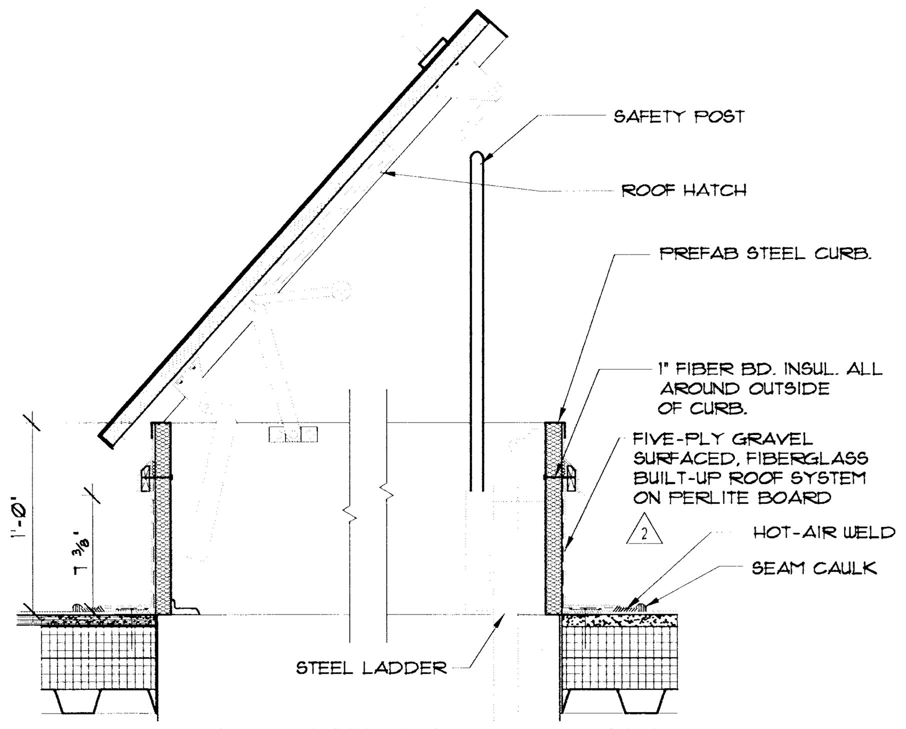
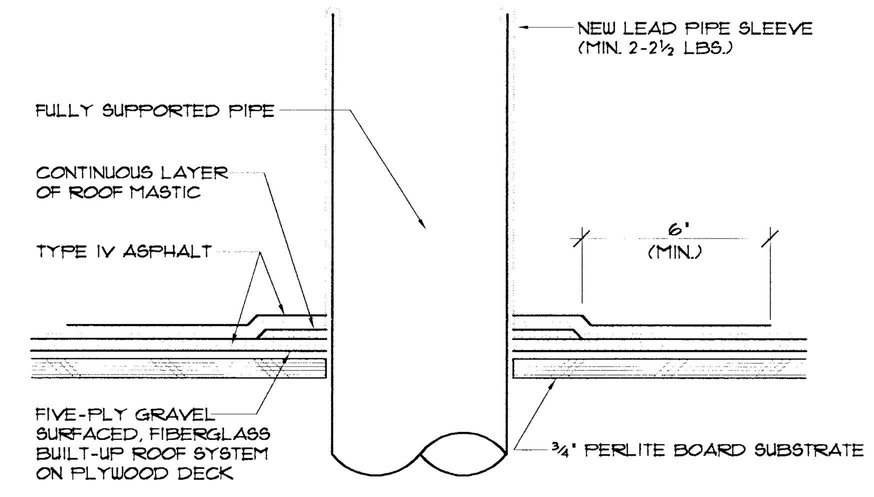


• ALL FLASHINGS MUST BE A MINIMUM OF 6" HIGH WHENEVER POSSIBLE AND MUST BE ABOVE ROOF FLOOD LEVEL.
• DETAIL APPLICABLE FOR PRE-FAB FULLY WELDED CURBS ONLY.

ROOF HATCH DETAIL (1)

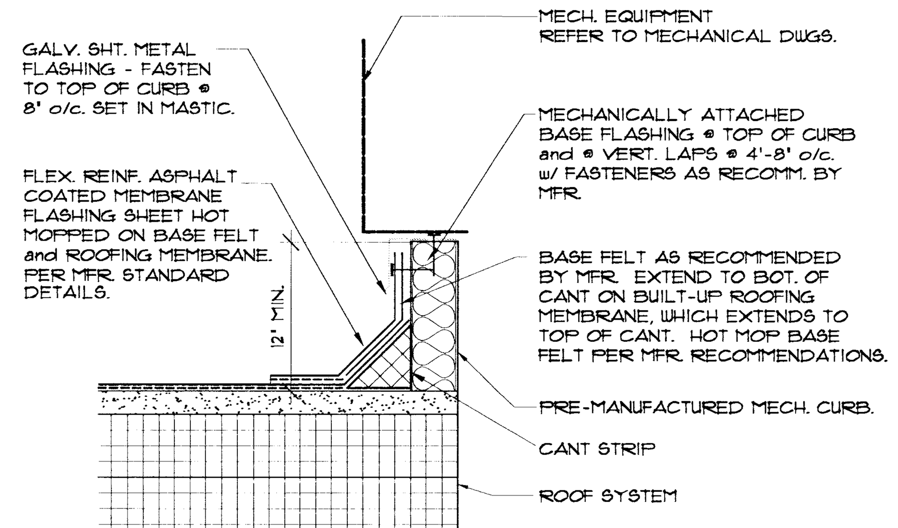
SCALE: 1½" = 1'-0"



NOTE:
1. APPLY PRIMER (ASTM D-41) TO LEAD SURFACES BEFORE APPLYING ASPHALT AND SBS REINFORCED MEMBRANE.
2. IF A PENETRATION IS CONSIDERED A HOT STACK (140°F OR HIGHER), THEN A WELDED WATERTIGHT SLEEVE W/ FLANGE SHALL BE INSTALLED PRIOR TO INSTALLING LEAD AND FLASHING. SLEEVE SHALL BE A MIN. 1" FROM ALL SIDES OF PIPE. FLANGE SHALL BE SET IN A CONT. APPLICATION OF ROOFING MASTIC AND THE METAL SLEEVE PRIMED W/ ASTM D-41 ASPHALT PRIMER. A STORM HOOD SHALL BE INSTALLED.
3. PIPE MUST BE ANCHORED BELOW DECK.
4. DO NOT USE OLD OR EXISTING LEADS.

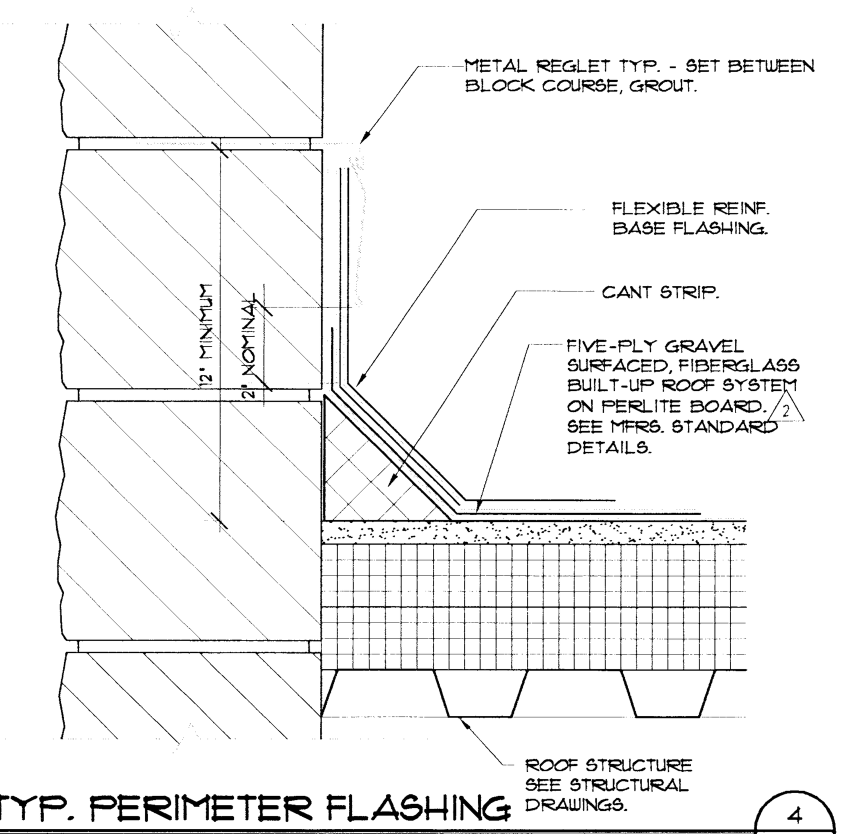
TYPICAL PIPE PENETRATION (2)

SCALE: 3" = 1'-0"



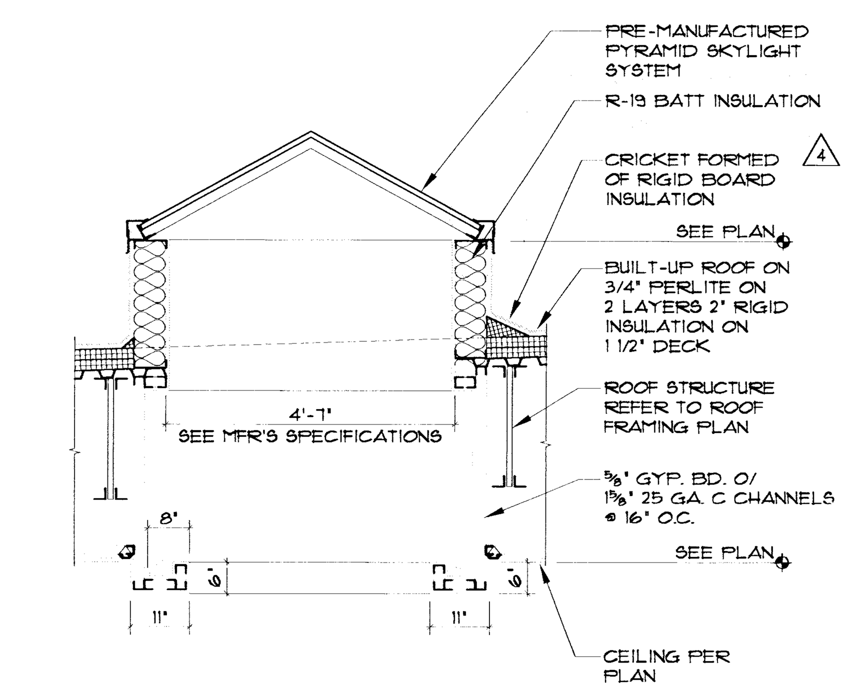
TYP. MECH. CURB DETAIL (3)

SCALE: 3" = 1'-0"



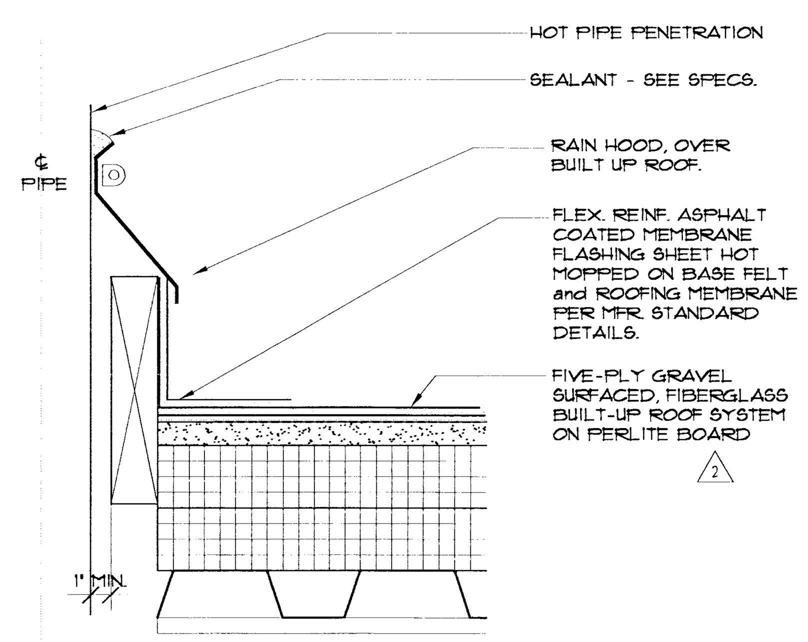
TYP. PERIMETER FLASHING (4)

SCALE: 3" = 1'-0"



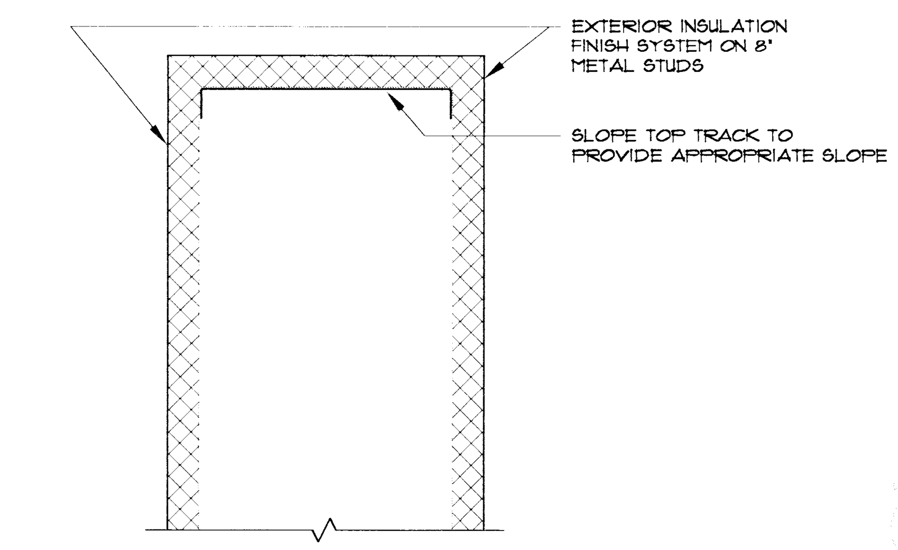
SKYLIGHT DETAIL (5)

SCALE: ½" = 1'-0"



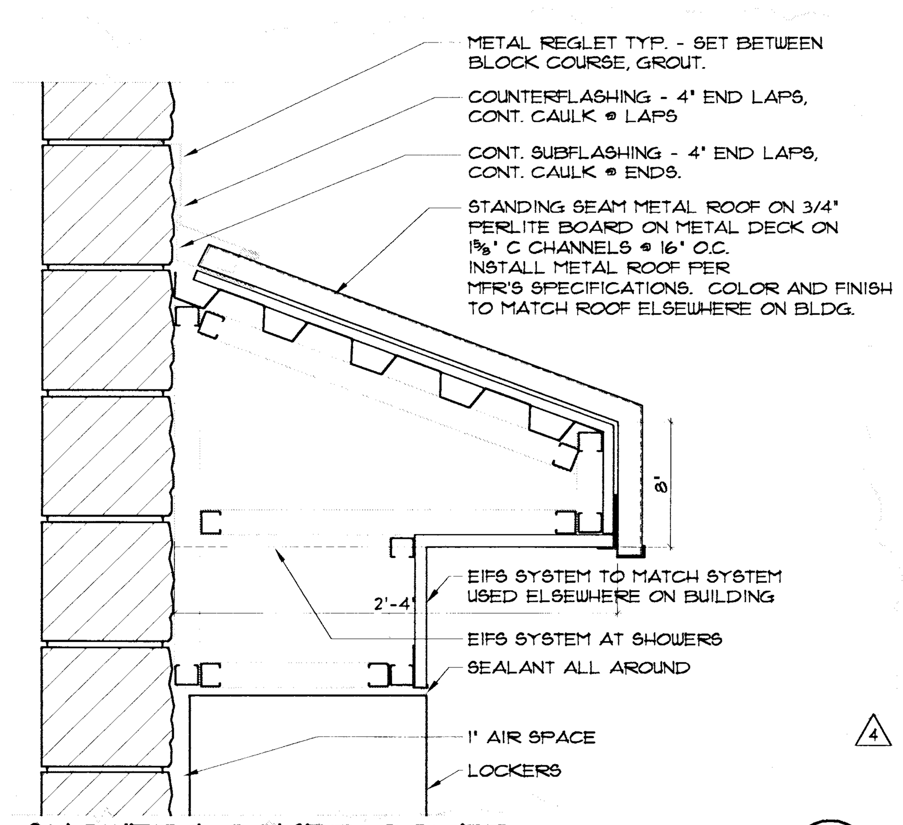
TYP. HOT STACK FLASHING DETAIL (6)

SCALE: 3" = 1'-0"



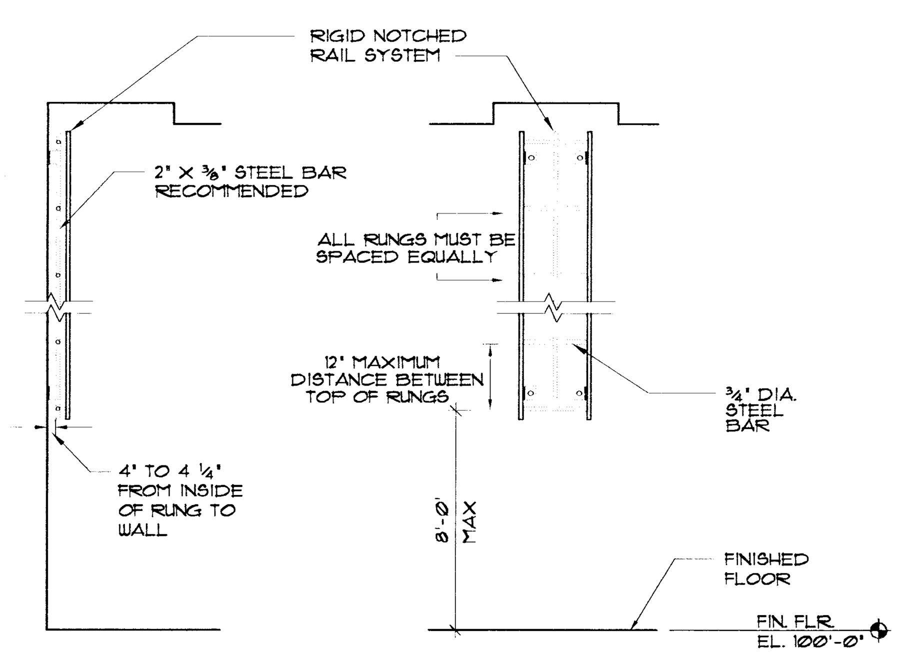
PARAPET at STUD WALL (7)

SCALE: 3" = 1'-0"



SHOWER/LOCKER COVER (8)

SCALE: 1½" = 1'-0"

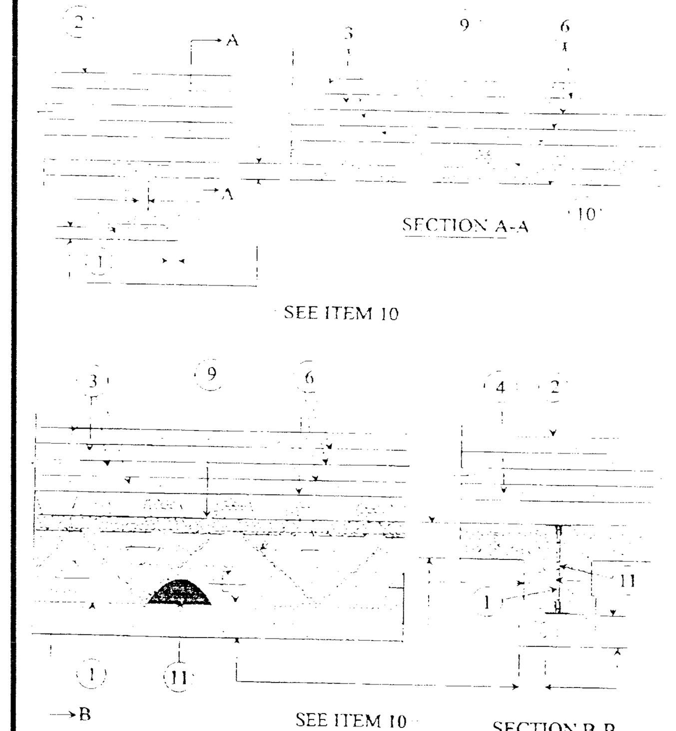


LADDER (ROOF ACCESS) (9)

SCALE: ½" = 1'-0"

Design No. P732

Restrained Assembly Ratings—1, 1-1/2, 2 or 3 Hr (See Item 10)
Unrestrained Assembly Ratings—3/4, 1, 1-1/2, 2 or 3 Hr (See Item 10)
Unrestrained Beam Ratings—1, 1-1/2, 2 or 3 Hr (See Item 10)



1. **Beam**—Min W6x16 or Steel Joist—10K1 or 16K2 min size with a max tensile stress of 30,000 psi or 12K3 or 12K5 min size with a max tensile stress of 24,000 psi.
2. **Roof Covering***—Consisting of hot mopped or cold application bituminous materials compatible with the insulation(s) described herein which provide Class A, B or C coverings. See Roofing Materials and Systems Directory—Roof Covering Materials (TEVT).

2A. In lieu of Item 2, roof covering consisting of single-ply **Roofing Membrane*** that is either ballasted, adhered or mechanically attached as permitted under the respective manufacturer's Classification. See Fire Resistance Directory—Roof Membrane (CHCI).

2B. **Metal Roof Deck Panels***—(Not shown)—In addition to or in lieu of Item 2 or 2A, the roof covering may consist of a mechanically fastened metal roof deck panel assembly. See Fire Resistance Directory —Metal Roof Deck Panels (CETW).

3. **Roof Insulation—Foamed Plastic**—Polyisocyanurate foamed plastic insulation boards nom 48 by 48 or 96 in., to be applied in one or more layers. Boards to be installed with end joints staggered a min of 6 in. Min thickness shall be selected from the Table below. No limit on max overall thickness.

Restrained Or Unrestrained Assembly Rating Hrs	Min Insulation Thkns, In. With Gypsum Wallboard	Without Gypsum Wallboard
1	1	2
1-1/2	1-1/2	3
2	2	3
3	3	4

Apache Products Co.—Type Apache Pyrox
Atlas Roofing Corp.—Type AC Foam II
Celotex Corp.—Types L, 0
Firestone Building Products Co.—"ISO 95+FK", "ISO 95+GL", "ISO 95+GW", "Rhoflex Isocyanurate FK", "Rhoflex Isocyanurate GL", "Rhoflex Isocyanurate GW".
Hunter Panels LLC—H Shield
John Manville International Inc.—E'NRG'Y 2, ISO-1, PSI 25
Loadmaster Systems Inc.—Type Loadmaster polyisocyanurate insulation
Rmax Inc.—Type Multi-Max FA

3A. **Foamed Plastic***—Not Shown—As an alternate to Item 3, polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., with formed channels on the top side and a flat bottom face, to be applied in one layer. Min thickness as measured at the thinnest cross section of polyisocyanurate shall be in accordance with Item 3. No limit on max thickness (as measured at the thickest section of the board). Insulation covered with field applied 3/8 min thick nonveneer APA rated sheathing for use with Class A or C asphalt glass-mat or asphalt organic shingles. Sheathing installed with all joints offset min 6 in. from joints of insulation boards.
GAF Materials Corp.—Type INSUL-AIR.
John Manville International Inc.—Type ISO-VENT.

3B. **Building Units***—Polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., faced on the top surface with oriented strand board. Min thickness of the polyisocyanurate core is 1.3 in. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows. Adhesive (Item 6) may be applied between the building units and the vapor retarder (or gypsum wallboard if vapor retarder is not used).
Apache Products Co.—Apache Nail-Line Roof and Nail-Line V.
Atlas Roofing Corp.—AC Foam Nail Base Insulation and Vented R.
Celotex Corp.—Hy-Therm Nail-Line.

3C. **Roof Insulation-Mineral and Fiber Boards***—(Not Shown) —Optional. Applied in one or more layers over the Foamed Plastic (Item 3) to be applied with adhesive (Item 6), asphalt or coal tar pitch (Item 7) or mechanically fastened (Item 8).
Johns Manville International Inc.

3D. **Building Units***—As an alternate to Item 3, polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., faced on the top surface with oriented strand board. Min thickness of the polyisocyanurate core is 1.3 in. for the 1 hr rating without gypsum wallboard (Item 4) and for the 1, 1-1/2 and 2 hr ratings with gypsum wallboard and 2.6 for the 1 1/2 hr ratings without gypsum wallboard. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows.
John Manville International Inc.—Nailboard.

3E. **Building Units***—As an alternate to Item 3, polyisocyanurate foamed plastic insulation boards faced on the underside (or both sides) with mineral fiber board. Min thickness of the polyisocyanurate core is 1.3 in. for the 1 hr rating without gypsum wallboard (Item 4) and for the 1-1/2 and 2 hr ratings with wallboard and 2.6 in. for the 1-1/2 hr ratings without gypsum wallboard. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. adjacent rows. Adhesive (Item 6) may be applied between the building units and the vapor retarder (or gypsum wallboard if vapor retarder is not used).
John Manville International Inc.—Fesco-Foam.

3F. **Building Units***—As an alternate to Item 3, polyisocyanurate foamed plastic insulation boards faced on the underside with wood fiber board. Min thickness of the polyisocyanurate core is 1.3 in. for the 1 hr rating without gypsum wallboard (Item 4) and for the 1-1/2 and 2 hr ratings with wallboard and 2.6 in. for the 1-1/2 hr ratings without gypsum wallboard. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows.
John Manville International Inc.—E'NRG'Y-2 Plus.

3G. **Building Units***—As an alternate to Item 3, polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., faced on the top surface with gypsum board. Min thickness of the polyisocyanurate core is 1.3 in. for 1 hr rating without gypsum wallboard (Item 4) and for the 1-1/2 and 2 hr ratings with wallboard (Item 4) and 2.6 in. for the 1-1/2 ratings without gypsum wallboard (Item 4). No limit on overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows. Adhesive (Item 6) may be applied between the building units and the vapor retarder (or gypsum wallboard if vapor retarder is not used).
John Manville International Inc.—E'NRG'Y 2 Gypsum Composite.

4. **Gypsum Wallboard**—(Not shown)—(Classified or Unclassified)—May be used to obtain various Restrained or Unrestrained Assembly Ratings as described in Item 10. Supplied in sheets nom 4 by 8 or 12 ft by 5/8 in. thick. Min weight 2.2 psf. Applied perpendicular to steel roof deck direction with end joints staggered 2 ft in adjacent rows. End joints to occur over crests of steel roof units. See **Gypsum Wallboard** (CKNX) category for names of manufacturers.
5. **Vapor Retarder—Sheathing Material***—(Optional)—(Not shown)—Vinyl film or paper scrim vapor barrier, applied to steel roof deck or gypsum wallboard with adhesive (Item 6), hot asphalt (Item 7) or laid loosely, overlapped approx 2 in. on adjacent sheets. See **Sheathing Material** (CHIZ) category for names of manufacturers.
6. **Adhesive*—(Optional)**—The vapor retarder, the gypsum wallboard or the first layer of roof insulation may be secured with adhesive to the steel crest surfaces. Also used to attach the vapor retarder to gypsum wallboard, the first layer of insulation to vapor retarder or gypsum wallboard and each additional layer of insulation. Applied in 1/2 in. wide ribbons 6 in. OC at 0.4 gal/100 sq ft. See **Adhesives** (BYWR) category for names of manufacturers.
7. **Asphalt or Coal Tar Pitch***—(Optional)—(Not shown) — The vapor retarder, the gypsum wallboard of the first layer of roof insulation may be secured with asphalt or coal tar pitch to the steel crest surfaces at a max rate of 15 lb/100 sq ft. Also used to attach the vapor retarder to gypsum wallboard, the first layer of insulation to vapor retarder or gypsum wallboard and each additional layer of roof insulation, applied at a max rate of 25 lb/100 sq ft.
8. **Mechanical Fasteners—(Optional)**—(Not shown) —Mechanical screw-type fastener with metal or plastic washer designed for the purpose may be used to attach one or more layers of insulation to steel roof deck.
9. **Steel Roof Deck**—(Unclassified)—Min 1-1/2 in. deep and 36 in. wide galv fluted steel deck. Min gauge is No. 22 MSG. Ends overlapped at supports a min 1-1/2 in. and welded to supports 12 in. OC and at side laps. Side laps fastened with 1/2 in. long hex head, self-drilling, self-tapping steel screws spaced a max of 36 in. OC.
Classified Steel Floor and Form Units*—Noncomposite 1-1/2 to 3 in. deep, 24 to 36 in. wide, min 22 MSG galvanized steel fluted units. Ends overlapped at supports a min 1-1/2 in. and welded to supports 12 in. OC and at side laps. Side laps fastened with 3/4 in. long No. 12 self-drilling, self-tapping steel screws at 36 in. OC. As alternate to screw fasteners adjacent units may be button-punched or welded together 36 in. OC along side joints.
Bowman Metal Deck/Wheeling Corrugating Co. Div of Wheeling-Pittsburgh Steel Corp.—Galv Types B, F and N, ptd/ptd units may be used for ratings up to 2 h.
Vulcraft, Div. of Nucor Corp.—Galv Types 1.5B, 1.5BI, 1.5F, 3N and 3NI, ptd/ptd units may be used for ratings up to 2 h.
Wheeling Corrugating Co. Div. Of Wheeling-Pittsburg Steel Corp.—Types B, BW, F and N, ptd/ptd units may be used for ratings up to 2 h.
Note: Type Z-106 Spray-Applied Fire Resistive Materials to be used with galv steel roof units only.
10. **Spray-Applied Resistive Material***—Applied by mixing with water and spraying in more than one coat to final thicknesses as shown in the illustration above and in the table below to steel beam surfaces which must be clean and free of dirt, loose scale and oil. Steel deck surface must be "spatter" coated with Type SK-III Spray-Applied Fire Resistive Materials prior to application of spray-applied resistive material. Type SK-III spray-applied resistive material applied in accordance with the manufacturer's application instructions. Min average and min individual density of 15/14 pcf, respectively. For method of density determination, see Design Information Section. Thickness of the spatter coat is included in the total final thickness of the protection material.

Restrained Assembly Rating h	Unrestrained Assembly Rating h	Unrestrained Beam Rating h	OnSteelDeck With Gypsum Wallboard	OnSteelDeck Without Gypsum Wallboard	For 10K1 Joists Spaced More Than: On Beam	4 ft OC	4 ft or Less OC
1	1	1	5/8	1	1/2	1-1/8	15/16
1	1	1	1*	1-5/8*	1/2	1-1/8	15/16
1-1/2	1	1	3/4	1-1/4	9/16	1-5/16	1-5/16
1-1/2	1-1/2	1-1/2	15/16	1-3/8	3/4	1-7/16	1-7/16
1-1/2	1-1/2	1-1/2	1-1/2*	2-1/8*	3/4	1-7/16	1-7/16
2	1	1	1	1-1/2	3/4	1-7/16	1-7/16
2	1-1/2	1-1/2	1	1-1/2	3/4	1-7/16	1-7/16
2	2	2	1-1/4	1-11/16	1	2-3/16	2-3/16
2	2	2	2*	2-5/8*	1	2-3/16	2-3/16
3	1-1/2	1-1/2	1-1/2	2-1/8	1-3/16	3-1/4	2-13/16
3	2	2	1-1/2	2-1/8	1-3/16	3-1/4	2-13/16
3	3	3	1-7/8	2-7/16	1-1/2	3-1/4	2-13/16

Restrained And Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray-Applied Fire-Resistive Mtls Min Thkns In. For 12K3 Or 16K2 Joists Spaced More than 4 Ft OC	4 Ft or Less OC
1	1	15/16	15/16
1-1/2	1-1/2	1-1/2	1-3/8
2	2	2-1/16	1-7/8
3	3	3-1/4	2-13/16

Restrained And Unrestrained Assembly Ratings, Hr	Unrestrained Beam Ratings, Hr	Spray-Applied Fire Resistive Mtls Min Thkns In. For 12K5 Joists
1	1	15/16
1 1/2	1-1/2	1-1/2
2	2	2-1/16
3	3	3-1/16

Arabian Vermiculite Industries—Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s, SK-3, Sonotex 1.
Grace Construction Products—Types MK-6/HY, MK-6S, RG, SK-III, Sonotex 1.
Grace Korea Inc.—Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6S, SK-III, Sonotex 1.
*No min insulation thickness required.

10A. **Alternate Spray-Applied Fire Resistive Materials***—Applied by mixing with water and spraying in one or more coats to final thicknesses as shown in the table below to steel beam surfaces which must be clean and free of dirt, loose scale and oil. When steel deck is used the area between the steel deck and the beams top flange shall be filled. Min avg and min ind density of 22/19 pcf, respectively. For method of density determination, refer to Design Information Section.

Restrained Assembly Rating h	Unrestrained Assembly Rating h	Unrestrained Beam Rating h	OnSteelDeck With Gypsum Wallboard	OnSteelDeck Without Gypsum Wallboard	For 10K1 Joists Spaced More Than: On Beam	4 ft OC	4 ft or Less OC
1	1	1	—	1	1/2	1-1/8	15/16
1	1	1	1*	1-5/8*	1/2	1-1/8	15/16
1-1/2	1	1	3/4	1-1/4	9/16	1-5/16	1-5/16
1-1/2	1-1/2	1-1/2	15/16	1-3/8	3/4	1-7/16	1-7/16
1-1/2	1-1/2	1-1/2	1-1/2*	2-1/8*	3/4	1-7/16	1-7/16
2	1	1	1	1-1/2	3/4	1-7/16	1-7/16
2	1 1/2	1-1/2	1	1-1/2	3/4	1-7/16	1-7/16
2	2	2	1-1/4	1-11/16	1	2-3/16	2-3/16
2	2	2	2*	2-5/8*	1	2-3/16	2-3/16
3	1-1/2	1-1/2	1-1/2	2-1/8	1-3/16	3-1/4	2 13/16
3	2	2	1-1/2	2-1/8	1-3/16	3-1/4	2-13/16
3	3	3	1-7/8	2-7/16	1 1/2	3-1/4	2-13/16

Restrained And Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray-Applied Fire-Resistive Mtls Min Thkns In. For 12K3 Or 16K2 Joists Spaced More than 4 Ft OC	4 Ft or Less OC
1	1	15/16	15/16
1-1/2	1-1/2	1-1/2	1-3/8
2	2	2-1/16	1-7/8
3	3	3-1/4	2-13/16

Restrained And Unrestrained Assembly Ratings, Hr	Unrestrained Beam Rating, Hr	Spray-Applied Fire Resistive Mtls Min Thkns In. For 125K Joists
1	1	15/16
1-1/2	1-1/2	1-1/2
2	2	2-1/16
3	3	3-1/16

Arabian Vermiculite Industries—Types Sonotex 5, Z-106, Z-106/G, Z-106/HY.
Grace Construction Products—Types Sonotex 5, Z-106, Z-106/G, Z106/HY.
Grace Korea Inc.—Types Sonotex 5, Z-106, Z-106/G, Z-106/HY.
*No min insulation thickness required.

10B. **Alternate Spray-Applied Fire Resistive Materials***—Applied by mixing with water and spraying in one or more coats to final thicknesses as shown in the table below to steel beam surfaces which must be clean and free of dirt, loose scale and oil. When steel deck is used, the area between the steel deck and the beams top flange shall be filled. Application to steel roof deck requires the installation of expanded metal lath. See Item 11A. Min avg and min ind density of 40/36 pcf, respectively. For method of density determination, refer to Design Information Section.

Restrained Assembly Rating h	Unrestrained Assembly Rating h	Unrestrained Beam Rating h	OnSteelDeck With Gypsum Wallboard	OnSteelDeck Without Gypsum Wallboard	For 10K1 Joists Spaced More Than: On Beam	4 ft OC	4 ft or Less OC
1	1	1	5/8	1	1/2	1-1/8	15/16
1	1	1	1*	1-7/16*	1/2	1-1/8	15/16
1-1/2	1	1	3/4	1-1/4	9/16	1-5/16	1-5/16
1-1/2	1-1/2	1-1/2	15/16	1-3/8	3/4	1-7/16	1-7/16
1-1/2	1-1/2	1-1/2	1-1/2*	1-7/8*	3/4	1-7/16	1-7/16
2	1	1	1	1-1/2	3/4	1-7/16	1-7/16
2	1-1/2	1-1/2	1	1-1/2	3/4	1-7/16	1-7/16
2	2	2	1-1/4	1-11/16	1	2-3/16	2-3/16
2	2	2	2*	2-5/16*	1	2-3/16	2-3/16
3	1-1/2	1-1/2	1-1/2	2-1/8	1-3/16	3-1/4	2-13/16
3	2	2	1-1/2	2-1/8	1-3/16	3-1/4	2-13/16
3	3	3	1-7/8	2-7/16	1-1/2	3-1/4	2-13/16

Restrained And Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray-Applied Fire-Resistive Mtls Min Thkns In. For 12K3 Or 16K2 Joists Spaced More than 4 Ft OC	4 Ft or Less OC
1	1	15/16	15/16
1-1/2	1-1/2	1-1/2	1-3/8
2	2	2-1/16	1-7/8
3	3	3-1/4	2-13/16

Restrained And Unrestrained Assembly Ratings, Hr	Unrestrained Beam Ratings, Hr	Spray-Applied Fire Resistive Mtls Min Thkns In. For 12K5 Joists
1	1	15/16
1-1/2	1-1/2	1-1/2
2	2	2-1/16
3	3	3-1/16

Arabian Vermiculite Industries—Type Z-146.
Grace Construction Products—Type Z-146
Grace Korea Inc.—Type Z-146
*No min insulation thickness required.

11. **Nonmetallic Fabric Mesh**—(Optional)—As an alternate to metal lath, glass fiber fabric mesh, weighing approx 2.5 oz/sq yd, polypropylene fabric mesh, weighing approx 1.25 oz/sq yd or equivalent, may be used to facilitate the spray application. The mesh is secured to one side of each joist web member. The method of attaching the mesh must be sufficient to hold the mesh and the spray applied Spray-Applied Fire Resistive Materials material in place during application until it has cured. An acceptable method to attach the mesh is by embedding the mesh in min 1/4 in. long beads of hot melted glue.The beads of glue shall be spaced a max of 12 in. OC along the top chord of the bar joist. Another method to secure the mesh is by 1-1/4 in. long by 1/2 in. wide hairpin clips formed from No. 18 SWG or heavier steel wire.

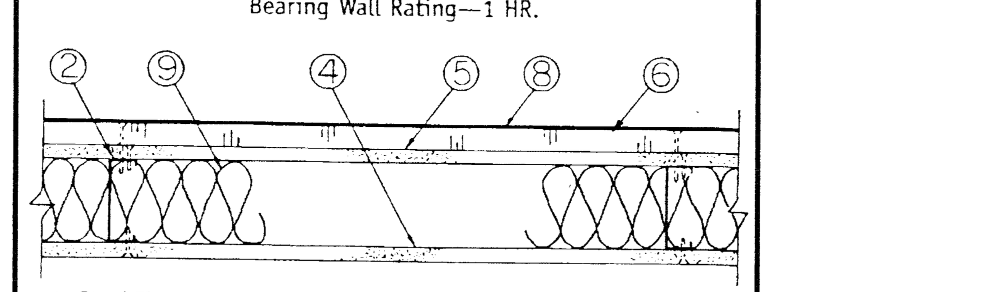
11A. **Metal Lath**—(Not Shown)(Required with Item 10B, optional with Items 10, 10A)—Metal lath shall be 3/8 in. expanded diamond mesh, weighing 2.5 lb per sq yd. Secured to underside of steel deck with No. 12 by 3/8 in. pan head self-drilling, self-tapping screws and steel washers with an outside diam of 1/2 in. screws spaced 12 in. OC in both directions with lath edges overlapped approx 3 in.

11B. **Metal Lath**—(Optional)—(Not shown)—Metal lath may be used to facilitate the spray application of Spray-Applied Fire Resistive Materials on steel bar joists and trusses. The diamond mesh, 3/8 in. expanded steel lath, 1.7 to 3.4 lb/sq yd is secured to one side of each steel joist with No. 18 SWG galv steel wire at joist web and bottom chord members spaced 15 in. OC max. When used, the metal lath is to be fully covered with Spray-Applied Fire Resistive Materials with no min thickness requirements.

*Bearing the UL Classification Marking

Design No. U472

(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). 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. 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. **Wallboard, Gypsum***—Any 5/8 in. thick (min) gypsum wallboard bearing the ULI Classification Marking as to Fire Resistance. Applied vertically with Type S-12 bugle head screws, spaced 8 in. O.C. at edges and joints and 12 in. O.C. at field.
See Wallboard Gypsum (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. O.C. along studs and tracks.
6. **Foamed Plastic***—Min 1 in. thick, density of 1 pcf max, polystyrene foamed plastic insulation boards, supplied in 2 by 4 ft sheets. Positioned horizontally and staggered 24 in. O.C. vertically, attached to the Gypsum Sheathing (Item 5) with Adhesive/Base Coat (Item 8) at a rate of 1-1/2 gal per 100 sq ft and (optional) four 2-1/4 in. long by 0.125 in. diam shank Phillip head screws with 1-3/4 in. diam plastic washers with cap, located 2 in. from the corners of the foamed plastic.
Associated Foam Manufacturers—Type WSG.
7. **Non-Metallic Fabric Mesh**—(Not shown) glassfiber fabric mesh, weighing approx 2.5 oz per sq yd, positioned vertically over the foamed plastic (Item 6) and secured at the top with 16 gauge, 3/8 in. long staples randomly spaced.
8. **Wall and Partition Facings and Accessories—Coating System** —The base coat is trowel applied over glassfiber fabric mesh (Item 7) at a rate of 2 gal per 100 sq ft. The textured wall finish is then applied over the base coat at a rate of 2-1/2 gal per 100 sq ft.
Gaco Western Inc.—Types A-5200, -5207, -5214, -5216, -5218, -5250.
9. **Batts and Blankets***—Min 3-1/2 in. mineral wool batts placed to fill cavity of wall.

*Bearing the UL Classification Marking

NOTE:
ASSEMBLIES ARE COPIED FROM 1999 UL FIRE RESISTANCE DIRECTORY
COPYRIGHT BY UNDERWRITERS LABORATORIES, INC.

APPROVAL IS FOR CLOUDED AREAS OR LATEST REVISIONS ONLY. SEE ORIGINALS FOR OTHER REQUIREMENTS.

PLANS APPROVED
ARCHITECTURAL
Building & Safety Dept.
City of Las Vegas, Nevada
JCC DEC 0 3 2001
Does Not Include Structural, Electrical, Plumbing/Mechanical or Off-Site Improvements Make No Change Without Approval Plan is Not a Permit to Violate Any Ordinance

3

387023

RECEIVED
OCT 0 8 2001
CITY OF LAS VEGAS
GENERAL PERMITS

LUCCHESI
•GALATI•
ARCHITECTS

CRAIG S. GALATI
REGISTERED ARCHITECT
No. 1952
OCT 0 1 2001
STATE OF NEVADA

ROOF DETAILS

SUMMERLIN ARBORS PARK
POOL AND POOL BUILDING

Date: October 22, 1999
Project No. 98035.00
Scale: AS NOTED
Drawn By: DDT

Revisions:
2 2/25/00 - CITY COMMENTS
3 1-13-00 - PLANCHECK COMMENTS
4 10-01-01 - MISC. REVISIONS

Sheet Number: A4.02