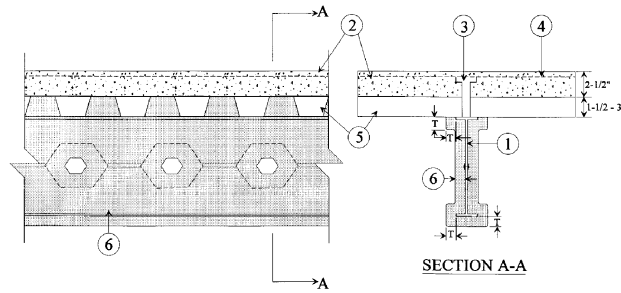


Design No. N784

Restrained Beam Ratings — 1, 1-1/2, 2, 3 & 4 Hr
 Unrestrained Beam Ratings — 1, 1-1/2, 2, 3 & 4 Hr
 Load Restricted for Canadian Applications — See Guide BXUV7



1. **Structural Steel Members*** — Tye CB12 x 10 min size.
2. **Normal Weight or Lightweight Concrete** — Compressive strength 3500 psi. For normal weight concrete either carbonate or silicious aggregate may be used. Unit weight 146 (plus or minus 3) pcf. For lightweight concrete, unit weight 110 (plus or minus 3) pcf.
3. **Shear Connector (Optional)** — Studs, 1/2 in. diam headed type or equivalent per AISC specifications. Welded to top flange of beam through the steel floor units.
4. **Welded Wire Fabric** — 6x6, W1.4xW1.4.
5. **Steel Floor And Form Units** — 1-1/2, 2 or 3 in. deep fluted units, welded to beam.
6. **Spray-Applied Fire Resistive Materials*** — Applied by mixing with water and spraying to the beam surfaces to the final min thicknesses shown below. Crest areas above the beam shall be filled with the Spray-applied fire resistive material. Surfaces must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15/14 pcf. Min avg and min individual density of 22/19 pcf respectively for Types Z-106, Z-106/G, and Z-106/HY. Min avg and min individual density of 40/36 pcf respectively for Types Z-146, Monokote Acoustic 35, and AV650. Min avg and min ind density of 50/45 pcf respectively for Type AV 800. For method of density determination see Design Information Section.

Thickness, In.

Rating Hr	Unrestrained Beam Rating Hr		Restrained Beam Rating Hr	
	Normal Weight	Lightweight	Normal Weight	Lightweight
	Concrete	Concrete	Concrete	Concrete
1	13/16	7/8	13/16	7/8
1-1/2	1-1/8	1-1/4	15/16	1
2	1-1/2	1-9/16	1-1/4	1-5/16
3	2-3/16	2-1/4	1-15/16	2
4	2-13/16	2-15/16	2-9/16	2-5/8

ARABIAN VERMICULITE INDUSTRIES —Types MK-10 HB, MK-10 HB Extended Set, Types AV650 investigated for exterior use, AV800 investigated for exterior use.

GRACE KOREA INC —Types MK-6/CBF, MK-6/HY, MK-6S, Monokote Acoustic 1, Z-106, Z-106/G, Z-106/HY, Type Z-146 investigated for exterior use, Monokote Acoustic 35, MK-6/HY Extended Set, MK-10 HB, MK-10 HB Extended Set.

W R GRACE & CO - CONN —Types MK-6/HB, MK-10 HB, MK-10 HB Extended Set, MK-6/HY, MK-6S, Monokote Acoustic 1, RG, Z-106, Z-106/G, Z-106/HY, Type Z-146 investigated for exterior use, Monokote Acoustic 35, MK-6/HY Extended Set.

*Bearing the UL Classification Mark