

BXUVC.F918 - Fire-resistance Ratings

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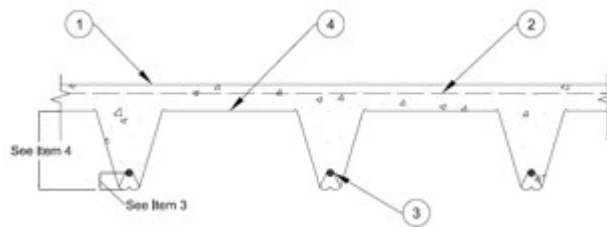
[See General Information for Fire-resistance Ratings](#)

Design No. F918

December 02, 2020

Restrained Assembly Ratings - 1 and 2 Hr. (See Items 3 and 4)

Unrestrained Assembly Rating -- 1 and 2 Hr. (See Items 3 and 4)



1. Normal Weight or Lightweight Concrete — Normal weight concrete, carbonate or siliceous aggregate, $2350 \pm 50 \text{ kg/m}^3$ unit weight. Lightweight concrete - expanded shale or slate aggregate by rotary-kiln method or expanded clay aggregate by rotary-kiln or sintered-grade method, $1750 \pm 50 \text{ kg/m}^3$ unit weight. Concrete vibrated with 4 to 7 per cent entrained air. Min. concrete compressive strength 27.6 MPa. See Item 4 for thicknesses.

2. Welded Wire Fabric — 152 by 152 - MW 18.7 / MW18.7

2A. Re-bars — As an alternate to Item 2, max # 13M bars spaced 305 mm OC in both directions shall be used. When re-bars are used, the concrete slab thickness shall be increased a minimum 8 mm.

3. Rib Reinforcement — Min. #10M rebar for Restrained Assembly Ratings and min. #13M rebar for Unrestrained Assembly Ratings. Min concrete cover below the steel reinforcement shall be 40 mm. Reinforcement support chairs spaced at max 1055 mm OC.

4. Steel Floor Units (CHWXC) — 120 mm, 203 or 225 mm deep composite, galv steel units. Min thickness 0.953 mm (20 MSG). Side joints of adjacent units fully overlapping, fastened together by using 30 mm. long self-drilling, self-tapping steel screws driven through Shear-Bond Clips (not shown) at 350 mm. OC. Steel end closures flashings (not shown) made of min thickness 1.37 mm (16 MSG) galv steel, fixed to the steel work before decking is placed. For Unrestrained Assembly Ratings, consult the deck manufacturer for comprehensive load tables and design parameters referencing this ULC Design.

Assembly Rating, Hr	2	2	2	1
Concrete Type	NW Siliceous	NW Carbonate	LW	NW or LW
Concrete Topping from Deck Crests - Types 210 and 225 (mm)	90	89	70	64
Concrete Topping from Deck Crests - Type 120 (mm)	108	108	83	64

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