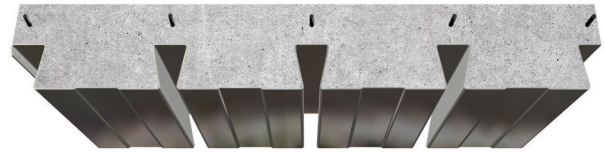


DOVETAIL FORMLOK® DECK-SLAB UL FIRE RATED ASSEMBLIES

USE UL RECOGNIZED 2.0D AND 3.5D DOVETAIL ROOF AND FORMLOK COMPOSITE DECK FOR YOUR FIRE RATED ASSEMBLIES



2.0D FormLok UL Fire Resistance Ratings^{1,2}

Restrained Assembly Rating (hr)	UL Design No.	Concrete Topping Thickness (in.) based on Unit Weight (pcf)			Minimum Reinforcement ³	Minimum Beam or Joist	Unrestrained Assembly Rating ⁴ (hr)
		LW	SLW	NW			
		112	130	147			
1	D904 or D961	2	---	2 ³ / ₄ ⁵	6x6-6/6 SWG	W8x28, W10x29	3/4
2		2 ¹ / ₂	3	3 ¹ / ₄			1
3		3 ³ / ₄	4	4 ³ / ₄			1 ¹ / ₂
		107-113	130	147-153			
1	D917	2	---	2 ³ / ₄ ⁵	6x6-6/6 SWG	W10x29	3/4
2		2 ¹ / ₂	3	3 ¹ / ₄			
3		3 ³ / ₄	4	4 ³ / ₄			
		107-113	130	147-153			
1	D928	2	---	2 ³ / ₄ ⁵	6x6-6/6 SWG	W10x29	3/4
2		2 ¹ / ₂	3	3 ¹ / ₄			1
3		3 ³ / ₄	4	4 ³ / ₄			



3.5D FormLok UL Fire Resistance Ratings^{1,2}

Restrained Assembly Rating (hr)	UL Design No.	Concrete Topping Thickness (in.) based on Unit Weight (pcf)		Minimum Reinforcement ³	Minimum Beam or Joist	Unrestrained Assembly Rating ⁴ (hr)
		LW	NW			
		107-113	147-153			
1 ¹ / ₂	D947, D964, or D984	2	2	6x6-W1.4xW1.4	W8x28, W10x29	3/4
2		2	2 ¹ / ₄			1 ¹ / ₂
3		2 ¹ / ₄	3 ³ / ₄			

Notes:

1. All DoveTail FormLok composite deck assemblies are subject to an upper live load limit of 130 psf.
2. Steel deck is exposed and does not require SFRM. See the UL design for thickness of SFRM on beams.
3. Dramix® fibers may be used in UL or ULC fire rated assemblies in lieu of WWR. See UL file R13907 for additional information.
4. See UL "Fire Resistance Directory" for span limitations and construction details.
5. Restrained Assembly Rating is 1¹/₂ hr with listed NW concrete thickness.

DOVETAIL ROOF DECK UL FIRE RATED ASSEMBLIES

2.0D and 3.5D UL Fire Resistance Ratings

Restrained Assembly Rating (hr.)	UL Design No.	Unrestrained Assembly Rating (hr.)	Support Type	Fire Protection	Deck Type	
					2.0D	3.5D
1, 1½, or 2	P908	0, 1½, or 2	Beams: W6x16, W8x10, W8x18 or W8x28 min., Joists: 10K1, 12J4, 14K4, or 16K3 min., Joist Girders: 20 in. min. depth and 13 lb/lin ft min. weight	Insulating Concrete	✓	✓
1, 1½, or 2	P921	0	Beams: W6x16 or W8x10, Joists: 12K5 or heavier may be used as secondary support, Joist Girders: 20 in. min. depth and 13 lb/lin ft min. weight	Insulating Concrete	✓	✓
1, 1½, or 2	P937	0	Beams: W8x28 min., Joists: 10K1 min.	Insulating Concrete	✓	✓
1, 1½, or 2	P938	0, 1½, or 2	Beams: W6x16, W8x10, W8x18 or W8x28 min., Joists: 10K1, 12J4, 14K4, or 16K3 min., Joist Girders: 20 in. min. depth and 13 lb/lin ft min. weight	Insulating Concrete	✓	✓

DOVETAIL DECK SOLUTIONS



Catalog Solutions

2.0D DoveTail FormLok Deck
3.5D DoveTail FormLok Deck
DoveTail Hanging Solutions
DoveTail Acoustic Solutions
DoveTail Roof Deck



Web Based Solutions

Calculators available at www.dovetaildeck.com
Maximum Unshored Span
Composite Deck-Slab Strength
Composite Deck-Slab Diaphragm Strength
Roof Deck Diaphragm Strength
Steel Deck Roving Load

ARCAT® Specifications for DoveTail Roof and FormLok Composite Decks are available for free download on Arcat at: www.arcat.com

The information in this product data sheet is presented for general information only and is not to be used or relied upon for any application without independent verification by a professional engineer or other qualified professional. Vulcraft and Verco expressly disclaim (i) any and all representations, warranties and conditions, express or implied, related to the information in this product data sheet, including but not limited to warranties of merchantability, fitness for a particular purpose, and non-infringement; and (ii) any and all liability whatsoever arising out of or related to this product data sheet or its use, including but not limited to liability by reason of death, personal injury or damage to property.

VULCRAFT, VERCO, and FormLok are registered trademarks of Nucor Corporation or its affiliates.