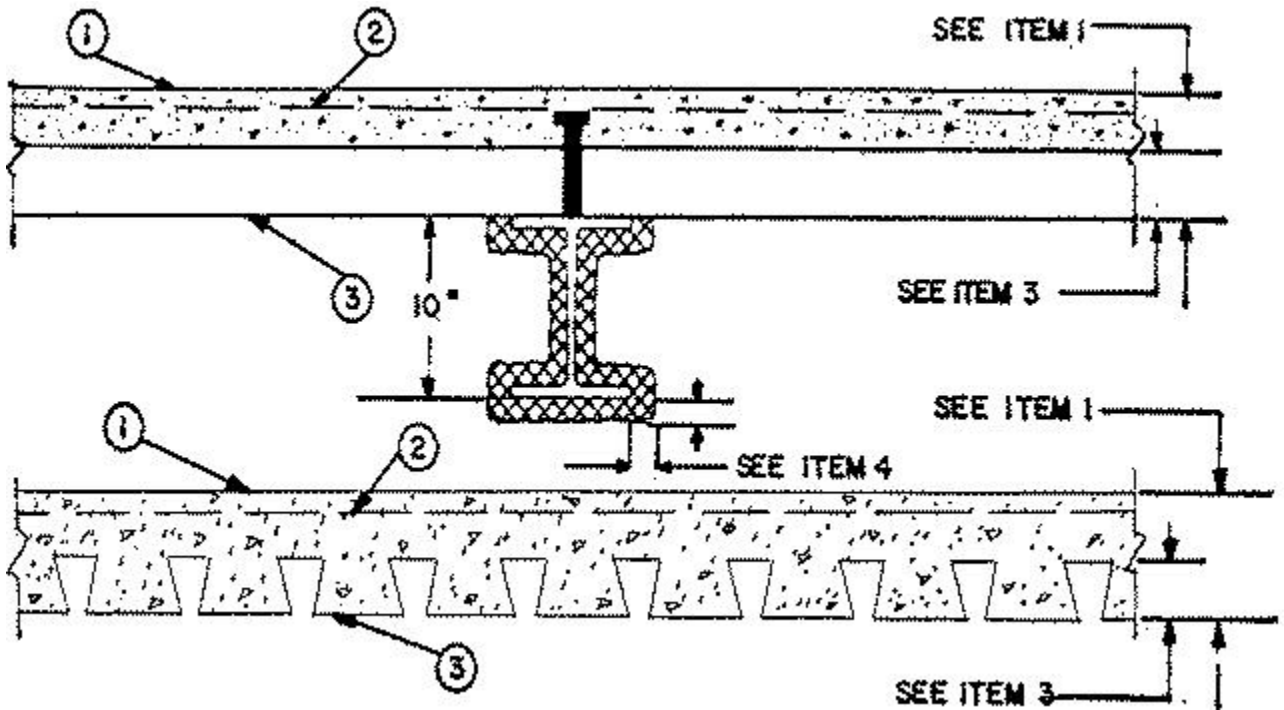


**Restrained Assembly Ratings — 1-1/2, 2 and 3 Hr.**

**Unrestrained Assembly Rating — 3/4 Hr.**

**Unrestrained Beam Ratings — 1 and 1-1/2 Hr.**



**Beam** — W10X29, min size.

1. **Normal Weight or Lightweight Concrete or Semi-Lightweight** — Normal weight concrete carbonate or siliceous aggregate, 150 + or - 3 pcf unit weight, 3500 psi compressive strength. Lightweight concrete, expanded shale, clay or slate aggregate by rotary-kiln method or expanded clay or flyash aggregate by sintered-grate method 110 + or - 3 pcf unit weight, 4000 psi compressive strength. Semi-Lightweight concrete, consisting of lightweight aggregate as described above and carbonate or siliceous normal weight aggregate, 130 pcf, 3500 psi concrete strength.

Restrained Assembly Rating Hr	Concrete (Type)	Total Slab Thkns In.
1-1/2	Normal Weight	4-3/4
2	Normal Weight	5-1/4
2	Semi Lightweight	5
2	Lightweight	4-1/2
3	Lightweight	5-1/4
3	Normal Weight	6-3/4
3	Semi Lightweight	6

2. **Welded Wire Fabric** — 6X6 — 6/6 SWG.

3. **Steel Floor and Form Units\*** — Composite. 2 in. deep, 24 in. wide, 22 MSG min galv fluted units. Welded to supports 12 in. O.C. max. Adjacent units welded 36 in. OC at joints.

**CONSOLIDATED SYSTEMS INC** — 24 in. wide Type Versa-Dek® S, LS, XLS. Units may be phos/ptd.

4. **Spray-Applied Fire Resistive Materials** — \* — Applied by mixing with water and spraying in one or more coats to a final thickness as shown below, to steel beam surface 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, Sprayed Material. The Spray-Applied Fire Resistive Materials shall be applied to the steel deck a min of 2 in. beyond each side of the beam's to flange at the beam thickness. Crest areas above the beam need not be filled with Spray-Applied Fire Resistive Materials.

<b>Restrained Assembly Rating Hr</b>	<b>Unrestrained Beam Rating Hr</b>	<b>Min Thkns In. (Beam)</b>
1-1/2, 2	1	1/2
3	1-1/2	3/4

**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, CK-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.

5. **Shear Connector Studs — Optional** — Studs, 3/4 in. diam by 3 in. long headed type or equivalent per AISC specifications. Welded to the top flange of the beam through the steel form units.

\*Bearing the UL Classification Mark

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