

BXUV.X650 - 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 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

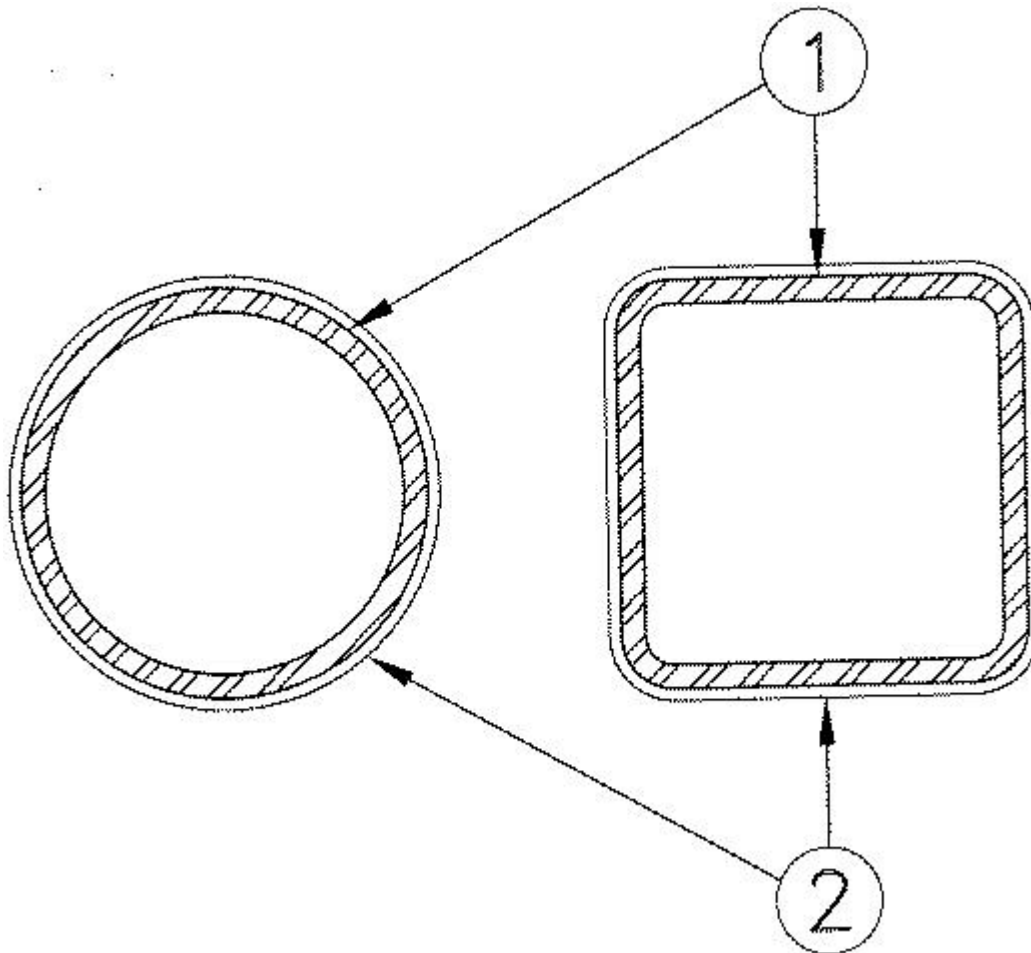
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. X650

August 09, 2018

Ratings - 1, 1-1/2, 2 and 3 Hr. (See Item 2)

*** 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 Column** — Steel tube (ST) or steel pipe (SP) with the minimum sizes shown in the table below. Columns shall be free of dirt, loose scale and oil. Columns shall be primed with a phenolic modified alkyd resin primer.

2. **Mastic and Intumescent Coatings*** — Coating spray, brush or trowel applied directly from containers to desired thickness. See table below for appropriate final dry thickness and applicable rating.

FOR STEEL PIPE

Steel Size	A/P	Hp/A	1 Hr		1-1/2 Hr		2 Hr		3 Hr	
			in.	mm	in.	mm	in.	mm	in.	mm
SP 4.5 x 0.313	0.29	135	0.117	2.99	—	—	—	—	—	—
SP 8 x 0.875	0.79	49	0.097	2.46	0.097	2.46	0.120	3.05	0.216	5.50
SP 8.625 x 0.5	0.47	85	0.097	2.46	0.138	3.50	0.202	5.14	0.364	9.25
SP 16 x 0.625	0.60	65	—	—	—	—	—	—	0.285	7.25

FOR SQUARE AND RECTANGULAR STEEL TUBE

Steel Size	A/P	Hp/A	1 Hr		1-1/2 Hr		2 Hr		3 Hr	
			in.	mm	in.	mm	in.	mm	in.	mm
ST3.5x3.5x3/16	0.18	224	0.165	4.18	—	—	—	—	—	—
ST5x3x1/4	0.23	169	0.104	2.65	0.252	6.39	0.400	10.15	—	—
ST5x3x5/16	0.29	135	0.084	2.13	0.218	5.54	0.353	8.96	—	—
ST8x6x3/8	0.35	114	0.074	1.87	0.173	4.40	0.280	7.12	—	—

ST8x6x7/16	0.41	100	0.074	1.87	0.151	3.84	0.244	6.21	—	—
ST5x3x1/2	0.44	93	0.074	1.87	0.127	3.23	0.207	5.27	—	—
ST8x8x1/2	0.47	85	0.074	1.87	0.095	2.41	0.164	4.17	0.327	8.31

BERLIN CO LTD — Type WB 3, Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type WB 4, Investigated for Exterior Use with top coat as described in Item 3

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Type WB 3, Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type WB 4, Investigated for Exterior Use with top coat as described in Item 3

ISOLATEK INTERNATIONAL — Type SprayFilm-WB 3 and Type WB 3, Investigated for Interior General Purpose . Type SprayFilm-WB 4 and Type WB 4, Investigated for Interior General Purpose. Type SprayFilm-WB 4 and Type WB 4, Investigated for Exterior Use with top coat as described in Item 3

NEWKEM PRODUCTS CORP — Type WB 3, Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type WB 4, Investigated for Exterior Use with top coat as described in Item 3

3. **Top Coat** — Type SprayFilm — TOPSEAL and Type TOPSEAL required for Exterior Use, applied at a minimum dry thickness of 14 mils (0.34 mm) over the intumescent material.

See Classification information in the **Mastic and Intumescent Coating** (CDWZ) category, Isolatek International, for mixing requirements.

Investigated for Interior General Purpose.

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Last Updated on 2018-08-09

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