

Durglass® E46 round bars and stirrups



Glass fiber round bars obtained through a pultrusion process, impregnated with polyester resin, used to temporarily reinforce D-walls and piles thanks to their combined high tensile strength, elastic modulus of 46 GPa, and ease of cutting. DURGLASS bars are coated with quartz sand and spiral wound with aramid fiber.

DURGLASS AND GLASSFREE SPECIFICATIONS*

Density	ASTM D792	1.95 g/cm ³
Ultimate tensile strength	ASTM D7205	760 – 1000 MPa
Tensile modulus of elasticity	ASTM D7205	46 GPa
Shear strength	ASTM D7617	100 – 200 MPa
Fiber content	ASTM D2584	>65%

* Based on ASTM International's testing method.

DURGLASS® E46 ROUND BARS

Diameter (mm)	Bar designation	Guaranteed tensile strength f* _{fu} (=ffk) - MPa	Ultimate tensile load kN
6	#2	900	28
10	#3	900	63
12	#4	850	106
16	#5	800	158
20	#6	780	244
22	#7	750	290
25	#8	750	380
28	-	700	384
30	#9	600	430
32	#10	580	458
38	#12	580	660
40	#13	580	775



f*_{fu} = mean tensile strength minus three times standard deviation (ACI 440.1R-2015).

DURGLASS® E46 STIRRUPS AND BENT BARS

Diameter (mm)	Bar designation	Bend radius (internal) mm	Tensile strength MPa
12	#4	75	379
16	#5	75	362
20	#6	110	345
25	#8	125	330
35x3 mm ring links	-	-	750

