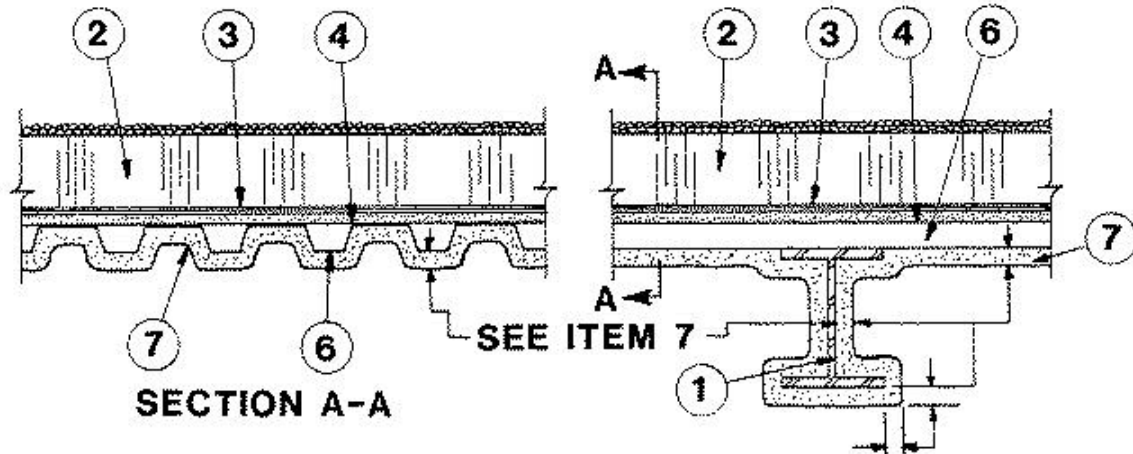


Restrained Assembly Ratings-1, 1-1/2 and 2 Hr.

Unrestrained Assembly Ratings-1, 1-1/2 and 2 Hr.

Unrestrained Beam Ratings-1, 1-1/2 and 2 Hr.



1. **Steel Beam** — W6x16, min size.

2. **Foamed Plastic*** — Rigid foamed plastic insulation, extruded polystyrene 2 by 4 ft boards, 1 to 8 in. thick. May be bonded to the membrane or installed without adhesion after final asphalt glaze coat has cooled. When applying more than one layer, successive layers shall be installed over preceding layer without attachment. The boards shall be covered with crushed stone or concrete pavers, at a rate of 10 psf, min.

THE DOW CHEMICAL CO — Type RM.

T CLEAR CORP — 4-3/8 in. thick, concrete mortar faced extruded polystyrene Lightguard Boards.

OWENS CORNING SPECIALTY & FOAM PRODUCTS

3. **Roof Covering*** — Consists of hot mopped or cold application bituminous materials compatible with insulation(s) described herein which provide Class A, B or C coverings. See Roofing Materials and Systems Directory-Roof Covering Materials.

A) In lieu of Item 3, 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 - Roofing Membranes (CHCI).

4. **Gypsum Board*** — 5/8 in. thick, supplied in 4 ft wide sheets. Min weight 2.0 psf. Installed perpendicular to steel roof deck with end joints staggered and offset from steel roof deck side lap joints. Secured to crests of steel roof deck with steel fasteners (Item 5) in a 24 in. grid. See Gypsum Board (CKNX) category for name of manufacturers.

5. **Fasteners** — (Not Shown) — For attaching gypsum wallboard to steel deck. **Steel Nails** — 2-1/8 in. long and 0.162 in. diam with a 19/64 in. diam flat head to be fabricated from case hardened steel with the shaft containing two types of serrations. The upper serration, approx 1/8 in. long, begins 1/4 in. from the nail head and the second serration begins 5/8 in. from the head with a spiral

pattern 11/16 in. wide. A steel disc 0.020 in. thick and 2-1/8 in. min diam with a 7/32 in. prepunched center hole is to be used with each nail. Nails are to be installed with an automatic nailer. **Steel Insulation Clips** — Fabricated from a single piece of steel 0.033 in. thick and 5/8 in. max width. Length of stem to be 2-3/8 in. with stem curved and end pointed and having five barbs 5/16 in. long. A steel disc 0.011 in. thick and 2-11/16 in. min diam is to be used with each clip. Spacing of fasteners to be 24 in. O.C. across the width of the panel beginning 12 in. from the side edges and 24 in. along the length of the panel beginning 12 in. from the end.

6. **Steel Roof Deck** — Unclassified — Min 24 in. wide, 1-1/2 to 3 in. deep, galv fluted steel deck. Min gauge is 22 MSG. Flutes approx 6 in. O.C., crests approx 3-1/2 in. wide, valleys approx 1-3/4 in. wide. Welded to supports 12 in. O.C. Adjacent units welded 36 in. O.C. along side lap joints. Or, Classified Steel Floor and Form Units* — Noncomposite 1-1/2 to 3 in. deep, 24 to 36 in. wide, min 22 MSG galv steel fluted units. Welded to supports 12 in. O.C. Adjacent units button-punched or welded together 36 in. OC along side joints.

CONSOLIDATED SYSTEMS INC — Types B, BI, F, N, NI. Units may be ptd/ptd.

7. **Spray-Applied Fire Resistive Materials*** — Applied by mixing with water and spraying in more than one coat to a final thickness as shown above and on the table below, to steel surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15/14 pcf respectively. For method of density determination, refer to Design Information Section.

Restrained & Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	Spray Applied Resistive Mtl	
		Thkns on Deck In.	Thkns on Beam In.
1	1	3/4	7/8
1	2	3/4	1-1/4
1-1/2	1-1/2	1-1/8	1
1-1/2	2	1-1/8	1-1/4
2	2	1-9/16	1-1/4

ARABIAN VERMICULITE INDUSTRIES — Types MK-5, MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s, Sonophone 1.

GRACE CANADA INC — Types MK-4, MK-5.

GRACE KOREA INC — Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s, Monokote Acoustic 1.

PYROK INC — Type LD.

SOUTHWEST VERMICULITE CO — Types 4, 5, 5EF, 5GP, 5MD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.

VERMICULITE PRODUCTS INC — Types MK-4, MK-5, VP4, VP5.

W R GRACE & CO - CONN

CONSTRUCTION PRODUCTS DIV — Types MK-4, MK-5, MK-6/HY, MK-6s, Monokote Acoustic 1, RG.

*Bearing the UL Classification Mark

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