Design No. D990
BXUV.D990
Fire-resistance Ratings - ANSI/UL 263

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.

BXUV - Fire Resistance Ratings - ANSI/UL 263
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design No. D990
March 10, 2016

Restained Assembly Ratings - 1, 1-1/2 and 2 Hr. (See Item 4)
Unrestrained Assembly Ratings - 0 Hr. (See Item 3)
Unrestrained Beam Ratings - 1 Hr. (See Item 4)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
Beam — W6 x 25, minimum size.

1. Normal-Weight or Lightweight Concrete — Normal-weight concrete, carbonate or siliceous aggregate, 3500 psi nominal compressive strength. Low-density concrete, expanded shale, clay or slate aggregate by rotary kiln method, 110±3 lb/ft² density, 3500 psi nominal compressive strength.

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

3. Steel Floor Units* — Composite or noncomposite floor units. 22 MSG thick fluted sections, welded to supports with 3/4 in. puddle welds spaced 12 in. OC. Adjoining units button punched or welded 12 in. OC along side joints. When the maximum clear span of the steel floor units is less than or equal to the tested span of 9 ft - 6 in., the unrestrained assembly rating is increased to 1 Hr and 1-1/2 Hr to match the unrestrained beam rating.

DECK WEST INC — 36 in. wide Type 3-DW

KAM INDUSTRIES LTD, DBA CORDECK — Types QL-99, QL-WKX

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

4. Mastic and Intumescent Coating* — Mastic coating spray or brush applied in accordance with manufacturer's instructions to the minimum dry film thicknesses shown below. The thickness shown does not include primer thickness.

<table>
<thead>
<tr>
<th>Min Concrete Cover Thickness, in</th>
<th>Min Dry Thickness of Fire Finish CFP-SP WB on Beam, Inches</th>
<th>Min Dry Thickness of Fire Finish CFP-SP WB on Beam, mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.052</td>
<td>1.33</td>
</tr>
<tr>
<td>1-1/2</td>
<td>0.052</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>0.052</td>
<td>1.33</td>
</tr>
</tbody>
</table>

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — Fire Finish CFP-SP WB investigated for Conditioned Interior Space Purpose and Interior General Purpose

5. Primer Coating — (Not Shown) — 60 micron (2 mil) thickness of a two component epoxy primer or 60 micron (2 mil) thickness of an alkyd primer or 60 micron (2 mil) thickness of an acrylic primer or 60 micron (2 mil) thickness of a polyurethane primer.

6. Shear Connectors — (Optional) (Not Shown) — Studs, 3/4 in. diam by 4-1/2 in. long, headed type or equivalent per AISC specification. Welded to the top flange of the beam, through the deck.

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

Last Updated on 2016-03-10
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