

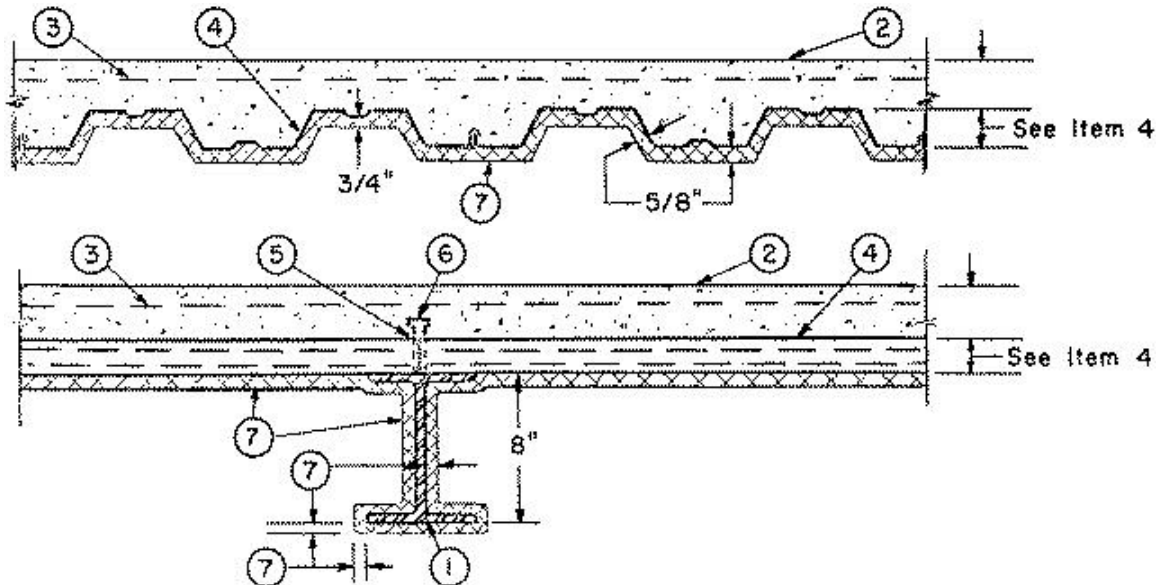
Design No. D771

June 14, 2002

Restrained Assembly Rating — 2 and 3 Hr (See Item 2)

Unrestrained Assembly Ratings — 1/2 Hr

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



1. **Beam** — W8x24 min size.

2. **Normal-Weight Concrete** — Carbonate aggregate, 150 + or- 3 pcf unit weight, 3500 psi compressive strength, vibrated.

Min Concrete Topping Thkns In.	Restrained Assembly Rating Hr
2-1/2	2
3-1/2	3

3. **Welded Wire Fabric** — 6x6 — W1.4xW1.4.

4. **Steel Floor and Form Units*** — Composite 1-1/2, 2 or 3 in. deep, 24 in. wide, galv, all fluted units. Min gauge is 22 MSG. Spacing of welds attaching units to supports shall be at each side of joint and not to exceed 12 in. OC between joints. Adjacent units welded together 36 in. OC at side joints.

CONSOLIDATED SYSTEMS INC — 24 or 36 in. wide Types CFD-1.5, CFD-2 or CFD-3. Units may be phos/ptd.

Alternate Construction — Noncomposite units of the same type listed above may be used provided allowable loading is calculated on the basis of noncomposite design. Fluted composite units may have integral hanger tabs punched in valleys of units spaced 12 in. OC and staggered in adjacent rows.

5. **Joint Cover** — 2 in. wide, pressure-sensitive cloth tape.

6. **Shear Connector** — (Optional) — Studs, 3/4 in. diam by 3-3/8 in. long., headed type or equivalent per AISC specification. Welded to the top flange of beam through the deck.

7. **Spray-Applied Fire Resistive Materials** — *Applied by mixing with water and spraying in one coat to a final thickness as shown above 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 the Type 15 and 15-High Yield, 22/18 pcf, respectively for the Type 22, 40/37 respectively for the Type 40, 28/25 respectively for the Type 239, 44.5/42 respectively for the Type 240-High Yield and 55/50 respectively for the Type 241. For method of density determination, refer to Design Information Section.

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

CARBOLINE CO — Types 15, 15-High Yield, 22, 40, 239, 240-High Yield, 241.

CARBOLINE KOREA LTD — Types 15, 15-High Yield, 22, 40, 239, 240-High Yield, 241.

STONCOR MIDDLE EAST L L C — Types 15, 15-High Yield, 22, 40, 239, 240-High Yield, 241.

CARBOLINE SOUTHEAST ASIA PTE LTD — Types 15, 15-HY, 22.

CDC CARBOLINE (INDIA) PVT LTD — Types 15, 15-High Yield, 22, 40, 239, 240-High Yield, 241., CDC Crete 15, CDC Crete 15-High Yield, CDC Crete 22, CDC Crete 40, CDC Crete 239, CDC Crete 240 High Yield, CDC Crete 241.

CENTRAL PAINTS IND INC LTD — Types 15, 15-High Yield, 22, 40, 239, 240-High Yield, 241..

8. **Metal Lath (not shown)** — Where Types 40, 239, 240 High-Yield and 241 are applied to steel deck, 3/8 in. metal ribbed lath weighing 3.4 lb/yd² shall be secured to the underside of the steel deck (ribs upward) with S-12 by 3/8 in. long panhead, self-tapping steel screws spaced 12 in. OC in all directions. Steel screws shall be fitted with 1/2 in. diameter steel washers. Adjacent pieces of lath shall be overlapped 1 in. min.

*Bearing the UL Classification Mark

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