

PERFORMANCE DATA

Ultimate Load Capacities for Zamac Nailin in Normal-Weight Concrete^{1,2}

Anchor Diameter <i>d</i> in. (mm)	Minimum Embedment Depth <i>h_v</i> in. (mm)	Minimum Concrete Compressive Strength (<i>f'_c</i>)					
		2,000 psi (13.8 MPa)		4,000 psi (27.6 MPa)		6,000 psi (41.4 MPa)	
		Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
3/16 (4.8)	3/4 (19.1)	285 (1.3)	415 (1.8)	400 (1.8)	560 (2.5)	480 (2.1)	560 (2.5)
1/4 (6.4)	5/8 (15.9)	410 (1.8)	440 (2.0)	580 (2.6)	655 (2.9)	580 (2.6)	655 (2.9)
	3/4 (19.1)	540 (2.4)	600 (2.7)	765 (3.4)	850 (3.8)	800 (3.6)	850 (3.8)
	1 (25.4)	620 (2.8)	640 (2.9)	875 (3.9)	890 (4.0)	895 (4.0)	890 (4.0)
	1 1/4 (31.7)	700 (3.1)	720 (3.2)	990 (4.4)	970 (4.3)	990 (4.4)	990 (4.4)

1. Tabulated load values are for anchors installed in concrete. Concrete compressive strength must be at the specified minimum at the time of installation.
2. Ultimate load capacities must be reduced by a minimum safety factor of 4.0 or greater to determine allowable working load. Anchors are not recommended for use overhead or for life safety. Consideration of safety factors of 20 or higher may be necessary depending upon the application such as in sustained tensile loading applications.

Allowable Load Capacities for Zamac Nailin in Normal-Weight Concrete^{1,2,3}

Anchor Diameter <i>d</i> in. (mm)	Minimum Embedment Depth <i>h_v</i> in. (mm)	Minimum Concrete Compressive Strength (<i>f'_c</i>)					
		2,000 psi (13.8 MPa)		4,000 psi (27.6 MPa)		6,000 psi (41.4 MPa)	
		Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
3/16 (4.8)	3/4 (19.1)	70 (0.3)	100 (0.5)	100 (0.5)	140 (0.6)	120 (0.5)	140 (0.6)
1/4 (6.4)	5/8 (15.9)	100 (0.5)	110 (0.5)	145 (0.6)	160 (0.7)	145 (0.6)	160 (0.7)
	3/4 (19.1)	135 (0.6)	150 (0.7)	190 (0.8)	210 (0.9)	200 (0.9)	210 (0.9)
	1 (25.4)	155 (0.7)	150 (0.7)	220 (1.0)	220 (1.0)	220 (1.0)	220 (1.0)
	1 1/4 (31.7)	175 (0.8)	180 (0.8)	245 (1.1)	240 (1.1)	245 (1.3)	240 (1.1)

1. Allowable load capacities listed are calculated using and applied safety factor of 4.0. Anchors are not recommended for use overhead or for life safety. Consideration of safety factors of 20 or higher may be necessary depending upon the application such as in sustained tensile loading applications.
2. Linear interpolation may be used to determine allowable loads for intermediate embedments and compressive strengths.
3. Allowable load capacities are multiplied by reduction factors found in the Design Criteria section when anchor spacing or edge distances are less than critical distances.