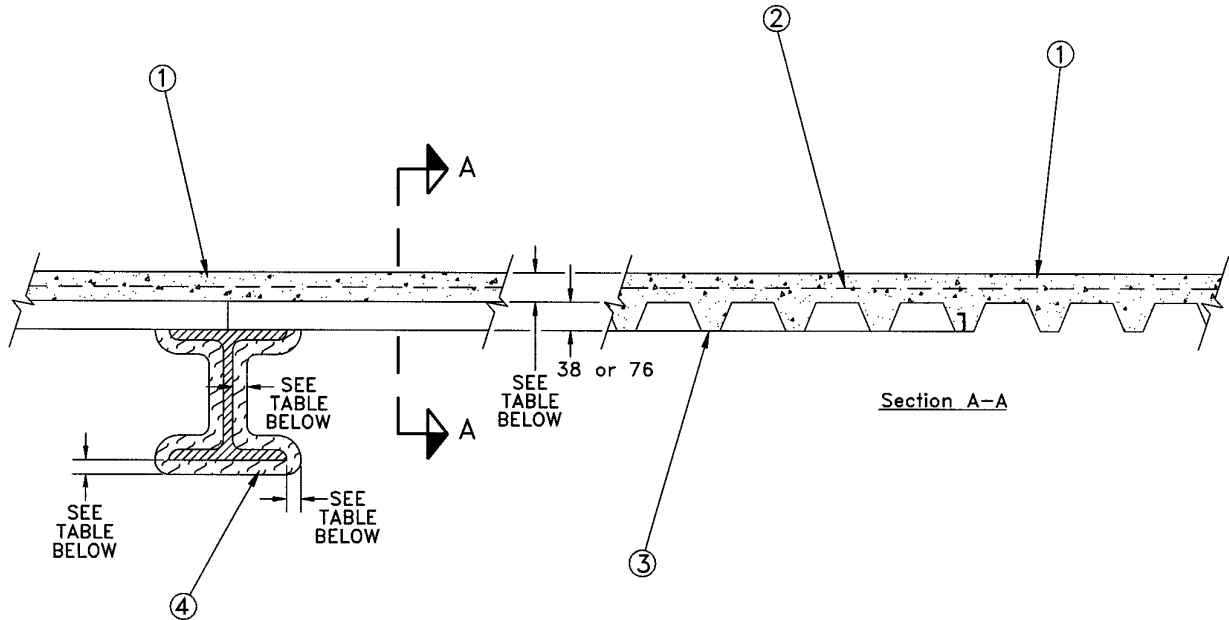


ULC DESIGN No. F912
 Restrained Assembly Rating - 2 h (See Item 4)
 Unrestrained Assembly Rating - 0 h (See Item 3)
 Unrestrained Beam Rating - 2, 1-1/2 h (See Item 4)



1. **Normal-Density Concrete** – Normal-density concrete, carbonate aggregate, $2400 \pm 50 \text{ kg/m}^3$ density, 25 MPa nominal compressive strength.
2. **Wire Fabric** – 152 by 152 MW9.1xMW9.1 wire mesh.
- 3. **Steel Floor Units** – (Guide No. 40 U18.19). Composite or noncomposite floor units. Any combination of 0.91 mm thick fluted sections or 0.91/0.91 mm thick cellular sections, welded to supports with 19 mm puddle welds spaced 300 mm OC. Adjacent units button punched or welded 915 mm OC along side joints. When the maximum clear span of the steel floor units is less than or equal to the tested span of 1760 mm, the unrestrained assembly rating is increased to 1-1/2 h or 2 h to match the unrestrained beam rating.
 See individual manufacturer's listing for those profiles that may be used in this Design.
 VICWEST, a Division of Jenisys Engineered Products
- 4. **Thin-Film Intumescent Coatings** - (Guide No. 40 U18.12.9). Intumescent coating designated "A/D FIREFILM II" or "A/D FIREFILM III" applied to steel beam in accordance with manufacturer's instructions to the minimum dry film thicknesses shown below:
 A/D FIRE PROTECTION SYSTEMS INC.

Minimum Beam Size, (M/D)	Restrained Assembly Rating, h	Unrestrained Assembly Rating, h	Unrestrained Beam Rating, h	Min Concrete Cover Thickness, mm	Min Dry Thickness of A/D Firefilm II on Beam, mm
W150 x 37 (48)	2	0 (see Item 3)	2	133	2.56
W200 x 46 (46)	2	0 (see Item 3)	1-1/2	133	2.25

5. **Shear Connectors** (optional) (not shown) – Studs 19 mm diameter by 150 mm long, headed type. Welded to top flange of beam through steel floor units.
6. **Finish Coating** (not shown) – Silicon alkyd designated "A/D COLORCOAT" topcoat applied over intumescent coating (Item 4) to maximum thickness of 0.05 mm.