

BXUVC.D712 - Fire-resistance Ratings

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See General Information for Fire-resistance Ratings

Design No. D712

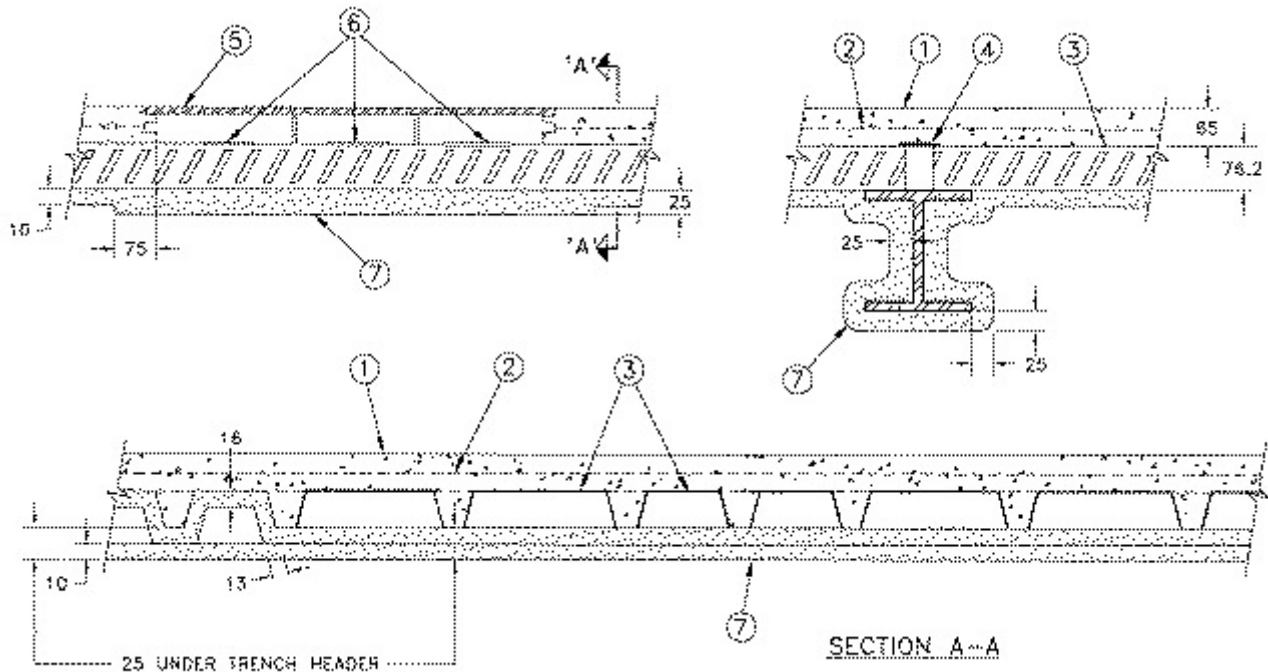
March 25, 2019

Restrained Assembly Rating - 2 h

Unrestrained Assembly Rating - 2 h

Unrestrained Beam Rating - 2 h

**Load Restricted — Assembly evaluated in accordance with Working Stress Design methods,
for use under Limit States Design methods; refer to information under Guide BXUVC.**



Beam — W200x36, min size.

1. **Sand-Gravel Concrete** — $2400 \pm 50 \text{ kg/m}^3$, 17 MPa nom compressive strength.

2. **Wire Fabric** — 152x152 P9.2/P9.2, steel wire.

• 3. **Steel Floor Units** — (CHWXC). Composite or noncomposite steel floor units alternating one 610 mm wide cellular section to one 610 mm wide fluted section. Every third fluted section may be replaced with two 305 mm wide cellular sections. Welded to supports 200 mm OC. Adjacent units button-punched 900 mm OC. Allowable loading to be calculated

on the basis of noncomposite design in spans employing trench-header duct. In other spans, allowable loading may be calculated on the basis of noncomposite design for noncomposite or composite floor units. Cellular sections 1.52/1.22 mm fluted sections 1.52 mm thick. The thickness of the floor units may be reduced to a min of 1.22/0.91 mm (cellular) and 1.22 mm (fluted).

4. **Cover Plate** — 1.22 mm steel, 100 mm wide welded to steel floor units, 250 mm OC.

5. **Trench-Header** — Constructed of 2.0 mm steel, 65 mm deep and provided with 6 mm thick painted steel cover plates.

6. **Access Openings** — As required, with grommets.

7. **Spray-Applied Fire-Resistive Material** — (CHPXC). Type MK-6/HY, RG or MK-6/ED spray-applied fire-resistive material may be applied to a blend of no more than one cellular to one fluted unit to have a min average dry density of 240 kg/m³ on beam and ceiling with a min individual value of 224 kg/m³. Steel deck surface shall be "spatter" coated with Type SK-3 spray-applied fire-resistive material prior to the application of the spray-applied fire-resistive material. When fluted steel deck is used, the area between the steel deck and the beam top flange shall be filled. 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.

GCP APPLIED TECHNOLOGIES INC

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