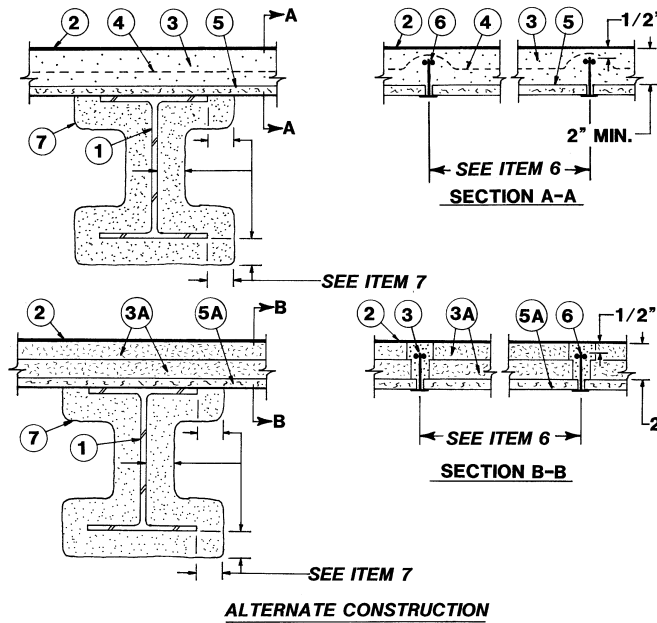


Design No. P676

Restrained Assembly Ratings — 1-1/2 and 2 Hr. (See Item 6)
 Unrestrained Assembly Ratings — 1-1/2 and 2 Hr. (See Item 6)
 Unrestrained Beam Ratings — 1-1/2 and 2 Hr. (See Item 6)
 Load Restricted for Canadian Applications — See Guide BXUV7



ALTERNATE CONSTRUCTION

1. **Beam** — W8 x 21, min size.
2. **Roof Covering*** — Consisting of hot mopped or cold application materials compatible with insulation(s) described herein which provide Class A, B or C coverings. See Roofing Materials and Systems Directory-Roof Covering Materials (TEVT).
3. **Gypsum Concrete** — Air dry density and strength approx 50 pcf and 500 psi, respectively. Dry gypsum mixture supplied in bags containing not more than 5 per cent by weight of wood shavings or chips.
4. **Wire Mesh** — (for use with Item 3) — No. 19 SWG galv steel wire twisted to form hexagons with 2-in sides. In addition, straight 16 SWG galv steel wire woven into the mesh and spaced 3 in. apart as stiffeners. Mesh installed without attachment and overlapped 6 in. at the sides.
5. **Gypsum Board*** — 1 in. thick gypsum panels nom 24 in. wide placed between sub-purlins, with end joints staggered in adjacent courses
 CGC INC — Type SLX.
 UNITED STATES GYPSUM CO — Type SLX.
 USG MEXICO S A DE C V — Type SLX
6. **Sub-purlins** — Spaced 24-1/2 in. O.C. Max spacing of supports not to exceed 8 ft 0 in. for a 2 hr rating and not to exceed 9 ft 0 in. for a 1-1/2 hr rating. Sub-purlins welded to supports with 1-1/2 in. long fillet welds on each side of each support.

Gypsum Board Thkns In.	Subpurlin Type
1/2	5-6-17-2 2-5-17-2 1-5-17-2
1	000-5-14-2 2-3-17-2-1/2 1-3-17-2-1/2
1-1/2	000-3-14-2-1/2 000-3-14-3 1-3-17-3

7. **Spray-Applied Fire Resistive Materials*** — Applied by mixing with water and spraying in several coats to a final thickness of 1-1/2 in. to beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15/14 pcf respectively. Min avg and min ind density of 19/18 pcf respectively for Type 7GP and 7HD. For method of density determination, see Design Information Section.
 ARABIAN VERMICULITE INDUSTRIES — Model 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 FIREPROOFING PRODUCTS CO — Types 4, 5, 5EF, 5GP, 5MD, 7GP, 7HD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.
 W R GRACE & CO - CONN — Types MK-4, MK-5, MK-6/HY, MK-6s, Monokote Acoustic 1, RG.
- 7A. **Spray-Applied Fire Resistance Materials*** — As an alternate to Item 7 - Applied by mixing with water and spraying in one or more coats to a final thickness of 7/16 in. to beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15 and 14 pcf, respectively. For method of density determination see Design Information Section.
 BERLIN CO LTD — Types 300, 300ES, 300N or SB.
 ISOLATEK INTERNATIONAL — Types 300, 300AC, 300ES, 300HS, 300N or SB.
 LUCKY CORE INSULATING MATERIALS
 MANUFACTURING L L C — Types 300, 300ES, 300N, or SB.
 NEWKEM PRODUCTS CORP — Types 300, 300ES, 300N or SB.
- 7B. **Spray-Applied Fire Resistance Materials*** — As an alternate to Item 7 and 7A - Applied by mixing with water and spraying in one or more coats to a final thickness of 7/16 in. to beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 17.5 and 16 pcf, respectively for Type 300TW. Min avg and min ind density of 22 and 19 pcf, respectively, for Type 400. For method of density determination see Design Information Section.
 ISOLATEK INTERNATIONAL — Types 300TW or 400.

LUCKY CORE INSULATING MATERIALS

MANUFACTURING L L C —Type 400.

NEWKEM PRODUCTS CORP —Type 400.

*Bearing the UL Classification Mark