

Design No. D781

Restrained Assembly Ratings — 2, 3 & 4 Hr (See Item 6)

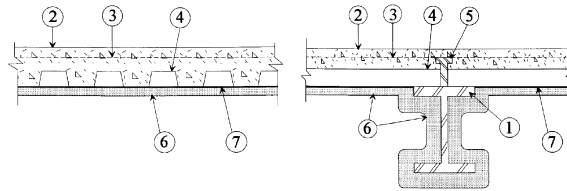
Unrestrained Assembly Ratings — 1, 1-1/2, 2, 3 & 4 Hr

(See Item 6)

Unrestrained Beam Assembly Ratings — 1, 1-1/2, 2, 3 & 4 Hr

(See Item 6)

Load Restricted for Canadian Applications — See Guide BXUV7



1. **Beam** — W8x24, min size.
2. **Lightweight Concrete** — Expanded shale, clay or slate aggregate by rotary-kiln method, 117 pcf unit weight, 2500 psi compressive strength, vibrated. Min thickness as measured to crests of steel floor and form units, 2-1/2 in.
Normal-Weight Concrete — Siliceous or carbonate aggregate, 150 +/- 3 pcf unit weight, 2500 psi compressive strength, vibrated. Min thickness as measured to crests of steel floor and form units, 2-1/2 in.
3. **Welded Wire Fabric** — 6x6 — 6/6 SWG.
4. **Steel Floor and Form Units*** — Composite 1-1/2, 2 or 3 in. deep galv units. Min gauges are No. 20 MSG fluted.
BOWMAN METAL DECK/WHEELING CORRGTNG CO, DIV OF WHLNG PITTSBRGH STL CORP — 24 in. wide Types 212VW2-Wireway; 24 or 32 in. wide Types 208V-Grip, 258V-Grip; 24 or 36 in. wide Types 212V-Grip or 312V-Grip.
CANAM STEEL CORP — 36 in. wide Type P-3623, P-3606 and P-3615 composite; 24 in. wide Type P-2432 composite.
H H ROBERTSON — 30 in. wide, 3 in. QL-GKXH; units may be welded or fastened together with No. 10 self-drilling, self-tapping screws 60 in. OC. The length of the screws shall be sufficient to fully penetrate adjacent floor units.
Spacing of welds attaching units to supports shall be 12 in. OC max. Adjacent units button-punched or welded 36 in. OC max along side joints.
Butt end joints sealed with pressure sensitive tape.
5. **Shear Connectors** — Studs, 3/4 in. diam by 3 to 4-1/2 in. long, headed type or equivalent per AISC specification. Welded to the top flange of the beam through the deck.
6. **Spray-Applied Fire Resistive Materials*** — Applied by mixing with water and spraying in one or more than one coat to a final thickness as shown in the following table to steel surfaces which must be clean and free of dirt, loose scale and oil. Min avg density is 44 pcf with min ind density of 40 pcf. For method of density determination, refer to Design Information Section.

CELLULAR AND FLUTED UNITS

Restrained Assembly Rating Hr	Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	on W8x24 Beam	Min Thkns of Spray Applied Fire Resistive Mtl In.		Crests & Sides
				Flat Plate	Flutes	
2	1	1	9/16	1/2	1/2	1/2
2	1-1/2	1-1/2	7/8	1/2	1/2	1/2
2	2	2	1-1/8	1/2	1/2	1/2
2	2	3	1-11/16	1/2	1/2	1/2

FLUTED UNITS ONLY

Restrained Assembly Rating Hr	Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	on W8x24 Beam	Min Thkns of Spray Applied Fire Resistive Mtl In.		Crests & Sides
				Concrete Type	Flutes	
2	1	1	9/16	LW	1/2	1/2(a)
2	2	2	1-1/8	LW	1/2	1/2(a)
3	1-1/2	1-1/2	13/16	LW	1-1/16	1-1/16
3	3	3	1-9/16	LW	1-1/16	1-1/16
4	2	2	1-1/8	LW	1-3/8	1-3/8
4	4	4	1-15/16	LW	1-3/8	1-3/8
2	1	1	9/16	NW	1/2	1/2(a)
2	2	2	1-1/8	NW	1/2	1/2(a)
3	1-1/2	1-1/2	13/16	NW	1-1/16	1-1/16
3	3	3	1-9/16	NW	1-1/16	1-1/16

(a) Minimum thickness of 5/8 in. required on crest and sides when 1-1/2 in. deep fluted units for the 2 hr Restrained Assembly Rating.

ISOLATEK INTERNATIONAL — Type M-II or TG. Types M-II and TG investigated for exterior use.

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

LUCKY CORE INSULATING MATERIALS

MANUFACTURING L L C — Types M-II or TG, investigated for exterior use.

7. **Metal Ribbed Lath** — 3/8 in. ribbed, expanded steel weighing 3.4 lb per sq yd. Secured to the underside of the steel deck (rib upward) with S-12 by 3/8 in. long pan-head, self-tapping screws spaced 12 in. OC longitudinally and 24 in. OC laterally. Steel screws fitted with 1/2 in. diam washers. Lath lapped 1 in. min at end and butted at sides.

*Bearing the UL Classification Mark