

FIRE-RESISTANCE DESIGN

Assembly Usage Disclaimer

BXUV - Fire-resistance Ratings - ANSI/UL 263

See General Information for Fire-resistance Ratings - ANSI/UL 263

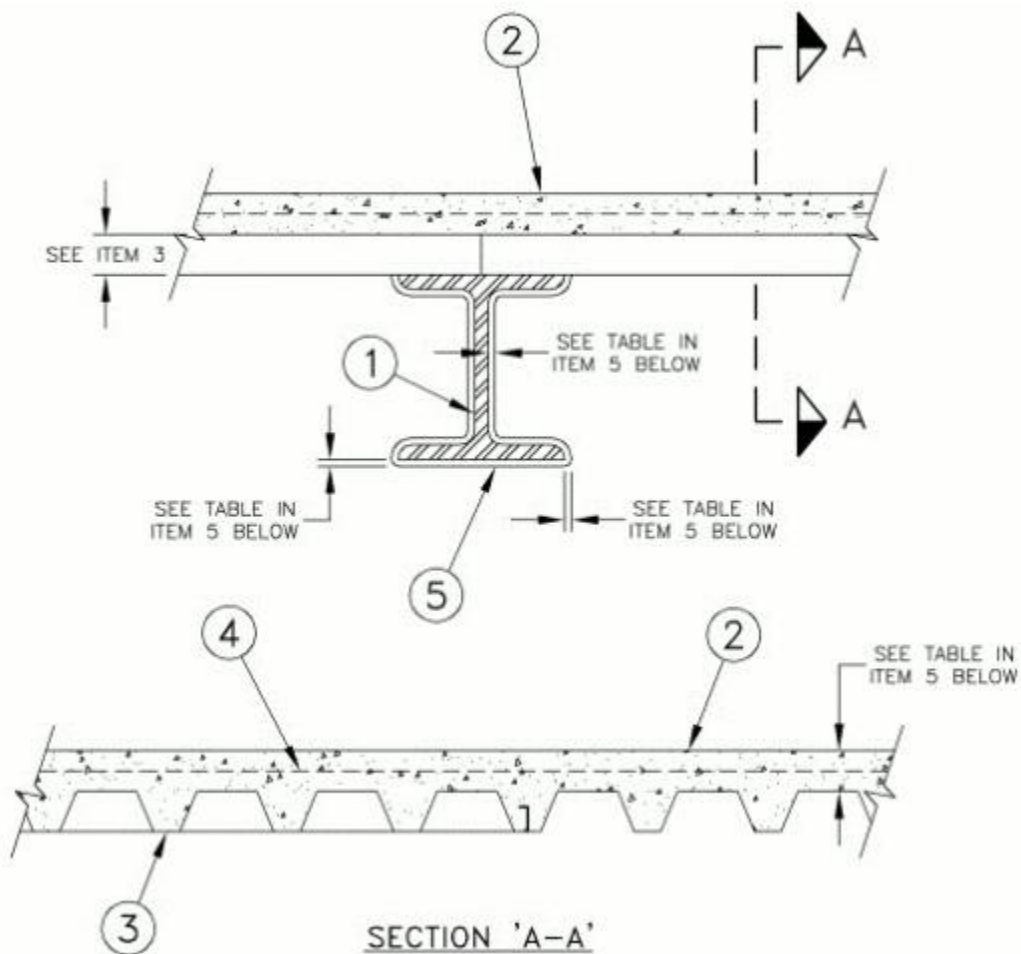
Design No. N641

December 21, 2016

Restrained Beam Ratings - 2, 1-1/2 Hr. (See Item 5)

Unrestrained Beam Ratings - 2, 1-1/2 Hr. (See Item 5)

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. **Steel beam** — Any wide flange steel size shown in table in Item 5. Beam shall be primed with metal Alkyd Primer.

2. **Normal Weight Concrete** — Normal-density concrete, carbonate aggregate, 150 pcf unit weight 3600 psi compressive strength.

3. **Steel Floor and Form Units*** — Composite or noncomposite, 3 in. deep, 20 MSG fluted or 20/20 MSG cellular, galv units. All fluted or alternating one 36 in. or 24 in. wide fluted to one 24 in. wide max cellular section. Welded to supports not over 12 in. OC. Adjacent units welded or crimped together along side laps 16 in. OC. 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., the unrestrained assembly rating is increased to 1-1/2 Hr. or 2 Hr. to match the unrestrained beam rating.

CANAM STEEL CORP — 24 in. wide Type P-2436 and P-2404 noncomposite.

DECK WEST INC — 36 in. wide Type 3-DW.

H H ROBERTSON — Type QL-99, QL-WKX

VULCRAFT, DIV OF NUCOR CORP — 24 or 36 in. wide Types 3VLI and 3VLP. Phos/ptd Type 3VLI units.

4. **Welded Wire Fabric** — 6 x 6 - W1.4 x W1.4.

5. **Mastic and Intumescent Coating*** — Mastic coating spray or brush applied in accordance with manufacturer's instructions to the minimum dry film thicknesses shown below:

Minimum Beam Size, (W/D)	Restrained Beam Rating, Hr.	Unrestrained Beam Rating, Hr.	Minimum Concrete Cover thickness, in.	Min Dry Thickness of A/D Firefilm on Beam, in.
W8 x 31 (0.80)	1-1/2	1-1/2	4.5	0.089
W6 x 25 (0.84)	2	2	4.5	0.100

A/D FIRE PROTECTION SYSTEMS INC — Types "A/D FIREFILM II" or "A/D FIREFILM III" or "A/D FIREFILM III C" investigated for Conditioned Interior Space Purpose and Interior General Purpose

6. **Shear Connectors** — (optional) (not shown)— Studs 3/4 in. diam by 6 in. long, headed type, or equivalent per A.I.S.C specifications. Welded to top flange of the beam through the deck. Shear studs shall not be permitted for concrete cover thickness less than 5.25 in.

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Last Updated on 2016-12-21

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

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