UL Product iQ®

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

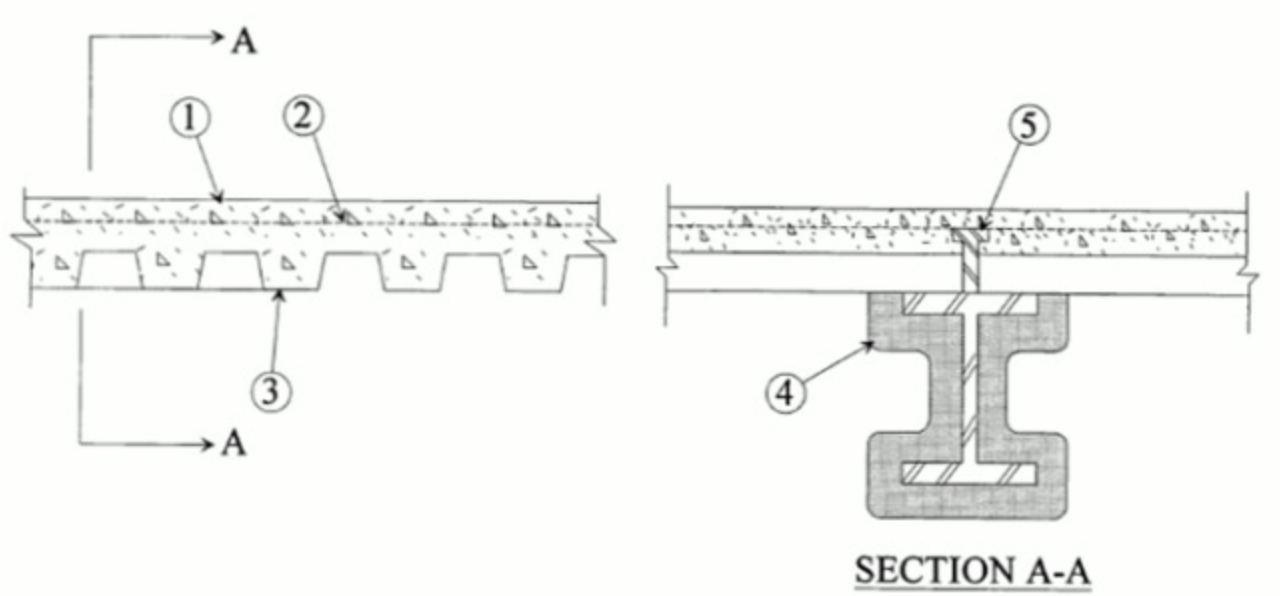
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

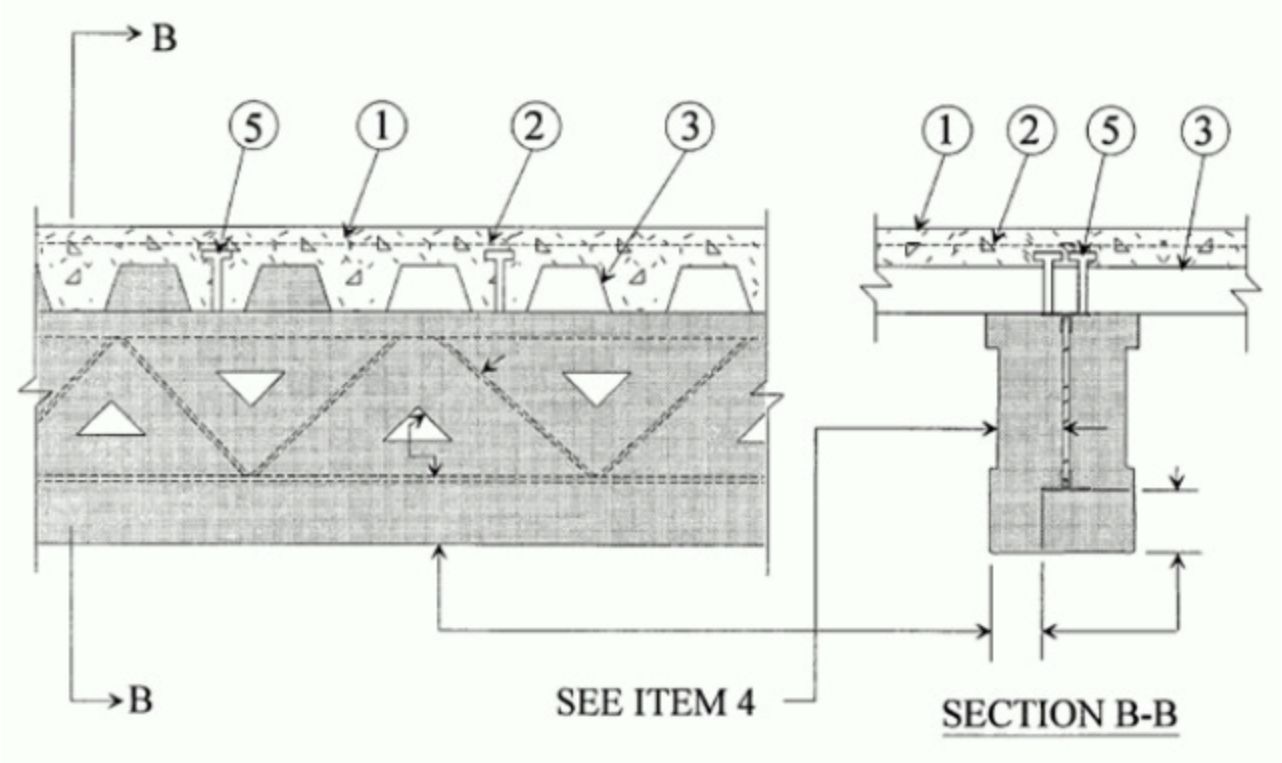
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. D985

August 02, 2024

Restrained Assembly Ratings — 3/4, 1, 1-1/2, 2 or 3 Hr (See Items 1, 3A, 6)
Unrestrained Assembly Rating — 0 Hr (See Items 3, 3A, 4, 4A)
Unrestrained Beam Ratings — 1, 1-1/2, 2, 3 and 4 Hr (See Items 4, 4A)
Loading Determined by Allowable Stress Design Method or Load and Resistance Factor Design Method published by the American Institute of Steel Construction, or in accordance with the relevant Limit State Design provisions of Part 4 of the National Building Code of Canada.
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**





1. **Supports —** W8 x 28 or alternate (per Section IV.6 in the front of the Fire Resistance Directory) steel beam or min 10K1 steel joists when joist substitution applied.

1A. **Normal Weight or Lightweight Concrete —** Normal weight concrete carbonate or siliceous aggregate, 3500 psi compressive strength, vibrated. Lightweight concrete, expanded shale, or slate aggregate by rotary-kiln method, or expanded clay aggregate by rotary-kiln or sintered-grate method, 3000 psi compressive strength, vibrated, 4 to 7 percent entrained air.

Restrained or Unrestrained – Assembly Rating Hr (Please refer to Item 3, 3A, 4, 4A below)	Concrete (Type)	Concrete Unit Weight pcf	Concrete Thkns In
1	Normal Weight	147-153	3-1/2
1-1/2	Normal Weight	147-153	4

2	Normal Weight	147-153	4-1/2
3	Normal Weight	147-153	5-1/4
3/4 or 1	Lightweight	107-113	2-1/2
1	Lightweight	107-120	2-5/8
1-1/2	Lightweight	107-113	3
2	Lightweight	107-113	3-1/4
2	Lightweight	107-116	3-1/4*
2	Lightweight	114-120	3-1/2
3	Lightweight	107-113	4-3/16
3	Lightweight	114-120	4-7/16

* For use with 2 or 3 in. steel floor and form units only.

2. **Welded Wire Fabric —** 6 x 6, 10 x 10 SWG.

2A. **Negative Reinforcement —** (Not Shown) — Optional — For 3/4, 1, 1-1/2 and 2 Hr Restrained Assembly Rating Only. Used in lieu of Item 2 and with Item 2B. For floor spans with concrete cast continuous over the supporting beams. Deformed bars designed to resist the support moments of the concrete slab in accordance with the latest ACI Building Code Specifications.

2B. **Fiber Reinforcement —** (Not Shown) — For 3/4, 1, 1-1/2 and 2 Hr Restrained Assembly Rating Only. Required with Item 2A. Engineered synthetic fibers added to concrete mix to control shrinkage cracks in concrete. Fibers added to concrete mix at rate of 5 lbs of fiber for each cubic yard of concrete.
GCP APPLIED TECHNOLOGIES INC — Type Strux 90/40

3. **Steel Floor or Form Units* —** Composite or Non-Composite, fluted, 1-1/2, 2, or 3 in. deep galv units welded to beam or joist. Min gauge is 22 MSG.
ASC STEEL DECK, DIV OF ASC PROFILES L L C — 32 in. wide Types NH-32, NHN-32, NHF-32; 36 in. wide Types BH-36, BHN-36, BHN-35-1/4, BHF-36, 2WH-36, 2WHS-36, 3WxH-36, 3WH-36, 3W-36, DG3W-36. All units may be galvanized or Prime Shield. May be vented designated with a "V" suffix to the product name.

CANAM GROUP INC — 36 in. wide Types P-3623, P-3606, P-3615 and 24 in wide Type P-2432 composite; 24 or 36 in. wide Type 3 in. LOK-Floor; 36 in. wide Types 1.5B, 1.5BI, 1.5BL and 1.5BL; 24 in. or 36 in. wide, Type LF2.

CANAM STEEL CORP — 24 in. wide, Types 1-1/2, 2 or 3 in. LOK-Floor; 36 in. wide, Types 2 or 3 in. LOK-Floor; 24 in. wide, Type N-LOK; 24, 30 or in. wide, Type 1-1/2 in. B-LOK

NEW MILLENNIUM BUILDING SYSTEMS L L C — 24 in. wide Type Versa-Dek

DECK WEST INC — 36 in. wide Types B-DW, 2-DW or 3-DW. Side joints of 2-DW and 3-DW may be fastened together with min 1 in. long No. 12 x 14 self-drilling, self-tapping steel screw 36 in. OC

DESIGN ASSISTANCE CONSTRUCTION SYSTEMS INC — 36 in. wide Type DACS1.5CD, or 24 in. wide Types DACS2.0CD or DACS3.0CD

EPIC METALS CORP — 24 in. wide Types EC150, EC300, EC366, EC150, EC300 inverted; 30 in. wide Types ECB150, ECBR150; 36 in. wide Types EC266

INTSEL STEEL EAST LLC— 36 in. wide Types 1.5" COMPOSITE/FLOOR, 2" COMPOSITE/FLOOR, 3" COMPOSITE/FLOOR.

MARLYN STEEL DECKS INC — Types 1.5 CF, 2.0 CF or 3.0 CF

NEW MILLENNIUM BUILDING SYSTEMS L L C — 24 or 36 in. wide Types 2.0CD, 3.0CD, 2.0CFD, 3.0CFD, 3.0CFDES; 24, 30 or 36 in. wide Types 1.5CD, 1.5CDI, 1.5CDR, 1.5CFD. Units may be phos/painted or galvanized.

SAMSON METAL LTD — Type 1-1/2" deep SM900FD-CL deck.

VALLEY JOIST+DECK — 24 or 36 in. wide Types WVC 1-1/2 or WVC 2

VERCO DECKING INC - A NUCOR CO — FORMLOK™ deck types PLB, B, BR, PLN3, N3, PLN, N, PLW2, W2, PLW3, W3. Units are min 24 in. wide and may be galvanized, phos./ptd., or mill finish. Units may be cellular or acoustical cellular, with the suffix "CD" or "CD-AC" added to the product name, respectively. All non-cellular deck may be vented or non-vented. 12 in. wide PLW2, W2, PLW3 or W3 units may be blended with 24 or 36 in. wide PLW2, W2, PLW3 or W3 units, respectively; or Type N3.

VICWEST INC. — Types HBS938, HBS938CL and HBS938CL-IN Composite Steel Decks; Types RDS938, RDS938CL and RDS938CL-IN Non-Composite Steel Decks.

VULCRAFT, DIV OF NUCOR CORP — 24, 30 or 36 in. wide, Type 1.5 VL, 1.5 VLI, 1.5PLVLI; 24 or 36 in. wide. Types 2VLI, 2.0PLVLI, 3VLI, 3.0PLVLI; 36 in. wide Types 1.5 SB, 1.5 SBR; 24 or 36 in wide Types 2.0 SB, 3.0 SB, 36 in. wide Type High Strength 1.5 SBI, 36 in. wide Type High Strength 1.5 SBN

The Unrestrained Assembly Rating is equal to the Unrestrained Beam Rating for a max of 3 Hr and is limited to the following floor units and spans:

(a) 1-1/2, 2 and 3 in. deep, 24 in. wide, 22 MSG or thicker fluted with clear spans not more than 7 ft, 8 in.

(b) 1-1/2, 2 and 3 in. deep, 24 in. wide, 20 MSG or thicker fluted with clear spans not more than 8 ft, 8 in.

(c) 1-1/2 and 2 in. deep, 24 in. wide, 16 MSG or thicker fluted with clear spans not more than 9 ft, 11 in.

(d) 3 in. deep, 36 in. wide, 18 MSG or thicker fluted and 24 in. wide with clear spans not more than 13 ft, 2 in.

For assemblies utilizing 3-1/4 in. lightweight concrete topping with a max Restrained Assembly Rating of 2 Hr, the Unrestrained Assembly Rating is equal to the Unrestrained Beam Rating and is limited to the following floor units and spans:

(a) 1-1/2, 2, and 3 in. deep, 24 or 36 in. wide, 22 MSG fluted with clear spans not more than 9 ft, 6 in.

(b) 2 and 3 in. deep, 24 or 36 in. wide 20 MSG fluted with clear spans not more than 10 ft, 0 in.

(c) 3 in. deep, 24 in. wide, 20 MSG fluted with clear spans not more than 13 ft, 2 in.

3A. **Steel Floor and Form Units* —** (not Shown) As an alternate to Item 3. Nom 8 or 9 in. deep composite, galv steel units. Min thickness 0.0375 inch (20 MSG). Side joints of adjacent units fully overlapping, fastened together by using 1-1/4 in. long self-drilling, self-tapping steel screws driven through Shear-Bond Clips (not shown) at 13-3/4 in. OC. Steel end closures flashings (not shown) made of min 0.056 inch thick (16 MSG) galv steel, fixed to the steel work before decking is placed.
In addition to the Steel Floor and Form Units, the following components are required:

a). Welded Wire Fabric — 6 X 6 - Min wire thickness W2.9 X W2.9 slab reinforcement. As an alternate, max # 4 bars spaced 12-in. OC in both directions shall be used. When re-bars are used, the concrete slab thickness shall be increased a minimum 5/16 in.

b). Rib Reinforcement —Min. #4 rebar. Min concrete cover below the steel reinforcement shall be 1-9/16 in. Reinforcement support chairs spaced at max 41-1/2 inches OC.

The flute areas above the beam/joist are to be : (1) filled with concrete, (2) filled with Spray-Applied Fire Resistive Material or (3) the beam/joist coated with Spray-Applied Fire Resistive Material installed as described in the design to thickness required when all cellular Steel Floor and Form Units are used

See Design No. D989 for a typical illustration of the components. Consult the deck manufacturer for comprehensive load tables and design parameters referencing UL Design D989.

BAILEY METAL PRODUCTS LTD — Type COMSLAB™ 210 and COMSLAB™ 225, Steel End Closure Flashing

4. **Spray-Applied Fire Resistive Materials —** Applied by mixing with water and spraying in one or more coats to a final thickness as shown in the tables below, to steel beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15/14 pcf, respectively for Types MK-6/HY, MK-6/HY Extended Set, MK-6/HB, MK-6s, MK-6 GF, MK-6 GF Extended Set, MK-10 HB, MK-10 HB Extended Set, MK-1000/HB, MK-1000/HB Extended Set, RG. Min avg and min ind density of 22/19, respectively for Types Z-106, Z-106/G and Z-106/HY. Min avg and min ind density of 40/36 pcf respectively for Types AV-650, Z-146, Z-146PC and Z-146T cementitious mixture. Min avg and min ind density of 50/45 pcf respectively for Types AV800, Z-156, Z-156T and Z-156PC. For method of density determination, refer to Design Information Section. AV-650, AV-800, Z-146, Z-146T, Z-146PC, Z-156, Z-156T, Z-156PC investigated for Exterior Use.

			W8x28 Beam (see Note #1)	
Restrained Assembly Rating Hr	**Unrestrained Assembly Rating Hr**	**Unrestrained Beam Rating Hr**	**Fluted Floor Units w/Light Weight Concrete**	**Fluted Floor Units w/Normal Weight Concrete**
1	1	1	3/8	5/16
1-1/2	1	1	3/8	5/16
1-1/2	1-1/2	1-1/2	5/8	9/16
2	1	1	3/8	5/16
2	2	2	7/8	11/16
3	1-1/2	1-1/2	5/8	9/16
3	3	3	1-5/16	1-5/16
3	3	4	2-1/8	1-7/8

Note #1: Restrained or unrestrained beams from the N series designs may be substituted for the listed beam. When beams are substituted, the restrained rating of the beam must be equal to or greater that the restrained rating of the assembly. Additional beam substitution requirements are contained in the front of the Fire Resistance Directory.

			Joist Thickness	
Restrained Assembly Rating Hr	**Unrestrained Assembly Rating Hr**	**Unrestrained Beam Rating Hr**	**Joist Spacing More than 4 ft OC**	**Joist Spacing 4 ft OC or less**
1	1	1	7/8	3/4
1-1/2	1	1	7/8	3/4

1-1/2	1-1/2	1-1/2	1-5/16	1-1/8
2	1	1	7/8	3/4
2	2	2	1-3/4	1-1/2
3	1-1/2	1-1/2	1-7/16	1-7/16
3	3	3	2-9/16	2-5/16

Note # 2: Restrained or unrestrained joists from the N series designs may be substituted for the listed joist. When joists are substituted, the restrained rating of the joist must be equal to or greater that the restrained rating of the assembly. Additional joist substitution requirements are contained in the front of the Fire Resistance Directory.

The thicknesses of Spray-Applied Fire Resistive Materials shown in the table below are applicable when normal weight concrete is used and the thickness applied to the beams' lower flange edges is reduced to one-half that shown in the table.

Restrained Assembly Rating Hr	Unrestrained Assembly Rating Hr	Unrestrained Beam Rating Hr	W8x28 Beam and NW Concrete
1	1	1	3/8
1-1/2	1	1	3/8
1-1/2	1-1/2	1-1/2	5/8
2	1	1	3/8
2	2	2	13/16
3	1-1/2	1-1/2	5/8
3	3	3	1-7/16
3 (#)	3	3	1-3/8
3	3	4	1-15/16

+ Thickness applied to beams' lower flange edges shall be a minimum of 1/4 in.

(#) Rating applicable only when a minimum of 5-1/4 in. of normal weight concrete provide over deck crests.

ARABIAN VERMICULITE INDUSTRIES — Types MK-6/HY, MK-6/HY Extended Set, MK-6/HB, MK-6s, MK-6 GF, MK-6 GF Extended Set, MK-10 HB, MK-10 HB Extended Set, MK-1000/HB, MK-1000/HB Extended Set, Z-106, Z-106/G, Z-106HY, Z146, AV-650, AV-800

GCP KOREA INC — Types MK-6/HY, MK-6/HY Extended Set, MK-6/HB, MK-6s, MK-6 GF, MK-6 GF Extended Set, MK-10 HB, MK-10 HB Extended Set, MK-1000/HB, MK-1000/HB Extended Set, Z-106/G, Z-106, Z-106HY, Z-146

GCP APPLIED TECHNOLOGIES INC — Types MK-6/HY, MK-6/HY Extended Set, MK-6/HB, MK-6s, MK-6 GF, MK-6 GF Extended Set, MK-10 HB, MK-10 HB Extended Set, MK-1000/HB, MK-1000/HB Extended Set, RG, Z-106/G, Z-106, Z106HY, Z-146, Z-146T, Z-146PC, Z-156, Z-156T, Z-156PC

4A. **Sprayed Fiber* —** (Optional, Not Shown) Sprayed Fiber, Classified for Surface Burning Characteristics (BNST), having a maximum applied density of 3.5 pcf applied over both Steel Floor and Form Units (Item 3 and 3A) and over Spray-Applied Fire Resistive Material (Item 4) on Supports (Item 1). Sprayed Fiber may be applied to the underside of Steel Floor and Form Units (Item 3 and 3A) at an unlimited thickness. Sprayed Fiber may be applied over Spray-Applied Fire Resistive Material (Item 4) on Supports (Item 1) according to the following tables:

Allowable Sprayed Fiber Thickness over SFRM applied to Beams (Item 1)

Installed SFRM Thickness (in.) on Beam	SFRM Density (lb/ft^3)			
	15	22	40	50
	Sprayed Fiber Thickness (in.)			
5/16	8	8	8	8
3/8	8	8	8	8
9/16	8	8	8	8
5/8	8	8	8	8
13/16	8	8	8	8
7/8	8	8	8	8
15/16	8	8	8	8
1-1/4	8	8	8	8
1-5/16	7-3/4	8	8	8
1-7/16	7-1/4	8	8	8
1-9/16	6-11/16	8	8	8
1-7/8	5-3/8	7-7/8	5	6-1/4
1-15/16	5-1/16	7-7/16	4-5/16	5-3/8
2-1/8	4-5/16	6-5/16	2-1/8	2-11/16

Allowable Sprayed Fiber Thickness over SFRM applied to Joists (Item 1)

Installed SFRM Thickness (in.) on Joist	SFRM Density (lb/ft^3)			
	15	22	40	50
	Sprayed Fiber Thickness (in.)			
3/4	7 3/4	8	8	8
7/8	7 1/4	8	8	8
1 1/8	6 3/16	8	8	8
1 1/4	5 5/8	8	8	8
1 5/16	5 3/8	7 7/8	8	8
1 7/16	4 13/16	7 1/16	8	8
1 3/4	3 1/2	5 1/8	8	8
2 5/16	1 1/16	1 9/16	8	8
2 9/16	0	0	7 7/8	8

INTERNATIONAL CELLULOSE CORP — Type K13, URE-K, or SonaSpray FC

4B. **Sprayed Fiber* —** (Optional, Not Shown) Sprayed Fiber, Classified for Surface Burning Characteristics (BNST), having a maximum applied density of 2.8 pcf applied over the Spray-Applied Fire Resistive Material (Item 4) on both the Steel Floor and Form Units (Item 3 and 3A) and on the Supports (Item 1). Sprayed Fiber may be applied to the underside of Steel Floor and Form Units (Item 3 and 3A) at an unlimited thickness. Sprayed Fiber may be applied over Spray-Applied Fire Resistive Material (Item 4) on Supports (Item 1) according to the following tables:

Allowable Sprayed Fiber Thickness over SFRM applied to Beams (Item 1)

Installed SFRM Thickness (in.) on Beam	SFRM Density (lb/ft^3)			
	15	22	40	50
	Sprayed Fiber Thickness (in.)			
5/16	5	5	5	5
3/8	5	5	5	5
9/16	5	5	5	5
5/8	5	5	5	5
13/16	5	5	5	5
7/8	5	5	5	5
15/16	5	5	5	5
1-1/4	5	5	5	5
1-5/16	5	5	5	5
1-7/16	5	5	5	5
1-9/16	5	5	5	5
1-7/8	5	5	5	5
1-15/16	5	5	5	5
2-1/8	5	5	2 11/16	3 3/8

Allowable Sprayed Fiber Thickness over SFRM applied to Joists (Item 1)

Installed SFRM Thickness (in.) on Joist	SFRM Density (lb/ft^3)			
	15	22	40	50
	Sprayed Fiber Thickness (in.)			
3/4	5	5	5	5
7/8	5	5	5	5
1 1/8	5	5	5	5
1 1/4	5	5	5	5
1 5/16	5	5	5	5

1 7/16	5	5	5	5
1 3/4	4 3/8	5	5	5
2 5/16	1 5/16	1 15/16	5	5
2 9/16	0	0	5	5

MONOGLASS INC — Type Monoglas

4C. **Sprayed Fiber* —** (Optional, Not Shown) Sprayed Fiber, Classified for Noncombustible Building Materials (BICW), having a maximum applied density of 3.5 pcf applied over the Spray-Applied Fire Resistive Material (Item 4) on both the Steel Floor and Form Units (Item 3 and 3A) and on the Supports (Item 1). Sprayed Fiber may be applied to the underside of Steel Floor and Form Units (Item 3 and 3A) at an unlimited thickness. Sprayed Fiber may be applied over Spray-Applied Fire Resistive Material (Item 4) on Supports (Item 1) according to the following tables:

Allowable Sprayed Fiber Thickness over SFRM applied to Beams (Item 1)

Installed SFRM Thickness (in.) on Beam	SFRM Density (lb/ft^3)			
	15	22	40	50
	Sprayed Fiber Thickness (in.)			
5/16	5	5	5	5
3/8	5	5	5	5
9/16	5	5	5	5
5/8	5	5	5	5
13/16	5	5	5	5
7/8	5	5	5	5
15/16	5	5	5	5
1-1/4	5	5	5	5
1-5/16	5	5	5	5
1-7/16	5	5	5	5
1-9/16	5	5	5	5
1-7/8	5	5	5	5
1-15/16	5	5	4 5/16	5
2-1/8	4 5/16	5	2 1/8	2 11/16

Allowable Sprayed Fiber Thickness over SFRM applied to Joists (Item 1)

Installed SFRM Thickness (in.) on Joist	SFRM Density (lb/ft^3)			
	15	22	40	50
	Sprayed Fiber Thickness (in.)			

3/4	5	5	5	5
7/8	5	5	5	5
1 1/8	5	5	5	5
1 1/4	5	5	5	5
1 5/16	5	5	5	5
1 7/16	4 13/16	5	5	5
1 3/4	3 1/2	5	5	5
2 5/16	1 1/16	1 9/16	5	5
2 9/16	0	0	5	5

THERMACOUSTIC IND. — Type TC-41

5. **Shear-Connector-Studs-Optional —** Studs 3/4 in. diam by 3 in. long, for 1-1/2 in. deep form units to 5-1/4 in. long for 3 in. deep form units, headed type or equivalent per AISC specifications. Welded to the top flange of the beam through the steel form units.

6. **Electrical Inserts —** (Not Shown) — Classified as "Outlet Boxes and Fittings Classified for Fire Resistance".
WIREMOLD CO — After set Inserts. Single-service after set inserts installed per accompanying installation instructions in 2-1/2 in. diam hole core-drilled through min 3-1/4 in. thick concrete topping to top of cell of any min 3 in. deep cellular steel floor unit specified under Item 3. Spacing shall be no more than one insert in each 10 sq ft of floor area in each span with a min center to center spacing of 16 in. If the high potential and low potential raceways of the cellular steel floor unit are separated by a valley filled with concrete, the center to center spacing of the high potential and low potential single-service after set inserts may be reduced to a min of 7-1/2 in. Restrained Assembly Rating is 2 hr or less with internally protected Type 436 after set insert with Types M4-, M6- or M8- Series single-service activation fitting

WIREMOLD CO — Internally protected Type 436 after set insert with Type M4-, M6- or M8- Series single-service activation fitting

7. **Roof Covering Materials* —** (Optional, not shown) — Consisting of materials compatible with insulations described herein which provide Class A, B or C coverings. See Roofing Materials and Systems Directory - Roof Covering Materials (TEVT).

8. **Insulating Concrete —** (Not Shown) — Optional. Various types of insulating concrete prepared and applied in the thickness indicated:
A. **Vermiculite Concrete —** (Not Shown) — Optional.
1. Blend 6 to 8 cu ft of Vermiculite Aggregate* to 94 lb Portland Cement and air entraining agent. Min thickness of 2 in. as measured to the top surface of the structural concrete or foamed plastic (Item 9) when it is used.
SIPLAST INC

VERMICULITE PRODUCTS INC

2. Blend 3.5 cu ft. of Type NVC Concrete Aggregate* or Type NVS Vermiculite Aggregate* to 94 lb Portland Cement. Slurry coat, 1/8 thickness beneath foamed plastic (Item 9) when used, 1 in. min topping thickness.
SIPLAST INC

VERMICULITE PRODUCTS INC

Vermiculite concrete may be covered with Roof Covering Materials (Item 7).

B. **Cellular Concrete-Roof Topping Mixture* —** Concentrate mixed with water and Portland Cement per manufacturers specifications. Min. thickness of 2-in. as measured to the top surface of the structural concrete or foamed plastic (Item 9) when used. 28-day min compressive strength of 190 psi as determined with ASTM C495-66.
AERIX INDUSTRIES — Cast dry density of 37 (+ or -) 3.0 pcf

CELCORE INC — Type Celcore with cast dry density of 31 (+ or - 3.0) pcf or Type Celcore MF with cast dry density of 29 (+ or - 3.0) pcf

ELASTIZELL CORP OF AMERICA — Type II. Mix #1 of cast dry density 39 (+ or -) 3.0 pcf, Mix #2 of cast dry density 40 (+ or -) 3.0 pcf, Mix #3 of cast dry density 47 (+ or -) 3.0 pcf

SIPLAST INC — Mix No. 1 or 2. Cast dry density of 32+3 (Mix No. 1) or 36+3 (mix No. 2) pcf

C. **Perlite Concrete —** Mix consists of 6.2 cu ft Perlite Aggregate* to 94 lbs of Portland cement and 1-1/2 pt air entraining agent. Compressive strength 80 psi min.

See Perlite Aggregate (CFFX) category for names of Classified companies.

D. **Cellular Concrete-Roof Topping Mixture* —** Foam Concentrate mixed with water, Portland Cement and UL Classified Vermiculite Aggregate per manufacturer's application instructions. Cast dry density of 33 (+ or -) 3.0 pcf and 28-day compressive strength of min 250 psi as determined in accordance with ASTM C495-86.
AERIX INDUSTRIES — Mix No. 3

SIPLAST INC — Mix No. 3

E. **Floor Topping Mixture* — (Optional, not shown) —** Approx 4.5 gal of water to 41 lbs of NVS Premix floor topping mixture. Slurry coat 1/8 in. thickness beneath foamed plastic (Item 9) when used, 1 in. min topping thickness.
SIPLAST INC

Floor Topping Mixture may be covered with Built-Up or Single Membrane Roof Covering.

9. **Foamed Plastic* —** (Optional, not shown) — For use only with vermiculate or cellular concretes or Floor Topping mixture (Item 8E) - Rigid polystyrene foamed plastic insulation having slots and/or holes sandwiched between vermiculite concrete slurry which is applied to the normal or lightweight concrete surface and concrete topping.
SIPLAST INC

VERMICULITE PRODUCTS INC

*** 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 2024-08-02