

WELDED WIRE MESH

Welded Smooth Wire Fabric

There are two types of wire, plain (or smooth) and deformed. Plain fabric develops anchorage of the steel at the welded intersections. In plain fabric the smaller wire should have a cross-sectional area equal to at least 40 per cent of the area of the larger wire. ASTM specifies a weld shear strength of 35,000 psi times the area of the larger wire.

Welded Deformed Wire Fabric

Deformed wire has two or more lines of deformations along the wire depending on the size of the wire. Anchorage is developed along the wire by virtue of the deformations and at the welded intersections. In deformed fabric the smaller wire should have at least 40 per cent of the cross-sectional area of the larger wire. The weld shear strength for deformed fabric is 35,000 psi times the area of the larger wire.

Common Stock Styles of Welded Wire Fabric

STYLE DESIGNATION		STEEL AREA SQ. IN. PER FT.		Weight Approx. Lbs. Per 100 S.F.
New Designation (by W-Number)	Old Designation (By Steel Wire Gauge)	Longit.	Trans.	
6x6-W1.4xW1.4	6x6-10x10	.028	.028	21
6x6-W2.0xW2.0	6x6-8x8	.040	.040	29
6x6-W2.9xW2.9	6x6-6x6	.058	.058	42
6x6-W4.0xW4.0	6x6-4x4	.080	.080	58
4x4-W1.4xW1.4	4x4-10x10	.042	.042	31
4x4-W2.0xW2.0	4x4-8x8	.060	.060	43

Wire Size Comparison

W & D SIZE NUMBER		AREA (SQ. IN.)	NOMINAL DIAMETER (IN.)	STEEL WIRE GAUGE	W & D SIZE NUMBER		AREA (SQ. IN.)	NOMINAL DIAMETER (IN.)	STEEL WIRE GAUGE
PLAIN	DEFORMED				PLAIN	DEFORMED			
W31	D31	.310	.628	W8.5		.085	.329		
W30	D30	.300	.618	W8	D8	.080	.319		
W28	D28	.280	.597	W7.5		.075	.309		
W26	D26	.260	.575			.074	.3065		1/0
W24	D24	.240	.553	W7	D7	.070	.298		
W22	D22	.220	.529	W6.5		.065	.288		
W20	D20	.200	.504			.063	.283		1
		.189	.490		W6	D6	.060	.276	
W18	D18	.180	.478	W5.5		.055	.264		
		.167	.4615			.054	.2625		2
W16	D16	.160	.451	W5	D5	.050	.252		
		.146	.4305			.047	.244		3
W14	D14	.140	.422	W4.5		.045	.240		
		.122	.394	W4	D4	.040	.225		4
W12	D12	.120	.390	W3.5		.035	.211		
W11	D11	.110	.374			.034	.207		5
W10.5		.105	.366	W3		.030	.195		
		.103	.3625	W2.9		.029	.192		6
W10	D10	.100	.356	W2.5		.025	.177		7
W9.5		.095	.348			.021	.162		8
W9	D9	.090	.338	W2		.020	.159		
		.086	.331			.017	.148		9
				W1.4		.014	.135		10