

# Titen HD® Rod Coupler

## Titen HD Rod Coupler Product Data

Size (in)	Model No.	Accepts Rod Diameter (in.)	Drill Bit Diameter (in)	Wrench Size (in)	Quantity	
					Box	Carton
3/8 x 6 3/4	THD37634RC	3/8	3/8	9/16	50	100
1/2 x 9 3/4	THD50934RC	1/2	1/2	3/4	20	40

## Titen HD Rod Coupler Allowable Tension Loads in Normal-Weight Concrete Stemwall



Size in. (mm)	Drill Bit Diameter in.	Embed. Depth in. (mm)	Stemwall Width in. (mm)	Minimum Edge Distance in. (mm)	Minimum End Distance in. (mm)	Minimum Spacing Distance in. (mm)	Tension Load Based on Concrete Strength		Tension Load Based on Connected Rod Strength
							$f'_c \geq 2,500$ psi (17.2 MPa) Concrete		A307 (SAE 1018)
							Ultimate lb. (kN)	Allowable lb. (kN)	Allowable lb. (kN)
3/8 (9.5)	3/8	5 (127)	8 (203)	1 3/4 (45)	10 (254)	20 (508)	8,900 (39.6)	2,225 (9.9)	2,105 (9.4)
1/2 (12.7)	1/2	8 (203)	8 (203)	1 3/4 (45)	16 (406)	32 (813)	15,540 (69.1)	3,885 (17.3)	3,750 (16.7)

1. Allowable load must be the lesser of the concrete or steel strength.
2. The allowable loads based on concrete strength are based on a factor of safety of 4.0.
3. The allowable load based on steel strength is limited by the strength of the coupler nut supplied with this anchor.  
Use of higher-strength rod will not increase allowable loads.
4. The minimum concrete thickness is 1.5 times the embedment depth.
5. Tension and shear loads may be combined using the straight-line interaction equation ( $n = 1$ ).

## Titen HD Rod Coupler Allowable Shear Loads in Normal-Weight Concrete Stemwall, Load Applied Parallel to Concrete Edge



Size in. (mm)	Drill Bit Diameter in.	Embed. Depth in. (mm)	Stemwall Width in. (mm)	Minimum Edge Distance in. (mm)	Minimum End Distance in. (mm)	Minimum Spacing Distance in. (mm)	Shear Load Based on Concrete Edge Distance	
							$f'_c \geq 2,500$ psi (17.2 MPa) Concrete	
							Ultimate lb. (kN)	Allowable lb. (kN)
1/2 (12.7)	1/2	8 (203)	8 (203)	1 3/4 (45)	16 (406)	32 (813)	6,200 (27.6)	1,550 (6.9)

1. Install with a washer (not supplied with anchor) when used to resist shear loads.
2. The allowable load based on concrete edge distance is based on a factor of safety of 4.0.  
Steel strength does not control.
3. The minimum concrete thickness is 1.5 times the embedment depth.
4. Tension and shear loads may be combined using the straight-line interaction equation ( $n = 1$ ).

\* See p. 13 for an explanation of the load table icons.