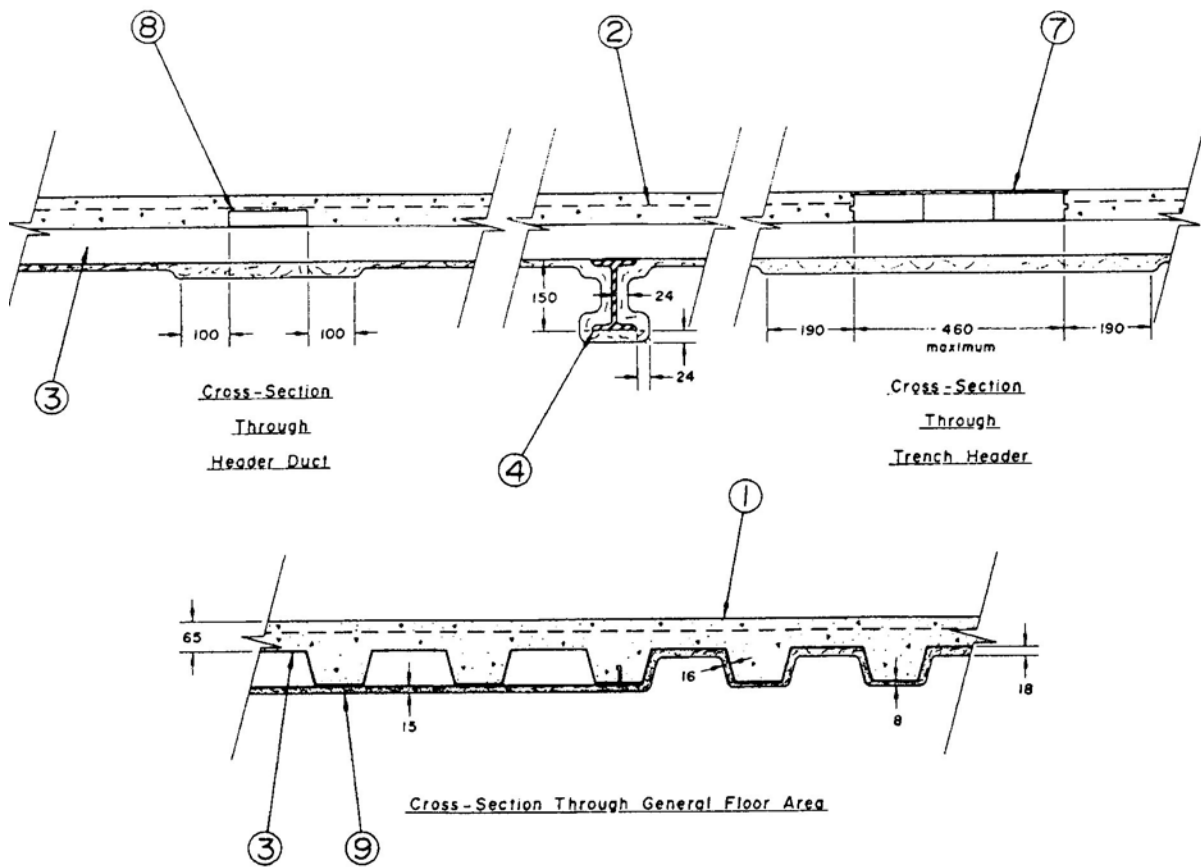


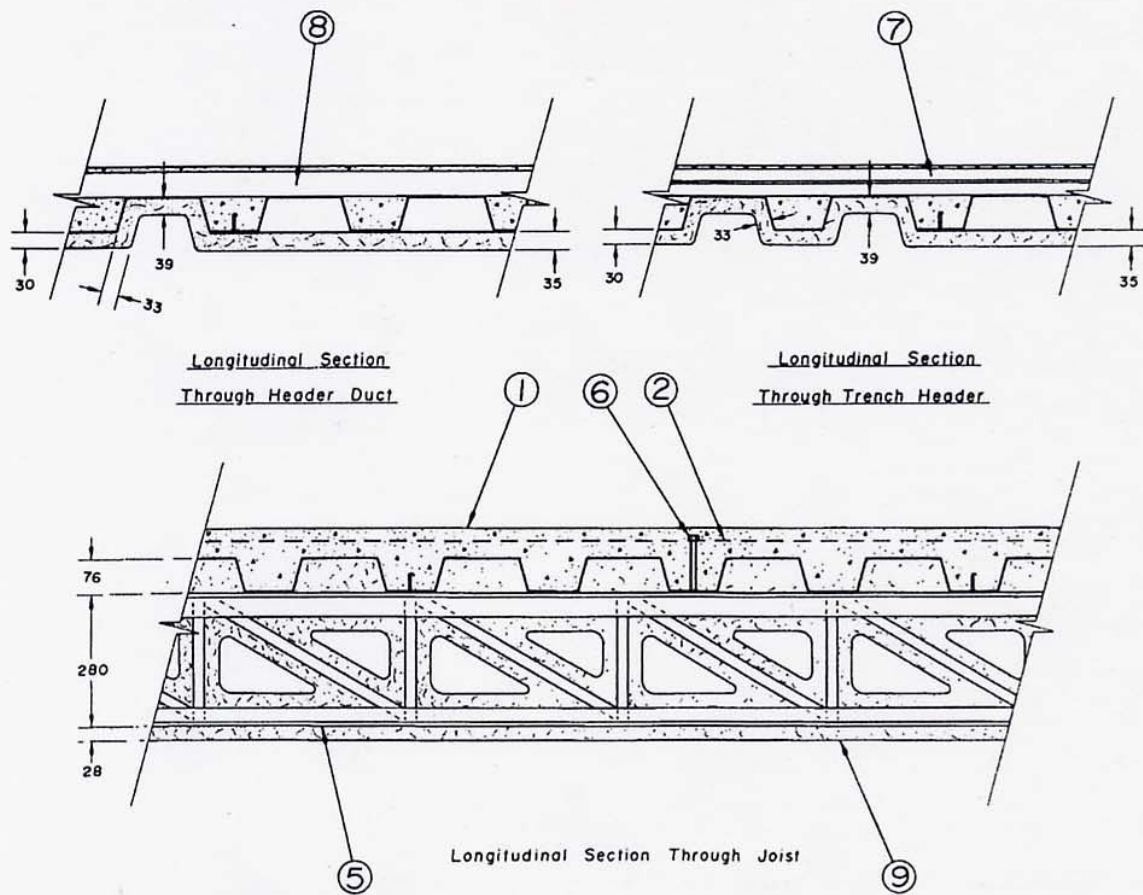


HiBAR™ Spray-Applied Fire-Resistive Material
RATED ULC DESIGN **F820** – (FLOOR/CEILING ASSEMBLY)
RE: ULC List of Equipment & Materials – Fire Resistance (March 2000)

DESIGN No. F820

- Restrained Assembly Rating** – 2 h
- Unrestrained Assembly Rating** – 1 h
- Unrestrained Beam Rating** – 1 h





1. Sand-Gravel Concrete – 2440 kg/m³ density, 20 MPa nominal compressive strength.
2. Wire Fabric – 152x152 MW9.9/MW9.1 wire mesh.
- 3. Steel Floor Units – (Guide No. 40 U18.19). Composite or noncomposite floor units, all 0.91 mm thick fluted sections or alternating one 900 mm wide, 0.91 mm fluted section to a maximum of one 900 mm wide 0.91/0.91 mm cellular section. Units welded to supports with 19 mm diameter plug welds spaced at every trough. Adjacent units crimped along joints at 460 mm OC. See individual manufacturer's listing for those profiles that may be used in this Design. Thickness of fluted sections may be reduced to 0.76 mm for ratings not exceeding 1 h.
 PEERLESS ENTERPRISES, Division of Tectum Limited
 VICWEST, a Division of Jenisys Engineered Products
4. Beam – W150x18, minimum size.
5. Joist – Open-web steel joist, 280 mm deep, 20 kg/m³ minimum size, designed in accordance with the relevant provisions of the National Building Code of Canada. For composite design use Item 6 below.
6. Shear Connectors (optional) – Headed type, welded to top flange of joist or beam through the deck.
7. Trench-Header – Housing constructed of steel, 460 mm wide, maximum.
8. Header Duct – 170 mm wide by 35 mm deep with 100 mm access holes.
- 9. Spray-Applied Fire-Resistive Material – (Guide No. 40 U18.6). "HIBAR" fibre for application with or without adhesive to steel surfaces in thicknesses indicated above. Fibre to have a minimum average dry density of 149 kg/m³ with no minimum individual value less than 140 kg/m³. For method of density determination, refer to General Information Section under heading "Fire Resistance Ratings". Steel surfaces must be clean and free of dirt, loose scale and oily deposits.

CELUFIBRE INDUSTRIES LTD.