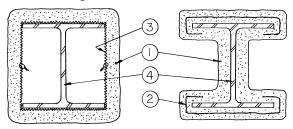
FIRE-RESISTANCE RATINGS - ANSI/UL 1709 (BYBU)

Design No. XR704 Ratings — 3/4, 1, 1-1/2, 2, 2-1/2, 3 or 4 Hr



1. **Spray-Applied Fire Resistive Materials*** — See table below for appropriate thickness. Prepared by mixing with water according to instructions on each bag of mixture and spraying in one or more coats, as necessary, directly to the column or onto the metal lath surfaces, which must be clean and free of dirt, loose scale and oil. Min avg density of 44 pcf, with min in. value of 40 pcf for Type M-II. Min avg density of 44 pcf, with min ind value of 42 pcf for Type TG . For method of density determination, see Design Information Service Materials. mation Section, Sprayed Material.

Rating, Hr	Min Thickness, In.(mm)	Min Thickness, In. (mm)	
	Contour Application	Boxed Protection	
3/4	11/16 (17.5)	11/16 (17.5)	
1	13/16 (20.7)	13/16 (20.7)	
1-1/2	1-1/16 (27.0)	15/16 (23.9)	
2	1-5/16 (33.4)	15/16 (23.9)	
2-1/2	1-9/16 (39.7)	1-3/16 (30.2)	
3	1-13/16 (46.0)	1-7/16 (36.6)	
4	2-5/16 (58.8)	2-1/4 (57.2)	

BERLIN CO LTD —Type M-II or Type TG, investigated for exterior use. **ISOLATEK INTERNATIONAL** —Type M-II or Type TG.

NEWKEM PRODUCTS CORP—Type M-II or Type TG, investigated for exterior use.

The thicknesses of Spray-Applied Fire Resistive Materials shown below are applicable when the protection of the column flange edges is reduced to one-half.

	Min Thkns, in (mm)							
Column Size	3/4 Hr	1 Hr	1-1/2 Hr	2 Hr	2-1/2	3 Hr	4 Hr	
W10x49	3/4 (19.1)	7/8 (22.3)	1-3/16 (30.2)	1-1/2 (38.1)	1-13/16 (46.1)	2-1/8 (54)	2-11/16 (68.3)	

- 2. Reinforced Mesh No. 20 SWG galv steel wire twisted to form 1 or 2 in. hexagons. Mesh embedded in Spray-Applied Fire Resistive Materials prior to application of final coat, and wrapped around the column flanges.
- 2A. Metal Lath (Not Shown) In lieu of the reinforced mesh, galv. expanded steel lath, weighing 3.4 lb per sq yd may be used. Lath secured tight to column by gunned or stud welding pins 16 in on-center along the lath edges. Metal lath shall reach around the flange a minimum 1-1/2" toward web of column.
- 3. Metal Lath For boxed type protection. Min 3.4 lb per sq yd expanded steel. Lath lapped 2 in. at vertical joint on column flange and tied together with No. 18 SWG galv steel wire, spaced vertically 14 in. OC.
 3A. Corner Bead (Optional Not Shown) No. 25 MSG galv expanded steel corner bead with minimum 2-in legs. May be used in conjunction with column cage. When used, placed over each corner of column cage and attached to metal lath with tie wire spaced 18 in. O.C.
- Steel Column Min size of column W10x49.
- *Bearing the UL Classification Mark