

FORMLOK COMPOSITE SLAB FIRE RESISTANCE RATINGS

Table 9 2, 4, 6, 8, 9

| RESTRAINED ASSEMBLY RATING (hr) | UL # | FRAME | CONCRETE (in.) ⁷ | FORMLOK DECK ¹ | | | | | | | PROTECTED ⁵ |
|---------------------------------|------|------------|-----------------------------|---------------------------|----|----------------|----------------|----------------|----------------|----|------------------------|
| | | | | B | BR | W2 | W3 | N3 | N | DV | |
| 1-3 | D216 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | Gypsum |
| 1-2 | D303 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | Mineral/Fiber Board |
| 1.5-2 | D502 | Beam/Joist | (varies) NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | Gypsum |
| 1-4 | D739 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-3 | D743 | Beam | 2" LW, NW | | | ✓ | ✓ | | | | SFRM |
| 2 | D750 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2-3 | D755 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2-3 | D759 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2-4 | D760 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | | | | SFRM |
| 2 | D764 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-4 | D767 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2 | D775 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-4 | D779 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | | | | SFRM |
| 1-4 | D787 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-4 | D788 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | | ✓ | | SFRM |
| 2 | D794 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-3 | D795 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-4 | D796 | Beam/Joist | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2 | D826 | Beam | ¾" LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2-3 | D832 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2 | D840 | Beam | (varies) LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-4 | D858 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-3 | D859 | Beam | 2" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 3 | D867 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-3 | D871 | Beam | 2½" LW, NW | | | ✓ | ✓ | | | | SFRM |
| 1-3 | D875 | Beam | 2" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2 | D878 | Beam | ¾" LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-3 | D883 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 2 | D888 | Beam | (varies) LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-4 | D891 | Beam | 2½" LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 3 | D896 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | SFRM |
| 1-3 | D898 | Beam | 2½" LW, NW | | | ✓ | ✓ | | | | SFRM |
| 1-3 | D902 | Beam/Joist | (varies) LW, NW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| 2 | D907 | Beam | ¾" LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| ¾-1 | D914 | Beam | 2½" LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| ¾-3 | D916 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 1-3 | D919 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 2 | D920 | Beam | ¾" LW | | | ✓ | ✓ | | | | No |
| ¾-3 | D922 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| ¾-3 | D923 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 2-3 | D924 | Beam | (varies) LW, NW | ✓ | | ✓ | ✓ | | | | No |

(continued on following page)

Table 9 (continued)

| RESTRAINED ASSEMBLY RATING (hr) | UL # | FRAME | CONCRETE (in.) ⁷ | FORMLOK DECK ¹ | | | | | | | PROTECTED ⁵ |
|---------------------------------|------|------------|-----------------------------|---------------------------|----|----------------|----------------|----------------|----------------|----|------------------------|
| | | | | B | BR | W2 | W3 | N3 | N | DV | |
| ¾-3 | D925 | Beam/Joist | (varies) LW, NW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| ¾-3 | D927 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 1-3 | D929 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 2 | D931 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 1-3 | D943 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 1-3 | D949 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | | ✓ | | No |
| 1-3 | D957 | Beam/Joist | (varies) LW, NW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| ¾-3 | D958 | Beam/Joist | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| ¾-1 | D967 | Beam | 2½" LW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 1-3 | D968 | Beam | (varies) LW, NW | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No |
| 2-3 | D969 | Beam | (varies) LW, NW | ✓ | | ✓ | ✓ | | | | No |
| 2 | D973 | Beam | ¾" NW | | | ✓ | ✓ | | | | No |
| 3 | D974 | Beam/Joist | 4½" NW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| 1-3 | D975 | Beam | (varies) LW, NW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| 1-2 | D976 | Beam/Joist | 3½" NW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| 1-2 | D977 | Beam/Joist | 3½" LW | ✓ ³ | ✓ | ✓ ³ | ✓ ³ | ✓ ³ | ✓ ³ | | No |
| 1.5-3 | G213 | Joist | (varies) NW | ✓ | | | | | | ✓ | Acoustical Material |
| 2 | G222 | Joist | 2½" NW | ✓ | | | | | | ✓ | Acoustical Material |
| 2 | G227 | Beam/Joist | 2½" NW | ✓ | | | | | | ✓ | Acoustical Material |
| 1.5-3 | G229 | Joist | (varies) NW | ✓ | | | | | | ✓ | Acoustical Material |
| 1.5-2 | G236 | Joist | 2½" NW | ✓ | | | | | | ✓ | Acoustical Material |
| 1.5-2 | G243 | Beam/Joist | 2½" NW | ✓ | | | | | | ✓ | Acoustical Material |
| 2-3 | G247 | Beam/Joist | (varies) NW | ✓ | | | | | | ✓ | Gypsum |
| 1-3 | G561 | Beam/Joist | (varies) LW, NW | ✓ | | | | | | ✓ | Gypsum |
| 1-3 | G710 | Joist | (varies) LW, NW | ✓ | | | | | | ✓ | SFRM |
| 1-4 | N789 | Joist | (varies) LW, NW | ✓ | | | | | | ✓ | SFRM |

1. The profile designations used in this table apply to the profile families as summarized below:

- "B" – PLB & B FORMLOK deck
- "N3" – PLN3 & N3 FORMLOK deck
- "N" – PLN & N FORMLOK deck
- "W2" – PLW2 & W2 FORMLOK deck
- "W3" – PLW3 & W3 FORMLOK deck
- "DV" – 1⁵/₁₆" Deep VERCOR deck

2. Refer to UL Fire Resistance Directory, evaluation reports for Verco Steel Deck, or municipality requirements for full details of construction including profile applicability, concrete thickness, strength requirements, and span limitations.
3. Denotes that the FORMLOK deck profile may be fluted or cellular.
4. Code-compliant Verco gray primer paint is formulated for compatibility with spray-applied fireproofing. Verco steel decks in the assemblies listed above may be galvanized or painted, excluding assemblies D924, D969, D973, D974, D976, and D977 which shall be galvanized only.
5. Protected assemblies have spray-applied fireproofing applied directly to the underside of the deck. Unprotected assemblies do not require spray-applied fireproofing applied to the underside of the deck. "SFRM = Spray-Applied Fire Resistive Materials."
6. Verco Decking, Inc. assumes no responsibility for adhesion of any spray-applied fireproofing material, nor for any treatment, cleaning, or surface preparation of the deck required for adhesion of fire protection material.
7. Concrete thickness is measured from top of deck to top of slab.
8. All assemblies except D750, D760, D775, D779, D924, D969, D973, D974, D976, D977, G213, G222, G227, G229, G236, G243, G547, G561, G710, and N789 are permitted to be blended. Blended deck refers to the allowed combination of cellular and non-cellular deck for the floor system.
9. Sidelap fastening by either button punch, seam weld, or VSC2 is required. Minimum ¾" long #10 self-drilling screws may be substituted for button punches at the spacing indicated for button punches – but only for an appropriate deck profile modified for this application.