



Underwriters Laboratories UL-Fire Ratings

ASC Steel Deck products that bare the UL approved mark have been investigated for fire resistance. Underwriters Laboratories is an independent, product safety testing and certification organization. ASC Steel Deck has been evaluated for fire resistance per UL 263 Fire Tests of Building Construction and Materials. See UL directory for fire rated assemblies.



The Fire Ratings table offers a quick reference summary of design numbers, fire ratings, deck type, SFRM Spray Applied Fire Resistive material listings and more. The details of the each design assembly are listed on UL Online Certification Directory www.ul.com.

Roof Deck Table Notes:

1. P2XX have suspended acoustical ceilings with an exposed grid system.
2. P3XX have mineral or fiber board applied to the underside of the deck.
3. P4XX have suspended gypsum board.
4. P7XX have (SFRM) Spray Applied Fire Resistive Material applied to the deck.
5. P9XX have not SFRM on the deck but it is required on the beams and joists.
6. P9XX includes lightweight insulating concrete.
7. The designer shall refer to the UL Fire Resistance directory for a detailed list of components in the fire rated assembly listing.
8. ASC Steel Deck does not assume responsibility for adhesion of any spray-applied fireproofing material, surface preparation, cleaning, or other treatments of the deck surface.
9. "Gray" prime painted deck is supplied for application of spray-applied fireproofing.
10. Please contact ASC Steel Deck for galvanizing options.

Floor Deck Table Notes:

1. This table summarizes ASC Steel Deck's UL fire listings. Refer to the UL website for the most accurate and up-to-date listings.
2. SFRM = Spray-Applied Fire Resistive Material.
3. ASC Steel Deck may be used as blend deck with other manufacturers electrified cellular deck or trench.
4. Carbonate Aggregate.
5. Siliceous Aggregate.
6. BK Holding Corp. Ultra Fiber 500®
7. Syntheon Inc. Elemix® XE and Grey XE concrete additive.
8. For restrained fire ratings see UL listing for additional requirements.

ASC STEEL DECK - ROOF DECK - UNDERWRITERS LABORATORIES (UL) FIRE RESISTANCE

UL Design Number	ANSI/UL 263	Support Type	UL Design Number	Panel Type (gauges)					Coatings		Side-Lap Fastening				Support Fastening		Fire Protection	Lightweight Insulating Concrete
	Fire Resistance Ratings Restrained and Unrestrained Assemblies (hrs)	Beam / Joist		DGB-36, B-36	DGN-32, N-32	DG2W-36, 2W-36	DG3WxH-36, 3WxH-36	CP-1 3/8, CP-32	Galvanized	Prime Shield	Screws	Button Punch	DeltaGrip	Welds	Screws	PAF (Pins/Nails)	Welds	
P225	Restrained Assembly Ratings — 1 and 1½ Hr. Unrestrained Assembly Ratings — 1 and 1½ Hr	Beam-W6x12min, Joist- 20min depth	P225	✓	✓				✓	✓			✓	✓			✓	✓
P230	Restrained Assembly Rating — 1 and 1½ Hr. Unrestrained Assembly Rating — 1 and 1½ Hr	Beam-W6x12min, Joist- 20min depth	P230	✓					✓	✓			✓	✓			✓	✓
P518	Restrained Assembly Rating — 1 Hr. Unrestrained Assembly Rating — 1 Hr	Joist - Cee-shaped sections, min 8 in. deep with 1-9/16 in. flanges and 9/16 in. lips, made from No. 18 gauge or heavier, Steel truss - chords shall be min of 18 ga. and web sections a min of 20 ga. min depth of 8 in.	P518	✓				✓	✓	✓	✓		✓		✓			✓
P701	Restrained Assembly Rating — ¾, 1, 1½ or 2 Hr. Unrestrained Assembly Rating — ¾, 1, 1½ or 2 Hr	Beam-W16x16min, Joist-20in joist girders	P701	✓	✓				✓	✓		✓	✓	✓			✓	✓
P711	Restrained Assembly Ratings — 1, 1½ or 2 Hr. Unrestrained Assembly Ratings — 1, 1½ or 2 Hr	Beam - W6x16 min size. , Joist girders -20 in. min depth, Joists Types 10J4, 10H4, 12J4, 14J7 or 14K4 min size.	P711	✓	✓				✓	✓		✓	✓	✓			✓	✓
P717	Restrained Assembly Rating — 1, 1½ or 2 H Unrestrained Assembly Rating — 1, 1½ or 2 H	Beam - W6x16 min size, Joist - 10H4, 14J7, 12K3 or 16K3 min sizes.	P717	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓
P719	Restrained Assembly Rating — 1, 1½, 2 or 3 Hr. Unrestrained Assembly Rating — 1, 1½ or 2 Hr	Beams-W6x16 min , Joist-10 K1 min, Joist girders -20 in. min depth and 13 lb/lin ft min weight.	P719	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
P723	Restrained Assembly Ratings — 1, 1½, 2 and 3 Hr Unrestrained Assembly Ratings — 1, 1½, 2 and 3 Hr	Beam- W6x16 , Joist -min 10K1 or 12K5	P723	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
P726	Restrained Assembly Rating — ¾, 1, 1½ or 2 Hr Unrestrained Assembly Rating — ¾, 1, 1½, or 2 Hr	Beam-W6X16 min, Joist -10K1 min , Joist girders - 20 in. min depth	P726	✓	✓				✓	✓		✓	✓	✓			✓	✓
P732	Restrained Assembly Ratings — 1, 1½, 2 or 3 Hr Unrestrained Assembly Ratings — ¾, 1, 1½, 2 or 3 Hr	Beam - Min W6x16 or W8x28 , Joist - 10K1 or 16K2 min, or 12K3 or 12K5 min size	P732	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓
P734	Restrained Assembly Ratings — ¾, 1, 1½ or 2 Hr Unrestrained Assembly Ratings — ¾, 1, 1½ or 2 Hr	Beam - W6x16min, Joist - 12J4, 14J7 or 14K4 min, Joist girders-20 in. min, any LH-Series joist may be used.	P734	✓	✓				✓	✓		✓	✓	✓			✓	✓
P739	Restrained Assembly Ratings — 1, 1½ and 2 Hr Unrestrained Assembly Ratings — 1, 1½ and 2 Hr	Beam- W6x16 min , Joist - 10H4, 14J7, 10K1 or 12K3 min.	P739	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓
P740	Restrained Assembly Ratings — 1, 1½ & 2 Hr Unrestrained Assembly Ratings — ¾, 1, 1½ & 2 Hr	Beam -W6x16 min , Joist 10K1 or 16K2 min or 12K3 min	P740	✓	✓				✓	✓		✓	✓	✓			✓	✓
P741	Restrained Assembly Ratings — 1, 1½ or 2 Hr Unrestrained Assembly Ratings — 0, 1, 1½ or 2 Hr	Beam - Min W6x16, Joist - Min 10K1	P741	✓	✓				✓	✓	✓	✓	✓				✓	✓

ASC STEEL DECK - ROOF DECK - UNDERWRITERS LABORATORIES (UL) FIRE RESISTANCE

UL Design Number	ANSI/UL 263	Support Type	UL Design Number	Panel Type (gauges)					Coatings		Side-Lap Fastening				Support Fastening		Fire Protection	Lightweight Insulating Concrete
	Fire Resistance Ratings Restrained and Unrestrained Assemblies (hrs)	Beam / Joist		DGB-36, B-36	DGN-32, N-32	DG2W-36, 2W-36	DG3WXH-36, 3WXH-36	CP-1 3/8, CP-32	Galvanized	Prime Shield	Screws	Button Punch	DeltaGrip	Welds	Screws	PAF (Pins/Nails)	Welds	
P742	Restrained Assembly Ratings - 1, 1½ or 2 Hr. Unrestrained Assembly Ratings - 1, 1½ or 2 Hr	Beam-W6x16, Joist - 12J4 or 14J7 min, Joist girders-20 in. min depth and 13 lb/lin ft min weight, any LH-Series joist may be used.	P742	✓	✓				✓	✓	✓	✓	✓			✓	✓	
P743	Restrained Assembly Ratings — 1, 1½ and 2 Hr Unrestrained Assembly Ratings — 1, 1½ and 2 Hr	Beam - W6x16 min size, Joist -10H4, 14J7, 10K1 or 12K3 min	P743	✓	✓				✓	✓		✓	✓			✓	✓	
P815	Restrained Assembly Rating- 1, 1½ , 2 Hrs Unrestrained Assembly Rating- 1, 1½, 2 Hr	Beam W6x16 min size, Joist-10K1 or 12K3 min size.	P815	✓	✓				✓	✓		✓	✓			✓	✓	
P819	Restrained Assembly Rating — 1, 1½ or 2 Hr. Unrestrained Assembly Rating — 1, 1½ or 2 Hr	Beam - W6x16 min size, Joist 10K1 or 12K3	P819	✓	✓				✓	✓	✓	✓	✓			✓	✓	
P908	Restrained Assembly Ratings — 1, 1½ or 2 Hr. Unrestrained Assembly Rating — 0, 1½, or 2 Hr	Beam- 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	P908	✓	✓				✓	✓		✓	✓			✓		✓
P920	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam - W8x10, W8x17, W6x16 or W8x28 min, Joists- 10K1, 12J4, 12K5 or 14K3 min	P920	✓	✓	✓			✓	✓		✓	✓			✓		✓
P921	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr Unrestrained Beam Rating — 1, 1½ or 2 Hr	Beam - W6X16 or W8X10 beam, Joist girders - 20 in. min depth and 13 lb/lin ft min weight. 12K5 or heavier steel joist may be used as secondary support	P921	✓	✓	✓		✓	✓	✓		✓	✓			✓		✓
P922	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam - W6x16, or W8x28 min, Joists- 10K1 min with steel bridging angles required per SJI specifications.	P922	✓	✓				✓	✓		✓	✓			✓		✓
P925	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam- W6X16 or W8X10, Joists -12K5 min, Joists or Joist girders 10K1- 20 in. min depth and 13 lb/lin ft min weight	P925	✓		✓		✓	✓		✓	✓	✓			✓		✓
P927	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam-W6x16, W8x10 or W8x1, Joists-12J4, 14K4 or 16K3 min, Joist girders-20 in. min depth and 13 lb/lin ft min weight	P927	✓	✓	✓		✓				✓	✓			✓		✓
P928	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam - W6X16 or W8X10, Joist girders-20 in. min depth and 13 lb/lin ft min weight	P928	✓	✓	✓		✓				✓	✓			✓		✓
P930	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam - W8x28 min size steel beam; or steel joists welded or bolted to end supports.	P930		✓			✓				✓	✓			✓		✓
P936	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr Restricted Load Condition	Beam - W6x16 or W8x28 min size, Joists 10K1 or 16K2 min size with a max tensile stress of 30,000 psi or 12K3 or 12K5 min size with a max tensile stress of 24,000 psi.	P936	✓	✓	✓		✓				✓	✓			✓		✓
P937	Restrained Assembly Rating — 1, 1½ or 2 Hr Unrestrained Assembly Rating — 0 Hr	Beam-W8x28 min, Joists-10K1 min	P937	✓	✓	✓		✓				✓	✓			✓		✓

ASC STEEL DECK - FLOOR DECK - UNDERWRITERS LABORATORIES (UL) FIRE RESISTANCE

UL Design Number	Minimum Beam or Joist	Unrestrained Assembly Rating ⁸	Minimum Concrete Reinforcing	Fire Proofing ² On		Restrained Assembly Rating ⁸	Concrete		CF 1 1/2	Deck ³										Smooth Series™ Option	Note	UL Design Number							
				Beam	Deck		Thickness	Type		BH-36	BHN-36	BHN-35 1/4	BHF-36	NH-32	NHN-32	NHF-32	2WH-36	2WHF-36	3WH-36				3WHF-36						
																								hr	in	pcf			
D216	W8x15, 10J3, 12K1, 20LH with a minimum of 13 lbs per foot weight	1, 1 1/2, 2, 3	6x6 W1.4xW1.4	None (ceiling system below)	none	1, 1 1/2, 2, 3	varies depending on acoustic material, see UL listing	"147-153 NW 107-113 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y	3	D216						
D303	W8x28	1, 1 1/2, 2	6x6 10x10 SWG	Mineral fiber board	Mineral fiber board	1	3 1/2	147-153 NW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D303					
						1 1/2	4	147-153 NW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	N		
						2	4 1/2	147-153 NW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	N	
						3	5 1/4	147-153 NW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	N	
						3/4 or 1	2 1/2	107-113 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	N	
						1 1/2	3	107-113 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	N
						2	3 1/4	107-113 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	N
						2	3 3/4	107-116 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	N
						3	4 3/16	107-113 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	N
						1	2 5/8	107-120 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	N
2	3 1/2	114-120 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N								
3	4 7/16	114-120 LW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N								
D502	W8x28, 20" Joist Girders at 20plf, 12K1, LH Series joists	1 1/2, 2	6x6 W1.4xW1.4	none (ceiling system below)	none	1 1/2, 2	2 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y	3	D502						
D703	W8x20	1, 1 1/2	6x6 W2.9xW2.9	SFRM	SFRM	1, 1 1/2, 2, 3	2 1/2	"142-148 NW 105 LW"														3	D703						
D708	W10x17	1 1/2, 3	6x6 W2.9xW2.9	SFRM	SFRM	3	2 1/2	"145-151 NW 109-115 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D708					
D712	W8x24	1 1/2, 2	6x6, 10x10 SWG	SFRM	SFRM	1, 1 1/2, 2	2 1/2	"147-153 NW 110 LW"						✓	✓	✓	✓	✓	✓	✓	✓	N	3	D712					
D722	W6x12	1, 1 1/2, 2	6x6 W1.4xW1.4	SFRM	SFRM	1, 1 1/2, 2	2 1/2	"142-148 NW 112 LW"						✓	✓	✓	✓	✓	✓	✓	✓	N	3	D722					
D739	W8x28, W6x12,OWSJ, Cast in place concrete beams	1, 1 1/2, 2, 3, 4	6x6 W2.9xW2.9, Synthetic fibers	SFRM	SFRM	1, 1 1/2, 2, 3, 4	2 1/2	"142-148 NW 102-120 LW (110 LW with joists)"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D739					
D740	W10x15	1	6x6 10x10 SWG	SFRM	SFRM	2	2 1/2	147-153 NW		✓	✓	✓	✓									N		D740					
D743	W8x20, W8x28, W8x15, Cast in place concrete beams	1, 1 1/2, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1 1/2, 2, 3	2	"147-153 NW 107-113 LW"								✓	✓	✓	✓	✓	✓	N	3	D743					
D750	W8x21	1 1/2, 2	6x6 W1.4xW1.4	SFRM	SFRM	2	2 1/2	"142-148 NW 105-111 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D750					
D754	W8x28	1 1/2, 2	6x6 W1.4xW1.4	SFRM	SFRM	3, 4	3 1/4	115-121 LW		✓	✓	✓		✓	✓			✓			N/A		D754						
D755	W8x24, W8x28, 10H3, 12J6	1, 1 1/2, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	2, 3	2 1/2	"147-13 NW 109-115 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D755					

ASC STEEL DECK - FLOOR DECK - UNDERWRITERS LABORATORIES (UL) FIRE RESISTANCE

UL Design Number	Minimum Beam or Joist	Unrestrained Assembly Rating ⁸ hr	Minimum Concrete Reinforcing	Fire Proofing ² On		Restrained Assembly Rating ⁸ hr	Concrete		CF 1 1/2	Deck ³											Smooth Series™ Option	Note	UL Design Number				
				Beam	Deck		Thickness	Type		BH-36	BHN-36	BHN-35 1/4	BHF-36	NH-32	NHN-32	NHF-32	2WH-36	2WHF-36	3WH-36	3WHF-36							
																								in	pcf		
D759	W8x28, 12K5, 12" deep OWSJ at 7.1plf	1, 1 1/2, 2, 3	6x6 W1.4xW1.4 with beams, 6x6 W2.9xW2.9 with joists, Fiber reinforcement	SFRM	SFRM	1, 1 1/2, 2, 3	2 1/2	"147-13 NW 109-115 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D759			
D760	W8x28, OWSJ	1, 1 1/2, 2, 3, 4	6x6 W1.4xW1.4	SFRM	SFRM	2, 3, 4	2 1/2	"144-150 NW 107-113 LW"		✓	✓	✓					✓		✓			N		D760			
D764	W8x28, OWSJ	2	6x6, 6x6 SWG	SFRM	SFRM	2	2 1/2	117 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D764			
D767	W8x28, W6x12, OWSJ, Cast in place concrete beams	1, 1 1/2, 2, 3, 4	6x6 W1.4xW1.4 with beams, 6x6 W2.9xW2.9 with OWSJ	SFRM	SFRM	1, 1 1/2, 2, 3, 4	2 1/2	"142-148 NW 102-120 LW (110 LW with joists)"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D767			
D768	W10x17	1 1/2, 3	6x6 W2.9xW2.9	SFRM	SFRM	3	2 1/2	"145-151 NW 109-115 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D768			
D775	W8x21	1 1/2, 2	6x6 W1.4xW1.4	SFRM	SFRM	2	2 1/2	"142-148 NW 105-111 LW"		✓	✓	✓		✓	✓				✓			N/A		D775			
D779	W8x28, 8K1	1, 1 1/2, 2, 3, 4	6x6 W1.4xW1.4, Synthetic fibers	SFRM	SFRM	1, 1 1/2, 2, 3, 4	2 1/2	"142-148 NW 102-120 LW"		✓	✓	✓		✓	✓				✓			N/A		D779			
D782	W8x28, 10" Deep OWSJ	1, 1 1/2, 2, 3, 4	6x6 W1.4xW1.4	SFRM	SFRM	1, 1 1/2, 2, 3, 4	3 1/4	115-121 LW		✓	✓	✓		✓	✓				✓			N/A		D782			
D788	W8x28, 10K1	1, 1 1/2, 2, 3, 4	6x6 8x8 SWG	SFRM	SFRM	1, 1 1/2, 2, 3, 4	2 1/2	"NW LW"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D788			
D794	W8x28, OWSJ	2	6x6 6x6 SWG	SFRM	SFRM	2	2 1/2	"147-153 NW 117 LW"		✓	✓	✓					✓	✓	✓	✓	✓	N		D794			
D795	W8x28, OWSJ	1, 1 1/2, 2, 3	6x6 W1.4xW1.4 with beams, 6x6 W2.9xW2.9 with OWSJ	SFRM	SFRM	1, 1 1/2, 2, 3	2 1/2	"147-153 NW 109-115 LW"		✓							✓	✓	✓	✓	✓	N		D795			
D798	W8x28, OWSJ	1, 1 1/2, 2, 3, 4	6x6 10X10 with beams, 6x6 W1.4xW1.4 with OWSJ	SFRM	SFRM	1, 1 1/2, 2, 3, 4	2 1/2	"142-148 NW 107-113 LW"		✓	✓	✓		✓	✓				✓			N/A		D798			
D799	W8x28, 10K1	1, 1 1/2, 2, 3	6x6 W1.4xW1.4 with beams, 6x6 W2.9xW2.9 with OWSJ	SFRM	SFRM	1, 1 1/2, 2, 3	2 1/2	"147-153 NW 109-115 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D799			
D825	W8x17	1, 1 1/2, 2	6x6 W1.4xW1.4	SFRM	SFRM	2	2 1/2	"147-153 NW 105-111 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D825			
D826	W8x20	0	6x6 W1.4xW1.4	SFRM	SFRM	2	3 1/4	108-114 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D826			
D832	W8x24, W8x28	1, 1 1/2, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1 1/2, 2, 3	2 1/2	"147-153 NW 109-115 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N	3	D832			
D833	W10x25	2, 3	WWF Optional	SFRM	SFRM	2, 3	2 1/2	"147-153 NW 109-115 LW"									✓	✓	✓	✓	✓	N	3	D833			
D840	W8x28	0	6x6 10x10 SWG	SFRM	SFRM	2	3 1/4	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D840			
							3 1/4	107-116 LW						✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	N
							3 1/2	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
D858	W10x25, Concrete beam	1, 1 1/2, 2, 3, 4	6x6 W1.4xW1.4	SFRM	SFRM	1, 1 1/2, 2, 3, 4	2 1/2	"147-153 NW 108-115 LW"										✓		✓		N/A	3	D858			
D859	W8x20	1, 1 1/2, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1 1/2, 2, 3	2	"142-148 NW 108-115 LW"										✓	✓	✓	✓	N	3	D859			

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UL Design Number	Minimum Beam or Joist	Unrestrained Assembly Rating ⁸ hr	Minimum Concrete Reinforcing	Fire Proofing ² On		Restrained Assembly Rating ⁸ hr	Concrete		CF 1½	Deck ³										Smooth Series™ Option	Note	UL Design Number					
				Beam	Deck		Thickness in	Type pcf		BH-36	BHN-36	BHN-35¼	BHF-36	NH-32	NHN-32	NHF-32	2WH-36	2WHF-36	3WxH-36				3WxHF-36				
D861	W8x15, W10x25	1½, 2	6x6 W1.4xW1.4	SFRM	SFRM	2	2½	"137-150 NW 107-115 LW"									✓		✓		N		D861				
D862	W8x21	1	6x6 W1.4xW1.4	SFRM	SFRM	2	2½	99-105 LW						✓	✓		✓		✓		N/A		D862				
D867	W8x18	1½, 2	6x6 6x6 SWG	SFRM	SFRM	3	-	"144-150 NW 107-113 LW"		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N		D867				
D871	W8x21, Concrete beam	1, 1½, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1½, 2, 3	2½	"147-153 NW 108-115 LW"									✓		✓	✓	N	3	D871				
D875	W8x20	1, 1½, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1½, 2, 3	2	"142-148 NW 108-115 LW"									✓		✓		N/A	3	D875				
D877	W8x17	1, 1½, 2	6x6 W1.4xW1.4	SFRM	SFRM	2	2½	"147-153 NW 105-111 LW"									✓		✓		N/A	3	D877				
D878	W8x20	0	6x6 W1.4xW1.4	SFRM	SFRM	2	¾	108-114 LW		✓	✓	✓					✓		✓		N/A	3	D878				
D883	W8x24, W8x28	1, 1½, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1½, 2, 3	2½	"147-153 NW 109-115 LW"									✓		✓		N/A	3	D883				
D884	W10x25	2, 3	WWF Optional	SFRM	SFRM	2, 3	2½	"147-153 NW 107-115 LW"									✓				N/A	3	D884				
D888	W8x28	0	6x6 10x10 SWG	SFRM	None	2	¾	107-113 LW		✓	✓	✓		✓	✓		✓		✓		N/A		D888				
							¾	107-116 LW					✓	✓		✓		✓									
							¾	107-120 LW	✓	✓	✓	✓	✓	✓		✓		✓									
D891	W10x25, Concrete beam	1, 1½, 2, 3, 4	6x6 W1.4xW1.4	SFRM	SFRM	1, 1½, 2, 3, 4	2½	"147-153 NW 108-115 LW"									✓		✓		N/A	3	D891				
D892	W8x15, W10x25	1½, 2	6x6 W1.4xW1.4	SFRM	SFRM	2	2½	"137-150 NW 107-115 LW"									✓				N/A	3	D892				
D893	W8x21	1	6x6 W1.4xW1.4	SFRM	SFRM	2	2½	109-115 LW									✓		✓		N/A		D893				
D898	W8x21, Concrete beam	1, 1½, 2, 3	6x6 W1.4xW1.4	SFRM	SFRM	1, 1½, 2, 3	2½	"147-153 NW 108-115 LW"									✓		✓		N/A	3	D898				
D902	W12x14, W8x28, W8x24, W6x21, 8K1, 12K5, OWSJ	1, 1½, 2, 3	6x6 10x10 SWG, Fiber reinforcement	SFRM	none	1	¾	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		D902			
						1½	4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	Y	
						2	4½	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						3	5¼	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						1	2½	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						1½	3	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						2	¾	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						2	¾	107-116 LW						✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						3	¾	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						1	2½	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						2	¾	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y
						3	¾	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	Y

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UL Design Number	Minimum Beam or Joist	Unrestrained Assembly Rating ⁸ hr	Minimum Concrete Reinforcing	Fire Proofing ² On		Restrained Assembly Rating ⁸ hr	Concrete		CF 1/8	Deck ³										Smooth Series™ Option	Note	UL Design Number	
				Beam	Deck		Thickness	Type		BH-36	BHN-36	BHN-35 1/4	BHF-36	NH-32	NHN-32	NHF-32	2WH-36	2WHF-36	3WH-36				3WHF-36
D907	W8x17, W8x28	0	6x6 W1.4xW1.4	SFRM	none	2	3/4	110 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		D907
D914	W8x28	0	6x6 W1.4xW1.4	SFRM	none	3/4, 1	2 1/2	110 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		D914
D916	W8x28, OWSJ	0	6x6 10x10 SWG	SFRM	none	1	3 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		D916
						1 1/2	4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						2	4 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						3	5 1/4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						3/4 or 1	2 1/2	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						1 1/2	3	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						2	3 1/4	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						2	3 1/4	107-116 LW						✓	✓	✓	✓	✓	✓	✓	Y		
						3	4 3/16	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
						1	2 5/8	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		
2	3 1/2	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y								
3	4 7/16	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y								
D919	W8x28	0	6x6 W1.4xW1.4	SFRM	none	1	3 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		D919
						1 1/2	4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						2	4 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						3	5 1/4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						1	2 1/2	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						1 1/2	3	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						2	3 1/4	107-116 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						3	4 3/16	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
2	3 1/2	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y									
3	4 7/16	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y									
D920	W8x28	0	6x6 W1.4xW1.4	SFRM	none	2	3/4	110-120 LW								✓	✓	✓	✓	Y		D920	
D922	W8x28, OWSJ	0	6x6 10x10 SWG	SFRM	none	Refer to D916 for these values.																D922	
D923	W8x28	0	6x6 10x10 SWG	SFRM	none	1	3 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y		D923
						1 1/2	4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						2	4 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						3	5 1/4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						1	2 1/2	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						1 1/2	3	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						2	3 1/4	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						2	3 1/4	107-116 LW						✓	✓	✓	✓	✓	✓	Y			
						3	4 3/16	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
						1	2 5/8	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y			
2	3 1/2	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y									
3	4 7/16	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Y									

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UL Design Number	Minimum Beam or Joist	Unrestrained Assembly Rating ⁸	Minimum Concrete Reinforcing	Fire Proofing ² On		Restrained Assembly Rating ⁸	Concrete		CF 1%	Deck ³								Smooth Series™ Option	Note	UL Design Number			
				Beam	Deck		Thickness	Type		BH-36	BHN-36	BHN-35½	BHF-36	NH-32	NHN-32	NHF-32	2WHF-36				2WHF-36	3WXH-36	3WXHF-36
		hr	hr	in	pcf	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓				✓	Y	
D924	W8x28	0	Synthetic fibers, negative reinforcing steel	SFRM	none	2	4½	142-148 NW	✓	✓	✓				✓		✓		N/A	4	D924		
						2	4½	142-148 NW	✓	✓	✓				✓		✓			N/A		5	
						2	3½	105-111 LW	✓	✓	✓				✓		✓					N/A	
						3	5	142-148 NW	✓	✓	✓				✓		✓					N/A	4
						3	5½	142-148 NW	✓	✓	✓				✓		✓					N/A	5
						3	4	105-111 LW	✓	✓	✓				✓		✓					N/A	
D925	W8x28, W8x16, 8K1 OWSJ	0	6x6 10x10 SWG or negative bending reinforcement with synthetic fibers	SFRM	none	Refer to D902 for these values.													D925				
D927	W8x28, OWSJ	0	6x6 10x10 SWG	SFRM	none	Refer to D916 for these values.													D927				
D929	W8x28	0	6x6 10x10 SWG	SFRM	none	Refer to D916 for these values.													D929				
D931	W8x28	0 or 1	6x6 10x10 SWG	SFRM	none	Refer to D902 for these values.													D931				
D949	W8x28	0	6x6 10x10 SWG	SFRM	none	Refer to D916 for these values.													D949				
D957	W12x14, W8x28, W8x24, W6x12, OWSJ	1, 1½, 2, 3	6x6 10x10 SWG	SFRM	none	1	3½	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y	D957		
						1½	4	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	4½	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						3	5¼	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						1	2½	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						1½	3	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	3¾	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	3¾	107-116 LW								✓	✓	✓	✓	Y			
						3	4⅞	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						1	2½	107-120 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	3½	114-120 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
3	4⅞	114-120 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y									
D967	W8x28	0	6x6 W1.4xW1.4	SFRM	none	¾, 1	2½	110 LW	✓	✓	✓				✓		✓		N/A	D967			
D968	W8x28	0	6x6 W1.4xW1.4	SFRM	none	1	3½	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y	D968		
						1½	4	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	4½	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						3	5¼	147-153 NW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						1	2½	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						1½	3	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	3¾	107-116 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						3	4⅞	107-113 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						2	3½	114-120 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			
						3	4⅞	114-120 LW	✓	✓	✓	✓				✓	✓	✓	✓	Y			

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UL Design Number	Minimum Beam or Joist	Unrestrained Assembly Rating ⁸	Minimum Concrete Reinforcing	Fire Proofing ² On		Restrained Assembly Rating ⁸	Concrete		CF 1 1/4	Deck ³											Smooth Series™ Option	Note	UL Design Number								
				Beam	Deck		Thickness	Type		BH-36	BHN-36	BHN-35 1/4	BHF-36	NH-32	NHN-32	NHF-32	2WH-36	2WHF-36	3WH-36	3WHF-36											
		hr		hr	in	pcf																									
D973	W8x28	0	Fiber - Ultra Fiber 500		none	2	3 3/4	142-148 NW									✓						N/A	6	D973						
D974	W8x28	1 1/2	6x6 10x10 SWG		none	3	4 1/2	114-120 NW						✓										N/A	7	D974					
D975	W8x28, W8x24, W6x12	1, 1 1/2, 2, 3	6x6 10x10 SWG		none	Refer to D957 for these values.																		D975							
D976	W8x28 OWSJ	1, 1 1/2, 2	6x6 8x8 SWG		none	1, 1 1/2, 2	3 1/2	111-117 NW						✓										N/A	7	D976					
D977	W8x28, OWSJ	1, 1 1/2	6x6 8x8 SWG		none	1, 1 1/2, 2	3 1/2	112.5-106.5 LW						✓	✓									N/A	7	D977					
D985	W8x28, 10K1	0	6x6 10x10 SWG		none	1	3 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓	✓							N	D985					
						1 1/2	4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓												N		
						2	4 1/2	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓													N	
						3	5 1/4	147-153 NW		✓	✓	✓	✓	✓	✓	✓	✓													N	
						3/4 or 1	2 1/2	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓													N	
						1 1/2	3	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓														N
						2	3 3/4	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓														N
						2	3 3/4	107-116 LW						✓	✓	✓	✓														N
						3	4 1/6	107-113 LW		✓	✓	✓	✓	✓	✓	✓	✓														N
						1	2 5/8	107-120 LW		✓	✓	✓	✓	✓	✓	✓	✓														N
						2	3 1/2	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓														N
3	4 1/6	114-120 LW		✓	✓	✓	✓	✓	✓	✓	✓													N							
D988	W8x28, 10K1	1, 1 1/2, 2, 3	6x6 W1.4xW1.4		none	Refer to D902 for these values.																		D988							
D998	W8x28, W8x24, W6x12	0	6x6 10x10 SWG	SFRM	none	2	4 1/2	147-153 NW		✓	✓	✓						✓	✓	✓	✓	✓	✓	✓	Y	D998					
						3	5 1/4	147-153 NW		✓	✓	✓									✓	✓	✓	✓	✓		✓	✓	Y		
						2	3 3/4	107-113 LW		✓	✓	✓										✓	✓	✓	✓		✓	✓	✓	Y	
						2	3 3/4	107-116 LW															✓	✓	✓		✓	✓	✓	Y	
						3	4 1/6	107-113 LW		✓	✓	✓											✓	✓	✓		✓	✓	✓	Y	
						2	3 1/2	114-120 LW		✓	✓	✓											✓	✓	✓		✓	✓	✓	Y	
3	4 1/6	114-120 LW		✓	✓	✓											✓	✓	✓	✓	✓	✓	Y								