB. Batts and Blankers*— (not shown) — As an alternate to Dems 5 and 5A, Class fiber or mineral wood instudation, min. 3-1/2 in. thick, placed to completely fill the wood or steel stad carvites. When Batts and Blankets are used in place of Items 5 and 5A, the max height is 54 and and the aluminum felip (them 6) shall be spaced a max of 5 ft OC vertically. See Batts and Blankets (BKNY) category in the Building Materials Directory and Batts and Blankets (BKNY) category in the Fire Resistance Directory for name of Classified Companies.

5C. Wall and Partition Facings and Accessories*— (not shown) — As an alternate to Items 5, 3A and 5B, 4 ft wide panels, applied vertically. Parels attached to wood stads (Items) with 51-36 in long steel drywall

C Rating — The STC Rating of the wall autembly is 61 when it is constructed as described by Items 1

A 6, except.

A 1 mm. 4, above - Wood Stadt - Shall be spaced 16 in: O.C.

B 1 mm. 4, above - Oyyuan Bound - Min. weight 1.5 pd. Shall be applied vertically and

transhed to studie with 1 mm. 1 mm.

C 1 lem 6, above - Aluminum Clips - Spaced a max of 10 ft OC vertically.

D Batts and Blankets - The carvies formed by the wood studies shall be frietion fit with 3-1/2 in. thick fiberglass instalation buts, min. 0.80 pcf. See Batts and Blankets (BRXV) entegory in the Building Materials Directory and Batts and Blankets (BZX) category in the Fire Resistance Directory for name of Classified Companies.

E Max Height of Separation Wall is 32 ft.

F. The STC rating applies to Configuration Body.

G. Sted Studd, (Berns 4.4 d.8), "Rywood Shattshing or OSB (Item 5A, and Item 9) and Blankets (Items 2B) not evaluated as alternatives for obtaining soft mit is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as described 7A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed 8A. STC Rating — The STC Rating of the wall assembly is 60 with it is constructed as

B. Item SC, above - Wall and Partition Facings and Accessories* - Type QuietRock
QR-510 panels shall be installed.

C. Item 6, above - Aluminum Clips - Spaced a max of 10 ft OC vertically.

D. Batts and Blankers* - The cavines formed by the wood stads shall be firstion fit with 3-1/2 in thick fiberglass insulation batts, min. 1.0 pcf. See Batts and Blankers (BCNV) category in the batts of the property for mans of Classified Companies.

E. Max Height of Separation Wall is 23 ft.

F. The STC rating applies to Configuration B only.

G. Steel Stads (Hems 4A, 4B), Plywood Sheathing or OSB (Item 5A and Item 9) and Batts and Blankers (Batts) (Hems 2B) and covaluated as alternatives for obtaining STC rating.

7B. STC Rating — The STC Rating of the wall assembly is 70 when it is constructed as described by Items 1.

7B. STC Rating — The STC Rating of the wall assembly is 70 when it is constructed as described by Items 1 through 6, except

A. Item 4, above — Wood Status - Shall be spaced 16 in. OC.

B. Item 5C, above — Wall and Partition Facing and Accessories* - Type QuietRock QR-525 panels shall be installed as described in Item 5C.

C. Item 6, above – Aluminium Clips - Spaced a max of 10 ft OC vertically.

D. Barts and Blankets* - The cavities formed by the wood studs shall be friction fit thick Breglass intuition butts, min. 1.0 pcf. See Barts and Blankets (BRNV) category in the Building Materials Directory and Batts and Blankets (BZZ) — category in the Fire Resistance Directory for name of Classified Companies.

Directory for name of Classified Companies.

F. The STC rating applies to Configuration B only.

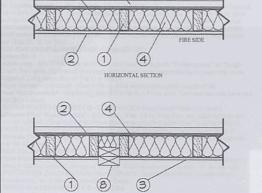
G. Steel Shads (Items 44, 4B), Plywood Shenthing or OSB (Item 5A and Item 9) and Batts and Blankets (Items 5B) not evaluated as abternatives for obtaining STC rating.

Non-Bearing Wall Partition Intersection — (Optional) Two nominal 2 by 4 in, stud or nominal 2 by 6 in, stud anilel together with two 3in. Iong 10 d mils spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in and with 3 in. long 10 d mils spaced as file. In OC. vertically and fastened to one side of the minimum 2 by 4 in and with 3 in. long 10 mils spaced as max. 16 in. OC. vertically Maximum one non-bearing wall purition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the wall.

9. Plywood Sheathing or OSB — (Optional). Who observed as max 16 in. Oct. vertically whatmum one non-bearing wall purition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the wall.

Design No. U356

November 21, 2011 (Exposed to Fire on Interior Face Only) Bearing Wall Rating - 1 Hr Finish Rating - 23 or 25 Min (See Item 2C)



to Justings classified Oppsium 15 in 160g 1579 to Supercious users stress spaces 12 in 160. All perms in necessives stagement with plotted in based perms at a slightle for me in Design Nos. L501, G512 or U305. See Gypsum Baard ACKNY, Carrier 160. All perms in the single for me in Design Nos. L501, G512 or U305. See Gypsum Baard ACKNY, Carrier 160. All perms in the single for the

Type W coarse thread gypsum panel steel screws spaced as max 8 in. OC, with last screw 1 in. from edge of board.

CGC INC

UNITED STATES GYPSUM CO

USG MEXICOS A DE C V

20. Cypsum Baard*— (As an alternate to Item 2, not shown) - 5/8 in. thick 4 ft wide gypsum panels applied ventically and attached to studa and bearing plates with 1-14 in long Type W coarse thread gypsum panel steel screws spaced as max 8 in. OC, with last screw 1 in. from edge of board.

ACADIA ORIVWALL SUPPLIES LTD.— Type X

CERTAINTEED GYPSIM CAN.— Type C or Type X

CERTAINTEED GYPSIM CAN.— Type C or Type X

PABCO BUILDING PRODUCTS. A R K — Type C Type X

PABCO BUILDING PRODUCTS. A R K — Type C Type X

PABCO STANADD — Type X. Veneer Platest Base-Type X. Water Rated-Type X, Sheuthing Type-X, Soffit-Type X, Type X Conferrituand Sound Deadening Gypsum Bond.

2C. Gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-14 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-14 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-14 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-16 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-16 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-16 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-16 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plates with 1-16 in. long Type W coarse thread gypsum panels applied borizentally and state-bed to studs and bearing plat 25 min.
PABCO BUILDING PRODUCTS L.L.C, DBA
PABCO GYPSUM — Type 176-11
TEMPLE-INLAND — Type X. Venece Plaster Base-Type X, Water Rated-Type X, Shenthing Type-X.Soffi-Type

LEMPLE-INLAND — Type A, veneer trainer traine-type A, water Kated-type X, Shearthing Type-A, Scoth-Type X, Octobe and Shear Andrews Teach Andrews Teach

5. James han (Natinees)— (Not Sooth)— with course place (overea with tape and joint compound. Nati needs covered with joint compound.

4. Batts and Blankers—Mineral fiber or glass fiber insulation, 3-1/2 in thick, pressure fit to fill will enviries between made hand, and the insulation to be unfitted and to have a min density of 3-pcf. Class fiber insulation sets of the control of the place o

rayed*—As an alternate to states are consequence with the application instructions supplied with minimum day density shall be 4.30 [bs/ft].

ONAL CELLUROSE CORP—Celburg RI. extractly a state of the st

istuate on extensor since on winn management to litera 5 - Min 1/2 in, thick, 4 flowide shearhing, installed at and Fiber Boards. — As an alternate to litera 5 - Min 1/2 in, thick, 4 flowide shearhing, installed at and Fiber Boards. Control of the state of the stat

s and 12 in OC along interior stals. As an option a weather resistive burner may be applied over the Mineral and Boards.

PLE-INLAND FOREST PRODUCTS CORP — Types Fiberillrace or Quiet Brace testing the properties of the properti

nding.

ming Members — (Optional, Not Shown)* — Furring Channels and Steel Framing Members as

below:

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in, wide by 7/8 in, deep, spaced 24 in.

Oc perpendicular to studi. Channels secured to studi as described in ltem b. Ends of adjoining channels a
overlapped 6 in, and teist together with oable stated of No. 18 SWG galv steel wire near each end of
overlap, As an alternate, ends of adjoining channels may be overlapped 6 in, and secured agother with tw
self-empting 66 mining screws, min. 7/16 in. long at the molypain of the overlap, with one screw on each
flangs of the channel. Opynom bound attached to farming channels as described in item 2.

b. Steel Farming Members* — Used to attach farming channels in the complete of the channel.
Oc., and secured to strait with No. 8.2-1/2 in consort drywall screw torough the center groommet. Furrin,

I Framing Members (Optional, Not Shown) — ruming cantiness and steet rrising potenties at the delice:

a. Furring Channels — Fermed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in hem. b. Ends of adjoining channels are overlapped 6 in. and field together with double strain of No. 18 SWG galv steel wire near each end of overlap. Two layers of gaptum bond intubed to faring channels as described in the measurable (Hem 74a) to intrinier side of studs. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in course drywall screws, one through the bole at each end of the clip. Furring channels are fitted into clips.

Reviring Wall Partition Intersection— (Optional) Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud orgether with two Sin. long 10d mails spaced a max. 16 in. OC. vertically, Intersection between partition wood studs with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in wood studs with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in wood studs with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in wood studs with its 1. long 10 dmails spaced a max. 16 in. Oc. vertically. Maximum one non-bening will partition

Design No. U465

January 28, 2012 Nonbearing Wall Rating - 1 HR. 9 9 9

I. Floor and Celling Runnery.— (Not shown) — Channel shaped numers, 3-5/8 in. deep (min.), 1-1/4 in. legs, formed from min No. 25 MSG galv sued, attached to floor and celling with flatteners spaced 24 in. OC max.

1.4. Framing Members*— Floor and Celling Runners — (Not shown) — As an alternate to Item 1 - Channel shaped, min 3-5/8 in. deep. Bloor and Celling with flatteners 14 in. OC. max.

1.4. STEEL & GYPSLM PRODUCTS INC.

1.5. CONSOLID ATED FABRICATORS CORP.

1.5. STEEL STEEL AS TO SHAPED STEEL S

MARINO/WARE, DIV OF WARE INDUSTRIES

NC — Viper20th Track

ELLING INDUSTRIES L.L.C — Viper20th Track

C. Floor and Celling Runners — (Not shown)—For use with Item 2C-Channel shaped, fabricated from min 20

MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to MOJ correction protected or galv steel, min depth to accommodate stud size, with min 1 in, long legs, attached to floor and clinic protected or galv steel, min depth to accommodate stud size, with min 1 in, long legs, attached to floor and clinic protection of the students of the stude

2-A. Framing Steiners - Seede Studs - A 8 in alterhate to Bent 2 - Channel shaped stude, min 3-5/8 in. deep, in the control of cut 3/4 in. less in length than assembly height.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20TM

CRACO MFG INC - SmarterStud201M, SmartStud201M MARINO/WARE, DIV OF WARE INDUSTRIES

TELLING INDUSTRIES L L C - Viper201M

2C. Steel Studs. — (As an alternate to Item 2, For use with Item 4E) Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-12 in min depth, spaced a max of 16 in .OC. Studs frictoon-fit into floor and ceiling runners. Stud to be cet 35 in 34 in in a state min by begin.

2D. Framing Members*—Steel Studs. — As the state of the state 20 cough 2C. For use with Item 1D and 4G only, channel shaped rutak, imi 3-36 in wide fibricanted from min 0.018 in. thick galv steel, spaced a max of 24 in. CC. Studs to be cut 1/2 in. less than susenbly height.

CLARKDIETRICH BULLDING SYSTEMS.—CD ProSTUD DMFCWBS L.L. C.—ProSTUD MAR BULLDING SUPPLIES.—ProSTUD MAR BULLDING SUPPLIES.—ProSTUD SOUTHEASTERN STUD & COMPONENTS INC.—ProSTUD E. Framing Members*—Steel Studs.—As an alternate to Items 2 through 2D. For use with Item 1E and 41 only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. TeLLING INDUSTRIES L.L. C.—TRUE-STUDDM

2F. Framing Members* — Steel Studs — As an alternate to Items 2 through 2E- For use with Item 1F, channel shaped studs, min 3-5/8 in. wide fabricated from min 25 MSG steel, spaced a max of 24 in. OC, Studs to be cut 1/3

shaped studs, min 3-5/8 in, wide fabricated from min 25 MSG steel, spaced a max of 24 in. OC, Studs to be cut 1/2 in, less than assembly height.

KIRII (HONG KONG) LTD — Type KIRII

20, Framing Members*—Steel Studs — Not shown. In lieu of Item 2 through 2F - For use with Item 1G. Proprietary channel shaped studs, minimum 3-5/8 in, wide, Studs to be cut 1/2 in, less than the assembly height.

STUDO BUILDING SYSTEMS—CROCSTUD

3. Batts and Blankets (#2/2) category for names of Classified companies.

34. Fiber, Sprayed*— As an afternate to Butts and Blankets ((#2) appendix of the study in accordance with the application instructions supplied with the proprieted with the proprieted with the proprieted with the proprieted with U.S. Oreenfiber LLC Type AD100 for their dasheave its a normal ratio of one part affisievite to 6, parts fiber to completely fill the enclosed early in accordance purt affisievite to 6, parts fiber to completely fill the enclosed early in accordance purt affisievite to 6, parts fiber to completely fill the enclosed early in accordance purt affisievite to 6, parts fiber to completely fill the enclosed early in accordance with the application instructions supplied with the product. Nominal dry dennity of 2.3 lbt/13.

try density of 2.3 lbtf3.

15 GREENFIBER Lt C — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

18. Fibers, Sprayed*— As an alternate to Batts and Blankets (Ben 3) and Item 3A - Spray applied cellulose
nustation material. The Brbe is applied with water to interior surfaces in accordance with the application instructio
supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per
table the control of the completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per
table the control of the completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per
table the control of the completely fill the enclosed cavity.

cube ch.

NU-WOOL CO INC — Cellulose Insulation

SG. Fiber, Sprayed*— As an alternate to Batts and Blankets (Item 3) - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed enviry in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 bits fig.

INTERNATIONAL CELLULOSE CORP — Celber-RL

4. Gypsum Barrd* — 58 in thick, 48 twide, attacked to steel stads and floor and ceiling track with 1 in. long, Type 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 attacked to item (resilient channels) or 65 (Isring) charactels), gypsum board is acrew attacked to furning channels with 1 in. long, Type 5 steel screws spaced 12 in.

OC.

ACADIA DRYWALL SUPPLIES LTD. — Type X

AMERICAN GYPSUM CO. — Types AGC., AGX-1, M-Glass

BELIINS NEW BILLDING MATERIALS PUBLIC

LTD. CO. — Type DBX-1.

CGC INC. — Type AG., IP-AR, IP-XI, IP-X2, IP-CAR, SCX, SHX, WRC or WRX.

CERTAINTEED GYPSUM INC. — Types 1, EGRQ, GlasRoc, Type X, Type C, SilenffX.

CERTAINTEED GYPSUM CANADA INC. — Type C, Type X, Type Abuse-Resistant,

CERTAINTEED GYPSUM CANADA INC. — Type C, Type X, Type Abuse-Resistant,

CERTAINTEED GYPSUM CANADA INC. — Type C, Type X, Type Abuse-Resistant,

CERTAINTEED GYPSUM LL C. — Types X, 9, C, DAP, DD, DD, DAP, DGQ, DG, GPFS6.

LAFARGE NORTH AMERICA INC. — Types LGFC2, LGFC2A, LGFC6, LGFC6A, LGFC-C/A, LGFC-C/C/A,

LGFC-WD. TIONAL GYPSUM CO — Types FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3, FSW-5, FSW-6,

FSI.

PABCO BUILDING PRODUCTS L. L. C. DBA
PABCO GYPSUM — Type FO.C., FG. II or FG.9.
PANEL REV S. A.— Type FRX, ENX, MDX, ETX.
SIAM GYPSUM INDUSTRY SARABURIJ CO L.TD.
Type EX.
SIAM GYPSUM INDUSTRY SARABURIJ CO L.TD.
Type X. Steathing - Type X, SoffitType X, TO.C., GreenClass Type X, Type X ConfereToard Sound Deadening Crypum Bound.
SWITED STATTS GYPSUM CO.— Type AR, C. FFAX, FIXA, II PAX, II PAX, IPAR, SCX, SHX, WRC,
WITED STATTS GYPSUM CO.— Type AR, C. FFAX, II-X, II PAX, II PCAR, SCX, SHX, WRC OF WRX.
USG MEXICO S A DE C.V.— Type AR, C. FFAX, II-X, II FCAR, SCX, SHX, WRC OF WRX.

4A. Gypsum Board* — (As alternate to Item 4) - Nom 5/8 in. thick gypsum panels with beveled, square or tag-edges, annihed vertically or horizontally. Vertical joints centered over study and staggered one stud cavity on

the field when panels are applied vertically. When used in widths other than 48 in., gypsum panels to be installed borizontally.

GG INC — Types AR, C, IP-AR, IP-XI, IP-XI, IP-X, IP-CAR, SCX, SHX, WRC or WRX.

CERTAINTEED GYPSUM INC — Type X, Type C.

CERTAINTEED GYPSUM CANADA INC — Type X, Type C.

GEORGIA-PACHIFG GYPSUM L L C. — Type BAP, DAPC, DGG, DS.

LAFARGE NORTH AMERICA INC — Type IGFC6A, LOFG-C/A

LINTED STATES GYPSUM CO — Type AR, C, IP-AR, IP-XI, IP-XI, IP-XI, IP-XC, IP-CAR, SCX, SHX, WRC, WRX,

USGX (Keixt tape and compound, Item S, optional for use with Type USGX).

USG MEXICO S A DE C V — Type AR, C, IP-AR, IP-XI, IP-XI, IP-XC, IP-CAR, SCX, SHX, WRC or WRX.

4B. Gypsum Board* — (As an alternate to Items 4 or 4A) — Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4A with screw length increased to 1-1/4 in.

GGC INC — Type AR, IP-AR.

UNG MEXICO S AD EC V — Type AR, IP-AR.

UNG MEXICO S AD EX V — Type AR, IP-AR.

UNG MEXICO S AD EX V — Type AR, IP-AR.

UNG MEXICO S AD EX V — Type AR, IP-AR.

UNG MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR, IP-AR.

ING MEXICO S AD EX V — Type AR IP-AR.

ING MEXICO S AD EX V — Type AR IP-AR.

ING MEXICO S AD EX V — Type AR IP-AR.

ING MEXICO S AD EX V — Type AR IP-AR.

ING MEXICO S AD EX V — Type AR IP-AR.

ING MEXICO S AD EX V — Type AR IP-AR.

ING WEXT AR IN SAME AR IN SAM

8 in. OC, with last 2 screws 34 in. and 4 in. from each edge of board. Herizontal joints need not be backed by steel farming. Herizontal edge joints and horizontal but joints on opposite sides of stude on inferior walls need not be staggered or backed by steel farming.

TEAPPLENALADD— GreenGlass 13 p. v.

TEAPPLENALADD— GreenGlass 14 p. v.

TEAPPLENALA

thick, 4ft wide, attached to steel stude 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. Joint ceited vertically and staggared on opposite sides of the assembly.

LAFARGE NORTH AMERICA INC — Type LGFC6A, LGFC-C/A

NATIONAL GYPSUM CO — Type SSW

UNITED STATES GYPSUM CO — Type SSW

All Wall and Partition Facings and Accessories' — (As an alternate to Items 4 through 4G) — Nominal 5/8 in. think, 4ft wise gantsit, applied were includy and secured as described in Item 4.

SERIOUS ENROY INC — Types Querfiold ES, QuietRock 5-27.

Hand, 4ft wise gantsit, applied vertically and secured as described in Item 4.

SERIOUS ENROY INC — Types Querfiold ES, QuietRock 5-27.

Long acidges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggared to Co. a shounded of the sacently.

UNITED STATES GYPSIM CO — Type SCX

4d. Gypsum Board — (Not as miletume to Item 4 through 4F) — of the Staggared to wall. For direct attachment only to steel studie Item 2C) - Noon 5/8 in. thick lead backed gypsum panels with beveled, againer or targeted edges, applied vertically. Vertical joints centered over studies and studies with 1-10 in. OC in the first of the sacently.

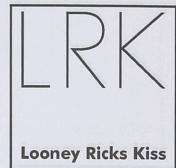
MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

Als. Gypsum Board — (Not Shown) — As an alternate to Item 4 when used as the base layer on one or both sides of wall. For direct attachment only to steel studie Item 2C) - Noon 5/8 in. thick lead backed gypsum panels with beveled.

MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

Als. Gypsum Board — (As an alternate to Item 4 and 4A, not for use with Items 1D, 1E, 2D and 2E) - Noon. 5/8 in. CC is primeter and 11 in. OC in the flarmatic to Item 4 and 4A, not for use with Items 1D, 1E, 2D and 2E) - Noon. 5/8 in. CC is a constant of the sacendary of the particular to the constant of the sacendary of the sacendary in the particular or in and 4 in the particular or in the particular or in the particular or

USG MEXICO S.A DE C.V.— Type ULXS. Joint Tape and Compound—Winyl, dry or premixed joint compound, applied in two coats to joints and serve beade; preper type. 2. in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/3 in. thick gypsum venere plaster may be applied to the entire compound over all joints. As an alternate, nominal 3/3 in. thick gypsum venere plaster may be applied to the entire compound over all joints. As an alternate to general plant of the pl



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PRICING SE A 10/15/12 For Construction Set

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Project Number: 01.11073.00

Project Name:

La Cantera Mixed Use 6215 Via La Cantera San Antonio, Texas 78256

Drawing Name: Walll and Floor Types

Drawn By: BD, MF, DS

Checked By: BD, BE

A200d