



The Dow Chemical Company
Dow Building Solutions

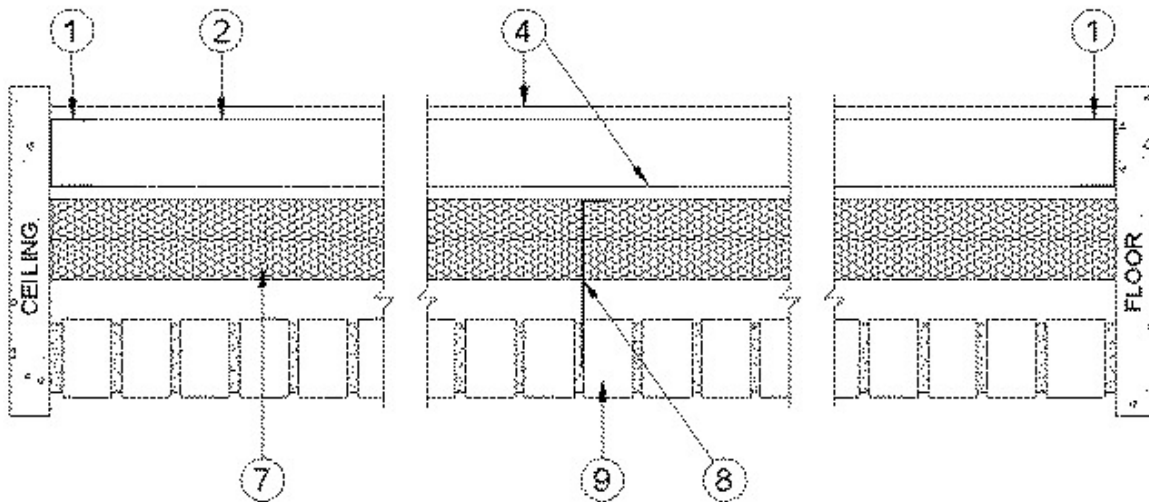
SUBJECT: Hourly- rated Wall Assemblies using Dow THERMAX

Below are shown several Underwriters Laboratory approved Wall assemblies with which Thermax is incorporated and having an hourly rating attached to that assembly.

1-Hour rated wall Assemblies – Steel Studs and Floor to ceiling steel track assemblies

UL Design # V – 454

Bearing Wall Rating - 1 Hr



1. **Steel Floor and Ceiling Tracks** —Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. O.C.
2. **Steel Studs** —The max stud spacing of wall assemblies shall not exceed 24 in. OC. Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or by welded or bolted connections designed in accordance with the AISI specifications.
3. **Lateral Support Members** — (Not Shown)—Where required for lateral support of studs, support may be provided by means of steel straps, channels or other similar means as specified in the design of a particular steel stud wall system.
4. **Gypsum Board*** — 5/8 in. thick, 4 ft wide. Wallboard applied vertically with joints centered over studs. Fastened to both sides of the steel studs with 1 in. long Type S self-drilling, self-tapping steel screws spaced 8 in. OC along the edges and 12 in. OC in the field of the board.
5. **Batts and Blankets*** — (Optional, not shown)
6. **Vapor Barrier** — (Optional, not shown) — 4 mil min polyethylene installed between steel studs and gypsum wallboard.
7. **Foamed Plastic***- Max 4 in. thick rigid polyisocyanurate insulation attached through the gypsum board to the studs with min 4-1/2 in. long Type S-12 wafer head steel screws spaced 12 in. OC.

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- 7B. **Construction Tape or Sealant** — (Optional, Not Shown) — Min 2 in. wide plastic tape placed over joints of foamed plastic on exterior surface of wall or sealant placed within the joints of the foamed plastic.
8. **Wall Anchor Ties** — Wall anchors attached to steel studs with 1/2 in. long Type S-12 self-drilling, self-tapping steel screws, spaced max 24 in. OC.
9. **Brick Veneer** — Any 4 in. wide brick. Min 1 in. airspace provided between veneer and Foamed Plastic (Item 7 or 7A).
10. **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.

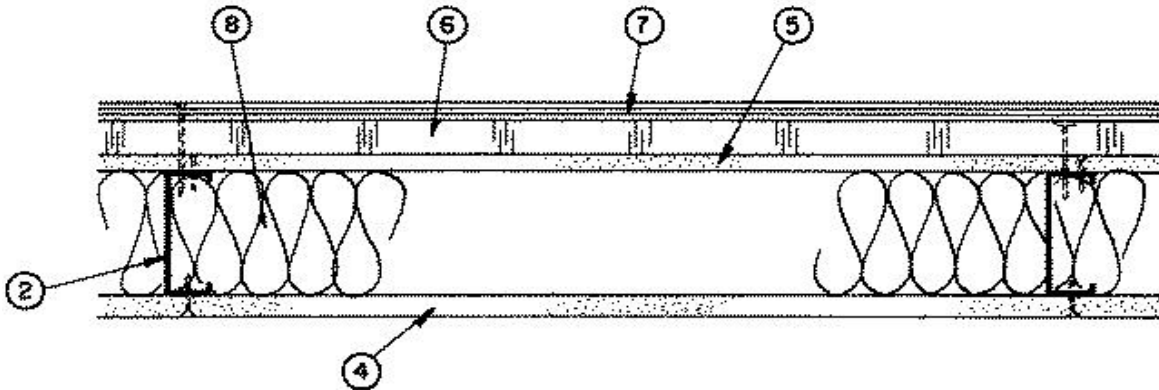
*Bearing the UL Classification Mark

1-Hour Rated Wall Assemblies – Steel Stud

DOW RESTRICTED - For internal use only

UL Design No. U460 (Exposed to Fire on Interior Face Only)

Bearing Wall Rating — 1 HR.



1. **Steel Floor and Ceiling Tracks** — (Not Shown) — Top and bottom tracks of wall assemblies shall consist of steel members, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galvanized steel or No. 20 MSG (0.033 in. thick) primed steel, that provide a sound structural connection between steel studs, and to adjacent assemblies such as floor, ceiling, and/or other walls. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. O.C.
2. **Steel Studs** — Corrosion protected steel studs, min 3-1/2 in. wide, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galvanized steel or No. 20 MSG (0.033 in. thick) primed 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 Iron and Steel Institute (AISI). Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or by welded or bolted connections designed in accordance with the AISI specifications.
3. **Lateral Support Members** — (Not Shown) — Where required for lateral support of studs, support may be provided by means of steel straps, channels or other similar means as specified in the design of a particular steel stud wall system.
4. **Gypsum Board*** — Any 5/8 in. thick (min) gypsum wallboard bearing the ULI Classification Marking as to Fire Resistance. Applied vertically with Type S-12 steel screws, spaced 8 in. OC at edges and joints and 12 in. OC at field. See Gypsum Board (CKNX) Category for names of Classified Companies.
5. **Gypsum Sheathing and Exterior Facings** — For exterior of wall 5/8 in. thick (min) exterior regular gypsum sheathing applied vertically and attached to studs and runner tracks with 1 in. long Type S-12 steel screws spaced 12 in. OC along studs and tracks.
6. **Foamed Plastic*** — 1 in. thick rigid polyisocyanurate insulation attached to studs with 2 in. long Type S-12 wafer head steel screws.

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7. **Plywood Sheathing (Sliding)** — Min 1/2 in. thick plywood applied vertically with vertical joints located over studs. Fastened to studs with 2-5/8 in. Type S-12 steel screws spaced 12 in. OC. at edges, joints and field.
8. **Batts and Blankets*** — Min 3-1/2 in. mineral wool batts placed to fill cavity of wall.
- 8A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 8) — Spray applied cellulose material.. Nominal dry density of 3.0 lb/ft³. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft³.

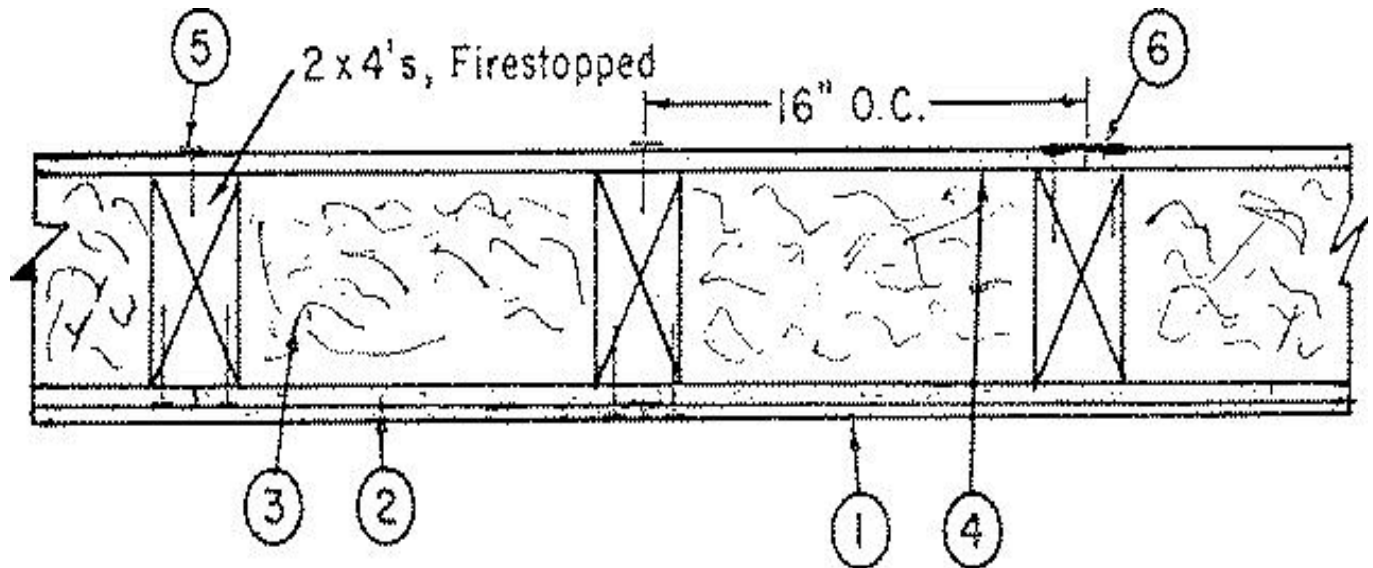
U S GREENFIBER L L C — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

*Bearing the UL Classification Mark

1-Hour Rated Wall Assemblies - Wood studs with Vinyl siding

DOW RESTRICTED - For internal use only

UL Design No. U026 (Exposed To Fire On Wallboard Face Only) {Vinyl siding optional see item 1B}
Bearing Wall Rating — 1 HR.



1. Hard board Paneling — Mineral and Fiber Boards * — Untreated hard board paneling with various face finishes, nom 7/16 or 1/2 in. thick, 6 to 48 in. wide. (Aluminum joint molding as required for Countryside and Colorlok lap sidings.)

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1A. In lieu of Item 1, the following Mineral and Fiber Boards* — may be used: Chemically treated with primed face, nom 7/16 in. thick, 48 in. wide.

MASONITE CORP — Type FT.

1B. Molded Plastic — In lieu of Item 1, the following Molded Plastic* may be used: Solid vinyl siding mechanically secured to framing members in accordance with manufacturer's recommended installation details.

ALSIDE, DIV OF or **ASSOCIATED MATERIALS INC** or **GENTEK BUILDING PRODUCTS LTD**

Or **HEARTLAND BUILDING PRODUCTS INC** or **NEBRASKA PLASTICS INC** or **ROYAL GROUP TECHNOLOGIES LTD** or **VYTEC CORP**

2. Gypsum Sheathing — Any nom 1/2 in. (min) thick gypsum sheathing in 2 ft (min) wide sheets, installed horizontally. Attached to each wood stud with 1-7/8 in. long 6d nails spaced vertically 8 in. OC.

3. Batts and Blankets — * — Min 3 in. thick glass fiber batts.

4. Gypsum Board — * — One layer, nom 5/8 in. nailed 7 in. OC. vertically at each stud with 1-7/8 in. long 6d nails. When used in widths other than 48 in., wallboard is to be installed horizontally.

4A. Gypsum Board — * — (As an alternate to Item 4) — Nom 3/4 in. thick, installed as described in Item 4.

5. Nailheads — Covered with joint compound.

6. Joints — Covered with paper tape and joint compound.

7. Foamed Plastic* — (Optional — Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing, attached between Hardboard Paneling (Item 1) or Molded Plastic (Item 1B) and Gypsum Sheathing (Item 2). Sheathing is applied vertically. Sheathing fastened with 3 in. long E.G. roofing nails spaced 8 in. O.C. along the edges and 12 in. O.C. in the field. Hardboard Paneling (Item 1) or Mineral and Fiber Boards fastened over Foam Plastic to wood studs.

THE DOW CHEMICAL CO — Type Thermax

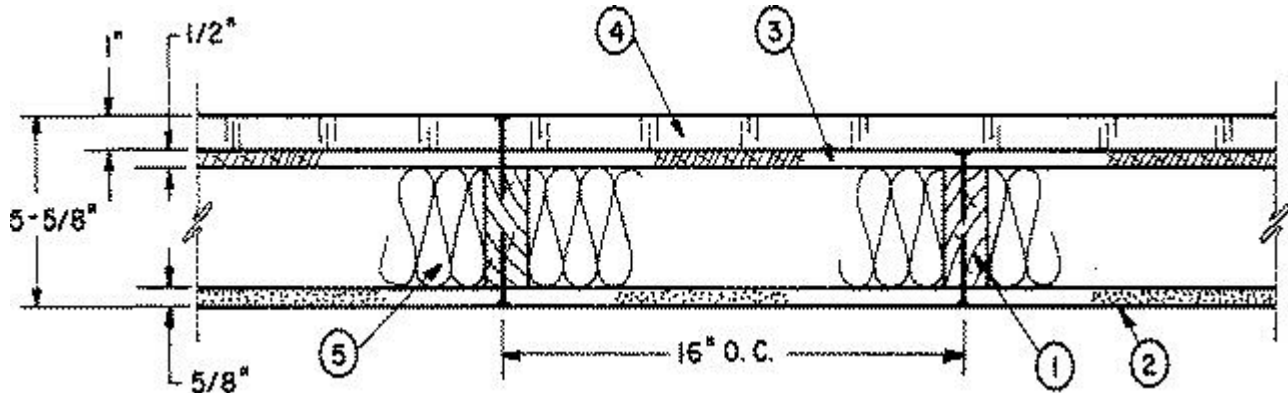
*Bearing the UL Classification Mark

1-Hour Rated Wall Assemblies (Thermax oversheathed on Plywood)

UL Design No. U326 (Exposed to Fire on Interior Face Only)

Bearing Wall Rating — 1 HR.

Finish Rating - 25 Min.



1. **Wood Studs** — Nom 2 by 4 in., spaced 16 in. OC.

2. **Gypsum Board*** — 5/8 in. thick, 4 ft wide, applied vertically. Attached to studs with 1-3/4 in. long steel drywall nails with 0.102 in. diameter shank and 0.29 in. diameter head, spaced 7 in. OC. Vertical joints located over studs. Joints covered with paper tape and joint compound. Nail heads covered with joint compound. See **Gypsum Board (CKNX)** category for names of manufacturers.

3. **Plywood Sheathing** — 1/2 in. thick, 4 ft wide, wood structural panels. Applied vertically with vertical joints located over studs and staggered 16 in. min from wallboard joints. Horizontal joints are backed with nom 2 by 4 in. wood backing. Attached to the studs with 2 in. long galvanized roofing nails with a 0.122 in. diameter shank and a 3/8 in. diameter head, spaced 6 in. OC at the perimeter of the sheet and 12 in. OC in the field.

4. **Foamed Plastic*** — Min 1 in. thick rigid polyisocyanurate insulation, supplied in 4 by 8 sheets. Applied vertically with vertical joints located over studs. Attached to studs with 2 in. long galv roofing nails with a 0.122 in. diam shank and a 3/8 in. diam head, spaced 12 in. OC.

THE DOW CHEMICAL CO — Type Thermax

5. **Insulation** — 3-1/2 in. thick kraft paper faced glass fiber insulation. Supplied in rolls 15 in. wide. Density to be nom 0.75 lb/ft³. Placed in stud cavities and secured to studs with steel staples spaced nom 12 in. O.C.

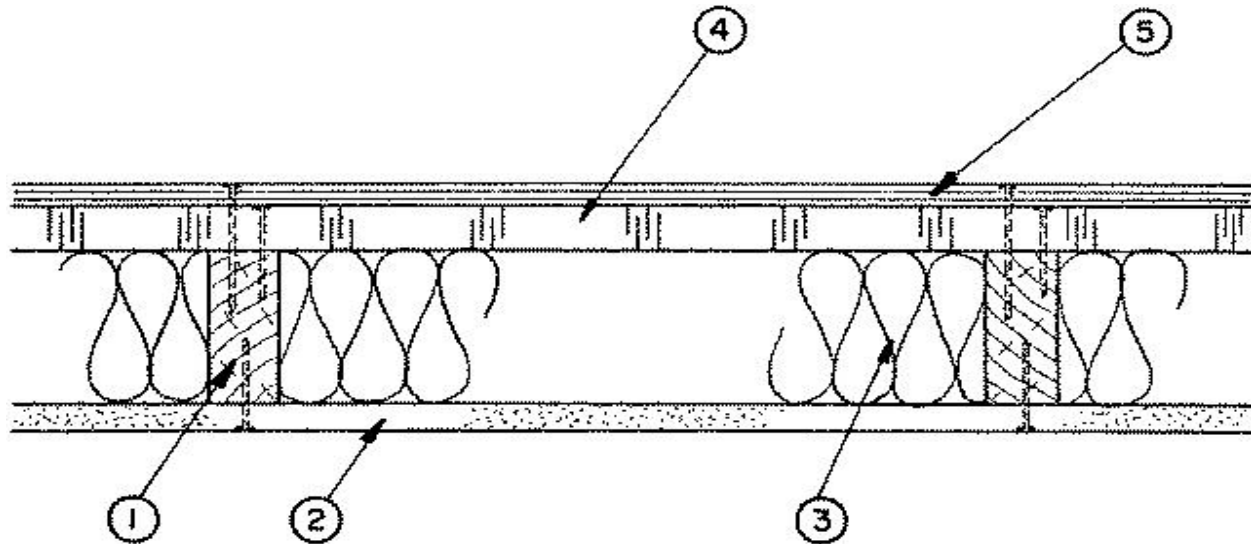
5A. **Fiber, Sprayed*** — As an alternate to Insulation (Item 5) — Spray applied cellulose insulation material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft³.

U S GREENFIBER L L C — Cocoon stabilized cellulose insulation.

*Bearing the UL Classification Mark

1-Hour Rated Wall Assemblies – Wood Studs with Plywood siding
UL Design No. U330 (Exposed to Fire on Interior Face Only)

Bearing Wall Rating — 1 HR.



1. **Wood Studs** — Nom 2 by 4 in., spaced 16 in. OC.
2. **Gypsum Board*** — 5/8 in. thick (min) 4 ft wide bearing the ULI Classification Marking for Fire Resistance applied vertically. Attached to studs with 6d cement coated nails spaced 7 in. OC at the edges and in the field. Vertical joints located over studs. Joints covered with paper tape and joint compound. Nail heads covered with joint compound. See Gypsum Board (CKNX) Category for names of Classified Companies.
3. **Batts and Blankets*** — Min 3-1/2 in. mineral wool batts placed to fill cavity of wall. See Batts and Blankets (BZJZ) Category for names of Classified Companies.
- 3A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose insulation material. Nominal dry density of 3.0 lb/ft³.

U S GREENFIBER L L C — Cocoon stabilized cellulose insulation.

4. **Foamed Plastic***— 1 in. thick rigid polyisocyanurate insulation attached to studs with 1-1/2 in. long galv roofing nails.

THE DOW CHEMICAL CO — Type Thermax

5. **Plywood Sheathing (Siding)** — Min 1/2 in. thick plywood applied vertically with vertical joints located over studs. Fastened to studs with 10d galvanized nails 6 in. OC at edges and 12 in. OC in the field.

5A. **Alternate Exterior — Hard board Paneling — Mineral and Fiber Boards*** — Untreated panels nom 7/16 or 1/2 in. thick, 12 to 48 in. wide. Ship lapped panel sidings are fastened to framing members with 10d rust — resistant nails thru the lap spaced 6 in. O.C. vertically. Butted panel siding fastened to framing members with 10d nails 3/8 in. from edge spaced 6 in. O.C. vertically. Lap sidings fastened to framing members with 12d nails 3/8 in. from edges spaced 16 in. O.C. horizontally. (Aluminum joint molding as required for lap products).

MASONITE CORP

*Bearing the UL Classification Mark



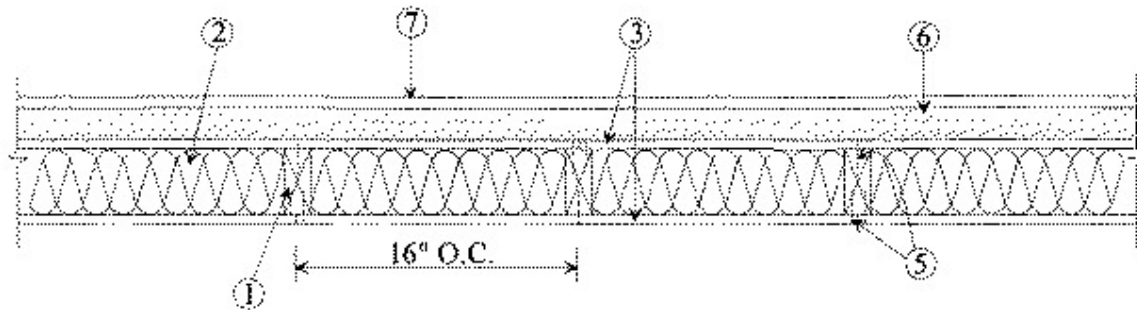
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1-Hour Rated Wall Assemblies – Wood studs various exterior sidings

UL Design No. U354 (Exposed to Fire on Interior Face Only)

Bearing Wall Rating — 1 Hr

Finish Rating — 24 Min



1. **Wood Studs** — Nom 2 x 4 in. spaced 16 in. OC. Cross braced at mid-height and **effectively firestopped at top and bottom of wall.**

2. **Batts and Blankets*** — Unfaced glass fiber batts, min 3-1/2 in. thick, min density of 0.72 pcf, pressure fit in wall cavities between studs and cross bracing. See **Batts and Blankets*** — (BZJZ) category for names of Classified companies.

2A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 2) — Spray applied cellulose material. Nominal dry density of 3.0 lb/ft³. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft³.

U S GREENFIBER L L C — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

3. **Gypsum Board*** — 5/8 in. thick gypsum boards, paper or vinyl surfaced, with beveled, square or tapered edges, applied either horizontally or vertically. Wallboard nailed 7 in. OC with 6d cement-coated nails or No. 6 bugle head drywall screws, 1-7/8 in. long. When used in widths other than 48 in., wallboard is to be installed horizontally.

4. **Steel Corner Fasteners** — (Optional, not shown) — For use at wall corners. Channel shaped 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel.

5. **Joints and Nailheads** — Interior joints covered with tape and joint compound. Interior nail heads covered with joint compound. Exterior side joints and nail heads uncovered.

6. **Sheathing — Foamed Plastic*** — Max 1-1/2 in. thick, 4 ft wide sheathing, with square edges. Sheathing is applied vertically. Sheathing fastened with 3 in. long E. G. roofing nails spaced 8 in. OC along the edges and 12 in. OC in the field.

THE DOW CHEMICAL CO — Type Thermax or Type Quik-R (EIFS)

7. **Exterior Wall Coverings** — Installed in accordance with the manufacturers installation instructions.

7A. **Aluminum Siding** — 0.019 in. min thick painted aluminum meeting AAMA 1402. Fastened over foam plastic sheathing to wood studs.

7B. **Steel Siding** — 0.017 in. min thick (No. 17 GSG gauge) painted steel. Fastened over foam plastic sheathing to wood studs.

7C. **Vinyl Siding** — 0.035 in. min thick vinyl, UL Classified exterior plastic siding (Molded Plastic). Fastened over foam plastic sheathing to wood studs.

- 7D. **Wood Siding** — 0.313 in. min thick lumber, plywood or OSB wood based siding. Fastened over foam plastic sheathing to wood studs.
- 7E. **Hard board Siding** — 0.250 in. min thick hard board UL Classified exterior hard board siding (Hard board). Fastened over foam plastic sheathing to wood studs.
- 7F. **Fiber-Cement Siding** — 0.250 in. min thick fiber-cement based siding. Fastened over foam plastic sheathing to wood studs.
- 7G. **Stone** — 2.0 in. min (natural stone) or 1.5 in (cast artificial) thick stone. Fastened over foam plastic sheathing to wood studs.
- 7H. **Brick Veneer** — 2.0 in. min thick brick units. Fastened over foam plastic sheathing to wood studs with metal ties.
- 7I. **Concrete Masonry Veneer** — 2.0 in. min thick concrete masonry units. Fastened over foam plastic sheathing to wood studs with metal ties.
- 7J. **Stucco** — Portland cement type — 0.750 in. min thickness. Metal lath or mesh base fastened over foam plastic sheathing to wood studs.
- 7K. **One-Coat Stucco** — 0.375 in. min thickness. Wire fabric lath fastened over foam plastic sheathing to wood studs.
- 7L. **Exterior Insulation and Finish System (EIFS)** — Base coat with reinforcing mesh applied over foam plastic sheathing (Quik-R Wall Insulation) followed by finish coat. Type Quik-R Sheathing (Item 6) must be used for this exterior wall covering.

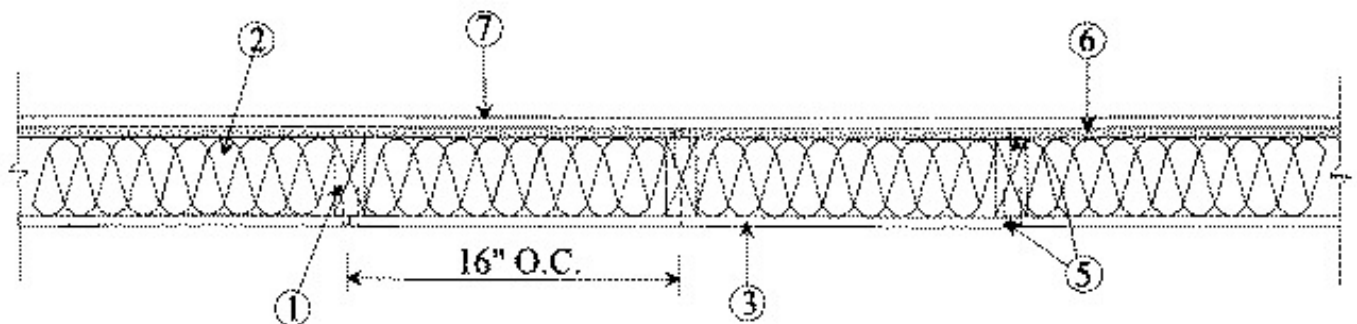
*Bearing the UL Classification Mark

1-Hour Rated Wall Assemblies- Wood Studs with various sidings (aluminum, wood, fiber cement)

UL Design No. U355 (Exposed to Fire On Interior Face Only)

Bearing Wall Rating — 1 Hr

Finish Rating — 23 Min



1. **Wood Studs** — Nom 2 by 4 in. spaced 16 in. OC. Cross braced at midheight and **effectively firestopped at top and bottom of wall.**
2. **Batts and Blankets*** — Unfaced glass fiber batts, min 3-1/2 in. thick, min density of 0.72 pcf, pressure fit in wall cavities between studs and cross bracing. See **Batts and Blankets*** — (BZJZ) category for names of Classified Companies.
- 2A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 2) — Spray applied cellulose insulation material. Nominal dry density of 3.0 lb/ft³. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft³.

U S GREENFIBER L L C — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)



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3. **Gypsum Board*** — 5/8 in. thick 4 ft wide gypsum boards, paper or vinyl surfaced, with beveled, square, or tapered edges, applied vertically. Wallboard nailed 8 in. OC with 6 d cement-coated nails or No. 6 bugle head drywall screws, 1-7/8 in. long.

3B. **Gypsum Board*** — (As an alternate to Items 3 and 3A) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Secured as described in Item 3. Joint covering (Item 5) not required.

4. **Steel Corners Fasteners** — (Optional) — (Not Shown) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from No. 24 gauge galv steel.

5. **Joints and Nail Heads** — Wallboard joints covered with tape and joint compound. Wallboard nail heads covered with joint compound.

6. **Sheathing — Foamed Plastic*** — 7/16 in. thick min, 4 ft wide sheathing, with square edges. Sheathing is applied vertically. Sheathing fastened with 1 in. long E. G. roofing nails spaced 8 in. OC along the edges and 12 in. OC in the field.

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7. **Exterior Wall Coverings** — Installed in accordance with the manufacturer's Installation Instructions.

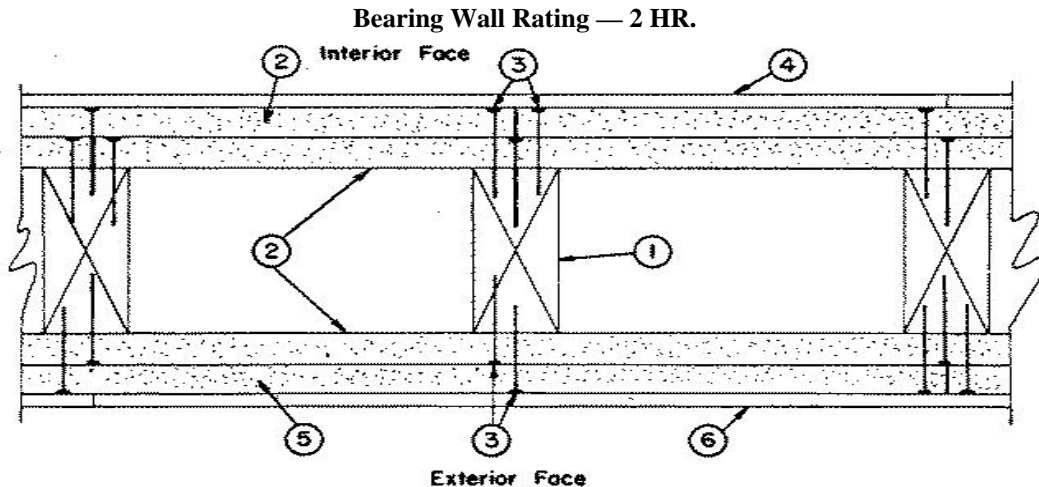
A. **Aluminum Siding** — 0.019 in. min thick painted aluminum meeting AAMA 1402. Fastened over foam plastic sheathing to wood studs using 1-1/2 in. long aluminum nails.

B. **Wood Siding** — 5/8 in. min thick lumber, plywood or OSB wood based siding. Fastened over foam plastic sheathing to wood studs using 10d galv box nails spaced 6 in. OC on perimeter and 12 in. OC in the field.

C. **Fiber-Cement Siding** — 0.250 in. min thick fiber-cement based siding. Fastened over foam plastic sheathing to wood studs using min 1-1/2 in. long galv nails.

*Bearing the UL Classification Mark

2-Hour Rated Wall Assemblies – Wood Studs with Hard board Paneling both sides of wall
UL Design No. U324 (Exposed to Fire on Interior Face Only)



1. **Wood Studs** — Nom 2 by 4 in., spaced 16 in. O.C. Studs cross braced at mid-height and effectively fire stopped at top and bottom of wall.
2. **Gypsum Board*** — 5/8 in. thick, 4 ft wide, applied either horizontally or vertically. Inner layer attached to studs with the 6d nails spaced 8 in. O.C. Outer layer attached to studs over inner layer with the 8d nails spaced 8 in. O.C. Vertical joints located over studs. All joints in inner layers staggered with joints in outer layers and from joints on opposite side. Wallboard joints exposed or covered with fiber tape and joint compound. Nailheads exposed or covered with joint compound. See Gypsum Board (CKNX) category for names of manufacturers.
3. **Nails** — 6d cement coated nails 1-7/8 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. **Interior Hard board Paneling — Mineral and Fiber Boards*** — Chemically treated paneling with a face finish, nom 1/4 in. thick, 48 in. wide. Attached vertically to the outer layer of wallboard with a neoprene adhesive applied in 1/4 to 1/2 in. wide beads spaced approx 24 in. O.C. vertically and 16 in. O.C. horizontally. Joints located over studs and staggered from wallboard joints.

MASONITE CORP — Type FT.

5. **Gypsum Sheathing** — 5/8 in. thick, 2 ft or 4 ft wide, applied either horizontally or vertically. Attached to studs with 8d nails spaced 8 in. O.C. Vertical joints located over studs. Joints staggered from inner layer wallboard joints.

6. **Exterior Hard board Paneling — Mineral and Fiber Boards*** — Chemically treated paneling with primed face, nom 7/16 in. thick, 48 in. wide. Attached vertically to wood studs with 10d rust resistant nails 2-1/2 in. long with 5/16 in. diam heads, spaced 6 in. O.C. along edges and 12 in. O.C. along intermediate supports.

MASONITE CORP — Type FT.

7. **Foamed Plastic*** — (Optional — Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing, attached between Gypsum Sheathing (Item 5) and Exterior Hardboard Paneling (Item 6). Sheathing is applied vertically. Sheathing fastened with 3 in. long E. G. roofing nails spaced 8 in. OC along the edges and 12 in. OC in the field. Attached Exterior Hardboard Paneling (Item 6) fastened over foam plastic sheathing to wood studs.

THE DOW CHEMICAL CO — Type Thermax

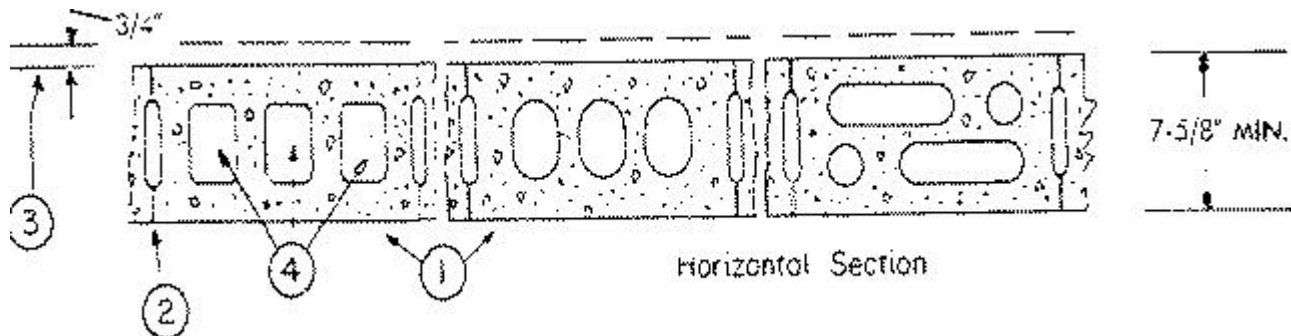
*Bearing the UL Classification Mark

2-Hour Rated Wall Assemblies- Concrete Block

UL Design No. U905

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 repellent vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

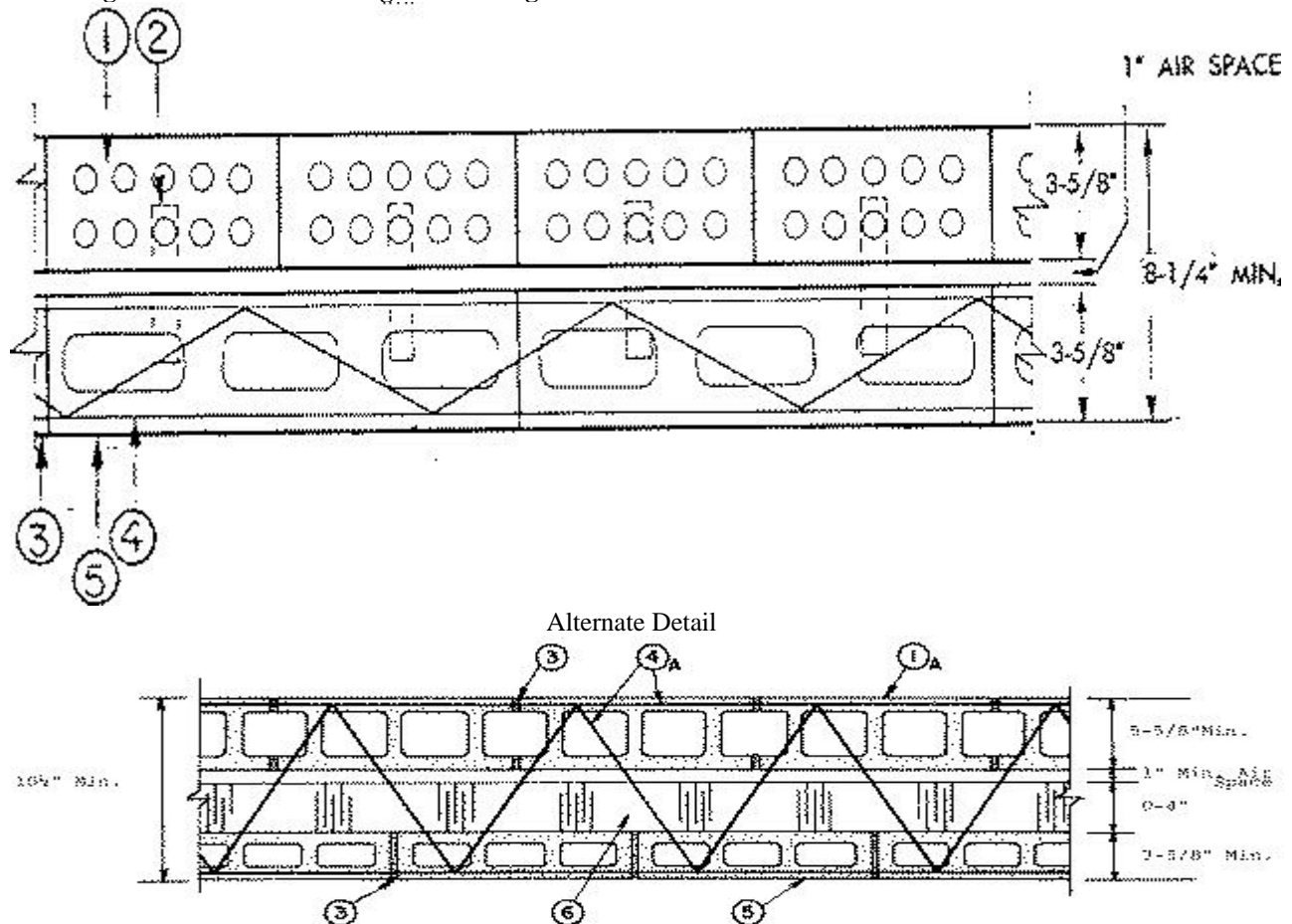
5. **Foamed Plastic*** — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

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4-Hour Rated Wall Assemblies- Concrete Block & Brick

UL Design No. U902 Bearing Wall Rating — 4 HR.



1. **Clay Face Brick** — 3-5/8 in. wide by 2-1/4 in. high by 8 in. long.
- 1A. **Concrete Blocks*** — Various designs, Classification D-2 (2 h). See Concrete Blocks category for list of eligible manufacturers.
2. **Brick Ties** — 3/4 in. wide, 7 in. long corrugated 26 MSG galv steel. Spaced one to each brick in every second course of blocks.
3. **Mortar** — Bricks and 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 clean sharp sand to 1 part Portland cement (proportioned by vol) and not more than 50 percent hydrated lime (by cement vol). Vertical joints staggered.
4. **Reinforcement** — Parallel and diagonal rods, 0.150 in. min diam with welded joints a max 16 in. OC. Placed the width of concrete block wall in every second course of blocks alternately with brick ties.
- 4A. **Masonry Reinforcement** — Prefabricated steel reinforcement, truss or ladder type, used for embedment in every second horizontal mortar joint. Placed the full width of wall assembly. Side and cross rods No. 9 (0.150 in.) min diam with welded joints a max 16 in. OC.
5. **Concrete Blocks*** — Nom 4 in. wide.
- 6A. **Foamed Plastic*** — (Optional-Not shown with clay face brick detail). Rigid polyisocyanurate insulation for use between brick and/or concrete blocks. One or more layers of rigid extruded polyisocyanurate insulation, 4 in. thick max having 1 in. min air space with face brick or blocks.

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