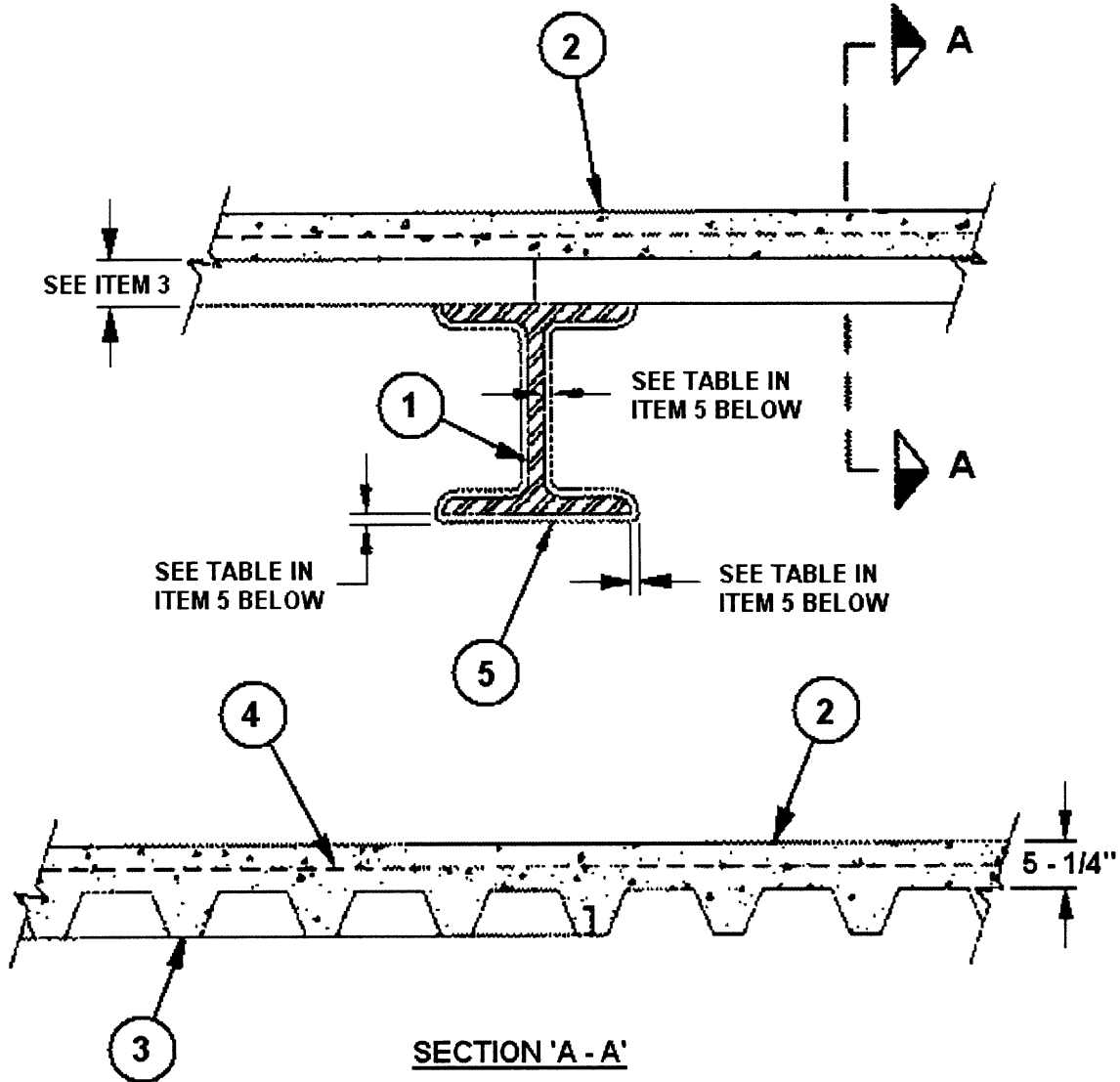


**FLOOR/CEILING DESIGN No. 31**

**Restrained Assembly Rating – 2 hr.**  
**Unrestrained Assembly Rating – 0 hr.**  
**Unrestrained Beam Rating – 2, 1-1/2 hr.**



FM APPROVALS  
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Appendix A  
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1. STEEL BEAMS — Wide flange steel beam with the minimum sizes shown in the table in item 5. Beam shall be primed with metal Alkyd Primer.
2. NORMAL WEIGHT CONCRETE — Normal-density concrete, carbonate aggregate, 150 pcf (2400kg/m<sup>3</sup>) density, 3600 psi (25 MPa) compressive strength.
3. STEEL FLOOR AND FORM UNITS — Composite or noncomposite, 3 in. (76.2 mm) deep, 20 MSG fluted or 20/20 MSG cellular, galvanized units. All fluted or alternating one 36 in.(914 mm) or 24 in. (610 mm) wide fluted to one 24 in. (610 mm) wide max cellular section. Welded to supports not over 12 in. (305 mm) o.c. Adjacent units welded or crimped together along side laps 16 in. (406 mm) o.c. When the maximum clear span of the Steel Floor and Form Units is less than or equal to the tested span of 5 ft. 9 in. (1.75 m), the unrestrained assembly rating is increased to 1-1/2 hr. or 2 hr. to match the unrestrained beam rating.
4. WELDED WIRE FABRIC — 6 x 6 in. – W1.4 x W1.4 (152 x 152 mm MW9.1 x MW9.1) wire mesh.
5. MASTIC COATING — Mastic coating spray or brush applied in accordance with manufacture's instructions to the minimum dry film thickness shown below:

Min Beam Size, in. (W/D)	Min Beam Size, m (M/D)	Restrained Assembly Rating, Hr.	Unrestrained Assembly Rating, Hr.	Unrestrained Beam Rating, Hr.	Required Min Dry Film Thickness, in. (mm)
W8x31 (0.80)	W200x46 (46)	2	0 (See Item 3)	1-1/2	0.089 (2.26)
W6x25 (0.84)	W150x37 (48)	2	0 (See Item 3)	2	0.100 (2.54)

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A/D FIREFILM® II or A/D FIREFILM® III.

6. SHEAR CONNECTORS — (Optional, Not shown) — Studs ¾ in. (19 mm) diameter by 6 in. (152 mm) long, headed type, or equivalent per A.I.S.C. specifications. Welded to top flange of the beam through the deck
7. TOP COAT — (Not shown) Finishing topcoat, (silicone alkyd paint) applied at an approximate 0.002 in. (0.05 mm) dry film thickness.

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