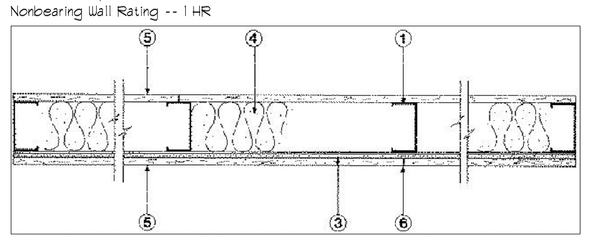
UL FIRE RATING DETAILS

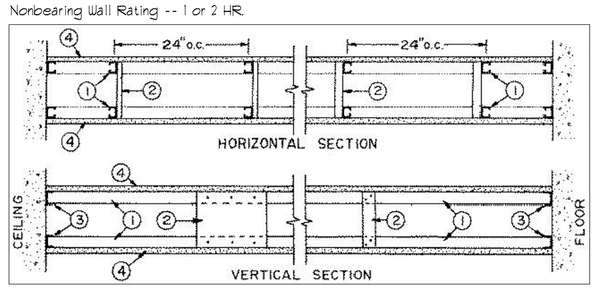
WALLS

Design No. U451
December 09, 2000
Nonbearing Wall Rating -- 1 HR



1. Studs Channel-shaped, Min. 2-1/2 in. wide by 1-1/4 in. deep with 5/16 in. folded back return flange legs, Fabricated from No. 25 MSG galv steel. Max stud spacing 24 in. OC. Studs to be cut 1 in. less than assembly height.
2. Floor and Ceiling Runners (Not Shown) Channel-shaped runners, 2-1/2 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, 1-1/2 in. min thickness.
THERMAFIBER L L C -- Type SAFB.
5. Gypsum Board 1/2 or 5/8 in. thick, 4 ft. wide. Screw attached one side to 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.
AMERICAN GYPSUM CO -- Type AG-C.
CANADIAN GYPSUM COMPANY -- 1/2 in. Type C, IP-X2, IPC-AR or URC, 5/8 in. Type AR, IP-AR or SCX.
CONTINENTAL GYPSUM COMPANY -- Types CG-C, CGS-5, CGTC-C.
G-P GYPSUM CORP, SUB OF
GEORGIA-PACIFIC CORP -- Types 5, C.
JAMES HARDIE GYPSUM INC -- 1/2 in. or 5/8 in. Type Max"C".
LAFARGE GYPSUM, DIV OF
LAFARGE CORP -- Type LGFC-C, LGFC-C/A.
NATIONAL GYPSUM CO -- Type FSW-C.
PABCO GYPSUM, DIV OF
PACIFIC COAST BUILDING PRODUCTS INC -- Type C or PG-C.
REPUBLIC GYPSUM CO -- Type RG-C.
STANDARD GYPSUM L L C -- Type SG-C.
TEMPLE-INLAND FOREST PRODUCTS CORP -- Type TG-C.
UNITED STATES GYPSUM CO -- 1/2 in. Type C, IP-X2, IPC-AR or URC, 5/8 in. Type AR, IP-AR or SCX.
YESO PANAMERICANO S A DE C V -- 1/2 in. Type C, IP-X2, IPC-AR or URC; 5/8 in. Type AR, IP-AR or SCX.
5A. Gypsum Board (As an alternate to Item 5) -- Nom 3/4 in. thick, 4 ft wide, installed as described in Item 5 with screw length increased to 1-1/4 in.
CANADIAN GYPSUM COMPANY -- Types AR, IP-AR.
UNITED STATES GYPSUM CO -- Types AR, IP-AR.
YESO PANAMERICANO S A DE C V -- Types AR, IP-AR.
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 reinforced.
7. Caulking and Sealants (Optional, not shown) -- A bead of acoustical sealant applied around the partition perimeter for sound control.
UNITED STATES GYPSUM CO -- Type AS.

Design No. U420
December 21, 2004
Nonbearing Wall Rating -- 1 or 2 HR



1. Stud - Channel - shaped 1 5/8 in. wide 1 3/8 in. legs and 1/4 in. stiffeningflanges. Fabricated from No. 25 MSG galv. steel. Studs to be cut 1/4 in. less than assembly height.

2. Bracing - Of two types, Type 1- Cut from the steel runners, 9 1/2 in. long, Fastened to the studs with two No. 8 by 1/2 in. self-drilling, self-tapping steel screws in each stud, Type 2 - Cut from the sgpsum wallboard 9 1/2 in. long and 12 in. wide. Fastened to the studs with three Type S wallboard screws at each ens. 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. Atatched to floor and ceiling with fasteners spaced 24 in. OC.

4. Wallboard, Gypsum* - Any 5/8 in. thick wallboard for the fire resistance Classified with beveled, suare, or tapered edges.
For 1 Hr Rating - One layer of wallboard to be used, Applied vertically with joints centered over studs. Fastened to studs with 1 in. long, Type S, wallboard screws spaced 8 in. OC at the joints, located 3/8, from the edges, and 12 in. OC in the field. Fasteners to be spaced 8 in. OC at the runners.
For 2 Hr Rating - Two layers of wallboad to be used. The inner layer to be applied in the same manner as for the 1 Hr Rating. The outer layer to be fasteneda the studs (through the inner layer) using 15/8 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. Joints to be staggered 24 in. from the inner layer.
See Wallboard, Gypsum (CKNX) category for names of manufacturers.

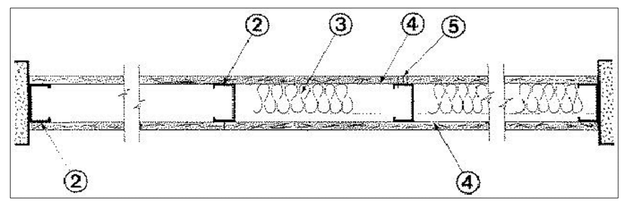
4A. Wallboard, Gypsum* - (As an alternate to Item 4) - Nom 3/4 in. thick, installed as described in Item 4 with 1-1/4 in. long Type S screws for single (or inner) layer and 2-1/4 in. long Type S screws for outer layer.
Canadian Gypsum Company - Type AR.
United States Gypsum Co. - Type AR.
Yeso Paramaericano SA de CV - Type AR.

4B. Wallboard, Gypsum* - (As an alternate to Items 4 and Item 4A) - 5/8 in. thick installed as described in Item 4. Joint covering (Item 5) not required for single layer system.
Canadian Gypsum Company - Type WSX.
United States Gypsum Co. - Type WSX.
Yeso Panamericano SA de CV - Type WSX.

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* - Optional, not shown) Glass fiber batts may be installed in the interior or walls cavity. The max thickness of the batts shall be 2 1/2 in. for the walls with 2 Hr. assembly ratings and 3 1/2 in. for the walls with 1 Hr assembly ratings. Attached to wallboard with wire staples spaced horizontally 12 in. OC and vertically 24in. OC.
Certainteed Corp.
Johns Manville International Inc.
Owens-Corning Fiberglas Corp.

Design No. U465
December 20, 2000
Nonbearing Wall Rating -- 1 HR



1. 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 (min No. 20 MSG when Item 4C is used) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
2. 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 (min No. 20 MSG when Item 4C is used) galv steel spaced 24 in. OC max.
3. Batts and Blankets* (Optional) -- 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, 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 (furring channels), wallboard is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.
AMERICAN GYPSUM CO -- Type AG-C.

BEIJING NEW BUILDING MATERIALS CO LTD -- Type DBX-1.

BPB AMERICA INC
BPB CELOTEX -- Type I.

CANADIAN GYPSUM COMPANY -- Types AR, C, IP-AR, IP-X2, IPC-AR, SCX, SHX, URC or URX.

CONTINENTAL GYPSUM COMPANY -- Types CG-C, CGS-5, CG6-6, CG9-9, CGTC-C.

G-P GYPSUM CORP, SUB OF
GEORGIA-PACIFIC CORP -- Types 5, 9, C, DGG, DS, GFFS6.

JAMES HARDIE GYPSUM INC -- Type Max "C" or Fire X.

LAFARGE GYPSUM, DIV OF
LAFARGE CORP -- Types LGFC2, LGFC2A, LGFC6, LGFC6A, LGFC-C, LGFC-C/A.

NATIONAL GYPSUM CO -- Types FSK-C, FSK-G, FSW-C, FSW-G, FSW .

PABCO GYPSUM, DIV OF
PACIFIC COAST BUILDING PRODUCTS INC -- Type PG-C.

REPUBLIC GYPSUM CO -- Type RG-C.

SIAM GYPSUM INDUSTRY CO LTD -- Type EX-1

STANDARD GYPSUM L L C -- Type SG-C.

TEMPLE-INLAND FOREST PRODUCTS CORP -- Type TG-C.

UNITED STATES GYPSUM CO -- Type AR, C, FRX-G, IP-AR, IP-X2, IPC-AR, SCX, SHX, URC or URX.

YESO PANAMERICANO S A DE C V -- Type AR, C, IP-AR, IP-X2, IPC-AR, SCX, SHX, URC or URX.

WESTROC INC -- Type Westroc Fireboard.

4A. Gypsum Board* (As an alternate to Item 4) -- Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4 with screw length increased to 1-1/4 in.
CANADIAN GYPSUM COMPANY -- Types AR, IP-AR.

UNITED STATES GYPSUM CO -- Types AR, IP-AR.

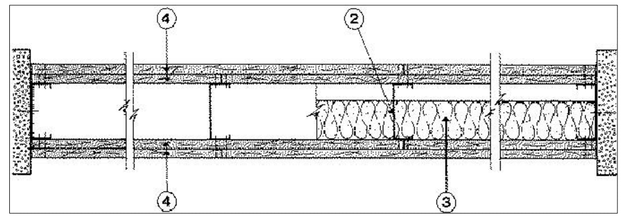
YESO PANAMERICANO S A DE C V -- Types AR, IP-AR

4C. Gypsum Board* (As an alternate to Item 4, 4A and 4B) -- 5/8 in. thick gypsum panels, installed as described in Item 4 with Type S-12 steel screws. The length and spacing of the screws as specified under Item 4.
CANADIAN GYPSUM COMPANY -- Type FRX.

UNITED STATES GYPSUM CO -- Type FRX.

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.
6. Furring Channel (Optional-Not Shown) -- 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 panhead steel screws. Not for use with Type FRX gypsum panels.

Design No. U411
December 20, 2000
Nonbearing Wall Rating -- 2 HR



1. Floor and Ceiling Runner (Not Shown) -- Min. 25 MSG (min 20 MSG when Item 4B is used) galv steel 1 in. high, return legs 2-1/2 in. wide (min), attached to floor and ceiling with fasteners 24 in. OC.
2. Steel Studs Min 2-1/2 in. wide, 1-1/4 in. legs, 3/8 in. return, formed of min 25 MSG (min 20 MSG when Item 4B is used) galv steel max stud spacing 24 in. OC. Studs to be cut 3/4 in. less than assembly height.
3. Batts and Blankets* (Optional) -- 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 studs with 1 in. long Type S steel screws spaced 8 in. OC along vertical edges, and 12 in. OC in the field and outer layer laminated 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.
Optional, (Direct Attached System). Inner layer attached to studs with 1 in. long Type S steel screws spaced 16 in. OC in the field and along the vertical edges. Outer layer attached to the studs over the inner layer with 1-5/8 in. long Type S steel screws spaced 16 in. OC in the field and along the vertical edges and 12 in. OC to the floor and ceiling runners. Joints of screw-attached outer layer offset from inner layer joints. Joints of outer layer may be taped or untaped.
Nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.

AMERICAN GYPSUM CO -- Type AG-C or AGX-11.

BEIJING NEW BUILDING MATERIALS CO LTD -- Type DBX-1.

BORAL GYPSUM INC -- Type BG-C, DDDG3, DDG2 or DDN1.

BPB AMERICA INC

BPB CELOTEX -- Type I or FRP.

CANADIAN GYPSUM COMPANY -- Type AR, C, FCV, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, URC or URX.

CONTINENTAL GYPSUM COMPANY -- Types CG-3, CG-C, CG3-3, CG5-5, CG6-6, CG9-9, CGTC-C.

G-P GYPSUM CORP, SUB OF
GEORGIA-PACIFIC CORP -- Types 5, 9, C, DGG, DS, GFFS6.

JAMES HARDIE GYPSUM INC -- Types Fire X, Max"C".

LAFARGE GYPSUM, DIV OF
LAFARGE CORP -- Types LGFC2, LGFC2A, LGFC3, LGFC6, LGFC6A, LGFC-C, LGFC-C/A.

NATIONAL GYPSUM CO -- Types FSW, FSW-3, FSW-C, FSW-G.

NORGIPS A/S -- NORFIRE X.

PABCO GYPSUM, DIV OF
PACIFIC COAST BUILDING PRODUCTS INC -- Type C, PG-3, PG-5, PG-9 or PG-C.

REPUBLIC GYPSUM CO -- Type RG-C.

SIAM GYPSUM INDUSTRY CO LTD -- Type EX-1

STANDARD GYPSUM L L C -- Type SGC, SG-C or SGC-G.

TEMPLE-INLAND FOREST PRODUCTS CORP -- Types T, TG-C, VPB-Type T.

UNITED STATES GYPSUM CO -- Type AR, C, FCV, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, URC or URX.

WESTROC INC -- Type Westroc Fireboard.

YESO PANAMERICANO S A DE C V -- Type AR, C, FCV, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, URC or URX.

4A. Gypsum Board* (As an alternate to Item 4) -- Nom 3/4 in. thick, installed as described in Item 4 with 1-1/4 in. long Type S screws for inner layer and 2-1/4 in. long Type S screws for outer layer.
CANADIAN GYPSUM COMPANY -- Types AR, IP-AR.

UNITED STATES GYPSUM CO -- Types AR, IP-AR.

YESO PANAMERICANO S A DE C V -- Types AR, IP-AR.

4B. Gypsum Board* (As an alternate to Item 4 and 4A) -- Nom 5/8 in. thick gypsum panels, installed as described in Item 4 with Type S-12 steel screws. The length and spacing of the screws as specified under Item 4.

CANADIAN GYPSUM COMPANY -- Type FRX.

UNITED STATES GYPSUM CO -- Type FRX.

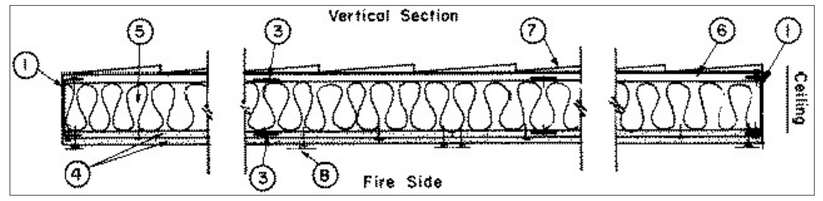
4C. Gypsum Board* (As an alternate to Item 4, 4A and 4B)--5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 4 for the direct attached system .

CANADIAN GYPSUM COMPANY -- Type SHX.

UNITED STATES GYPSUM CO -- Type SHX.

YESO PANAMERICANO S A DE C V -- Type SHX.

Design No. U418
August 01, 2006
(Exposed to Fire on Interior Face Only)
Bearing Wall Rating 1 45 Min, 1 or 2 HR



1. Floor and ceiling tracks. Channel shaped, 3-5/8 in. or 5-5/8 in. wide with 1-1/2 in. flanges. Fabricated from No. 18 GSG galv steel. Attached to floor and ceiling with fasteners spaced 24 in. OC.
2. Steel Studs 1 C-shaped, fabricated from min No. 18 GSG (0.051 in. thick) galv steel, 3-1/2 in. or 5-1/2 in. wide with 1-1/2 in. flanges and 1/2 in. returns (stiffening flanges.) Min yield strength 40,000 psi. See III, 12 of Report R7162-1 -2 dated Dec. 11, 1975 or III, 15 of Report R7162-3, -4 dated Aug. 23, 1976 for tables containing max allowable axial loads. Report, IIIs, available from U. S. Steel Corp., Rm. 1846, 600 Grant St., Pittsburgh, PA 15230.
3. Steel Strapping 1 Flat stock, 2 in. wide, fabricated from No. 18 GSG galv steel. Located horizontally and attached to both sides of the studs at the third points using one No. 6-20 by 1/2 in. self-drilling steel screw at each intersection.
4. Gypsum Board* 1 Any classified gypsum wallboard with beveled, square, or tapered edges. The thickness, number of layers and method of attachment of the wallboard for the 2 Hr, 1 Hr, and 45 Min ratings are:2 Hr Rating 1 Three layers of 1/2 in. thick wallboard applied vertically. Inner layer attached to the studs and tracks with 1 in. long, Ø.142 in. diam, Type S-12 bugle head screws spaced 12 in. OC. Middle layer attached to the inner layer of wallboard with 1-1/2 in. long, Ø.210 in. diam, Type G bugle head screws spaced 12 in. OC and to the end studs with 1-7/8 in. long, Ø.118 in. diam, Type S-12 bugle head screws spaced 12 in. OC. Outer layer attached to studs and tracks with 1-7/8 in. long, Ø.118 in. diam, Type S-12 bugle head screws spaced 12 in. OC and into the wallboard with 1-1/2 in. long Ø.210 in. diam Type G screws spaced 12 in. OC. Middle layer of wallboard edge joints staggered 2 ft. from joints of inner and louer layer.) Hr Rating 1 Two layers of 1/2 in. thick wallboard applied horizontally or vertically, Inner layer attached to studs and tracks with 1 in. long, Ø.142 in. diam Type S-12 bugle head screws spaced 12 in. OC beginning 6 in. from the edge. Outer layer attached to the studs and tracks with 1-5/8 in. long, Ø.142 in. diam, Type S-12 bugle head screws spaced 12 in. OC beginning 1 in. from the edge. In addition, the outer layer to be attached to the inner layer at the joints with 1-1/2 in. long, Ø.210 in. diam Type G bugle head screws spaced 24 in. OC located between studs.45 Min Rating 1 One layer of 5/8 in. thick wallboard applied horizontally or vertically. Attached to studs and tracks with 1 in. long, Ø.142 in. diam Type S-12 bugle head screws spaced 12 in. OC beginning 6 in. from edges.
When used in widths other than 48 in., gypsum board to be installed horizontally.

See Gypsum Board (CKNX) Category for names of manufacturers.

5. Batts and Blankets* 1 3-1/2 in. thick, 2 ft wide, glass fiber batts. Inserted between each stud to fill the wall cavity.
CERTAINTEED CORP

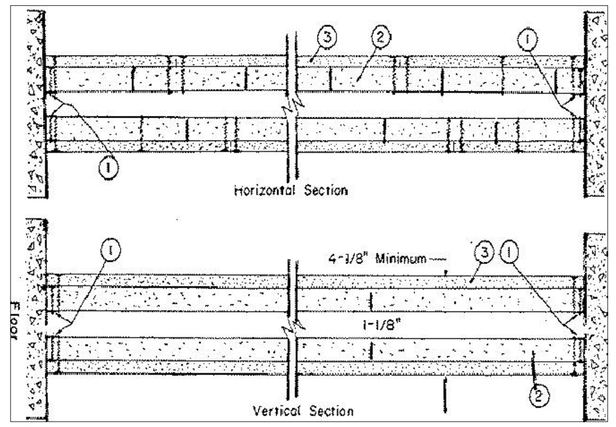
JOHNS MANVILLE INTERNATIONAL INC

OLENS CORNING

6. Gypsum Sheathing 1 One layer of nominal 1/2 in. thick exterior sheathing, applied vertically and secured to the studs and runner tracks with 1 in. long, Ø.142 in. diam, Type S-12 bugle head screws spaced 12 in. OC along the studs and the runner tracks.
7. Exterior Facings 1
7A. Aluminum Siding 1 Horizontal lap type 9 in. wide fabricated from Ø.019 in. thick or Ø.024 in. thick painted aluminum. Interior face of Ø.019 in. thick siding lined with 3/8 in. thick unbonded insulation material. Attached to the studs with 1-7/8 in. long, Ø.118 in. diam steel screws spaced 9 in. OC along the studs. A starter strip to be fastened to floor runner with Ø.118 in. diam screws spaced 12 in. OC.
7B. Steel Siding 1 Same description as above (No. 17 GSG) gauge Ø.017 in. thick.
7C. Brick Veneer 1 Any type 4 in. wide brick. Metal ties used as every fourth course spaced 24 in. OC horizontally. Fastened to steel studs through gypsum sheathing with one No. 6-20 steel screw per tie. One inch air space provided between veneer and gypsum sheathing.
7D. Stucco 1 Portland cement type 1 3/4 in. min thickness. Metal lath or mesh base attached to studs with No. 6-20 steel screws. "T-Nails," or staples approved by local building codes. Spaced 6 in. OC max and driven through gypsum sheathing.
7E. Mineral and Fiberboards 1 (Not Shown) 1 Exterior hard board paneling, chemically treated, with primed or finished face, 7/16 in. thick by 48 in. wide. Attached to studs with 1-7/8 in. long bugle-head TEK fasteners 16 in. OC. at the intermediate supports. Or, exterior lap siding, chemically treated, 7/16 in. thick by 8 in. or 12 in. wide. Attached to studs with 1-7/8 in. long, bugle-head Type TEK fasteners at each lap. Panels lapped minimum 1 in.
MASONITE CORP 1 Type FT

7F. Fiber-Cement Siding 1 (Not Shown) 1 Fiber-cement exterior sidings including smooth and patterned panel or lap siding.
8. Joint Tape and Compound 1 Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads. Perforated paper tape, 2 in. wide, embedded in first layer of compound over all joints.
*Bearing the UL Classification Mark

Design No. U507
January 23, 2001
Nonbearing Wall Rating -- 2 HR



1. Supporting Angles 7/8 by 1-3/8 in. fabricated from 22 MSG galv steel, short leg attached to concrete or masonry with fasteners spaced 24 in. OC.
2. Gypsum Board* 1 in. thick, 2 ft wide, V-shaped T&G edges. Attached to supporting angles with Ø.117 in. diam by 1-5/8 in. long, self-drilling, self-tapping Phillips head steel screws, spaced 5 ft O.C. along the side walls and at the edges of each sheet along the floor and ceiling.

CANADIAN GYPSUM COMPANY -- Type R.

UNITED STATES GYPSUM CO -- Type R.

3. Gypsum Board* 1/2 in. thick, 4 ft wide. Attached to the supporting angles with Ø.117 in. diam by 2-1/8 in. long, self-drilling, self-tapping Phillips head steel screws spaced 12 in. OC., and to the core board with laminating compound and No. 10 by 1-1/2 in. double lead Phillips head steel screws, spaced 48 in. OC. along the vertical edges and 30 in. from the ends along the vertical center line of each sheet. Joints between core board and wallboard or lath staggered. Outer layer wallboard joints covered with joint tape and compound, and screw heads covered with joint compound. Lath joints covered with 2-1/2 in. wide pressure-sensitive glass fiber tape, or glass fiber tape attached with wire staples. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.

CANADIAN GYPSUM COMPANY -- Type IP-R or R.

UNITED STATES GYPSUM CO -- Type R or IP-R.

4. Laminating Compound (Not Shown) -- Of the type used in joint treatment, mixed with water in accordance with instructions shown on containers, applied with an applicator producing beads above 5/16 in. in diam spaced 2 1/4 in. OC.
5. Batts and Blankets* (Optional) -- (Not Shown) -- 1, 1 1/2, or 2 in. thick mineral wool batts, may be placed in interior of wall.
CERTAINTEED CORP

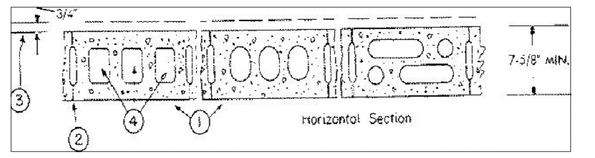
GUARDIAN FIBERGLASS INC

JOHNS MANVILLE INTERNATIONAL INC

KNAUF FIBER GLASS GMBH

THERMAFIBER L L C -- Type SAFB

Design No. U805
January 02, 1997
Bearing Wall Rating -- 2 HR
Nonbearing Wall Rating -- 2 HR



1. Concrete Blocks* Various designs. Classification D-2 (2 hr).
See Concrete Blocks category for list of eligible manufacturers.

2. 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.
3. Portland Cement Stucco or Gypsum Plaster Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).
4. Loose Masonry Fill If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant, vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.
5. Foamed Plastic* (Optional-Not Shown) -- 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
CELOTEX CORP -- Type Thermax

LLW ARCHITECTS
803 S. MOUNT MORIAH
SUITE 100B
MEMPHIS, TN 38117
(901) 683-7175 p.
(901) 683-2385 f.
llw@llwarchitects.com

NO.	ISSUED	DATE
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