

Datasheet

Countersunk Ankerbolt

ENGLISH

COUNTERSUNK



Features

The Countersunk Ankerbolt is a zinc plated self tapping anchor for use in a variety of base materials.

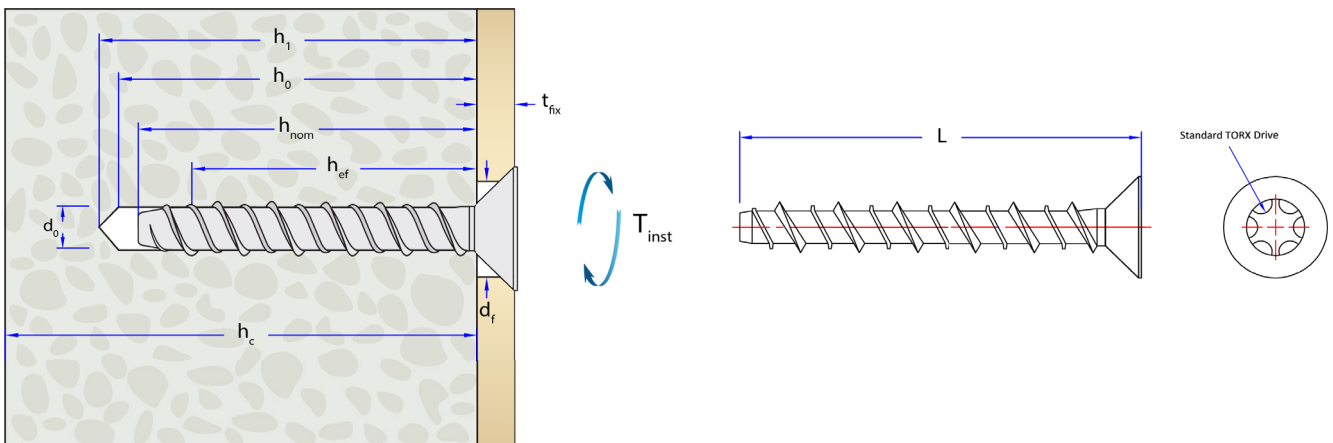
The undercutting action provides a positive anchorage with no expansion forces.

The wide range of sizes gives flexibility of choosing the correct anchor according to the fixture thickness.

- Undercutting Action
- Fast And Secure Installation
- Expansion Free
- Through Fixing
- High Performance
- Zinc Plated Minimum 5µm

Range Data

RANGE DATA													
Part Number	Drill Hole Diameter	Thread Diameter	Anchor Length	Fixture Clearance Hole	Shallow Embedment			Deep Embedment			Min Structure Thickness	Driver Size	Tightening Torque
					Max Fixture Thickness	Min Hole Depth	Embedment Depth	Max Fixture Thickness	Min Hole Depth	Embedment Depth			
					(t _{fix})	(h _i)	(h _{nom})	(t _{fix})	(h _i)	(h _{nom})			(h _c)
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	-	Nm	
COUNTERSUNK													
1776892	6	8	50	10	20	40	30	5	55	45	100	Torx Drive T30	25
9086725			75		45			30					
9086729			100		70			55					
9086738			130		100			85					
9086731	8	10	60	12	20	55	40	N/A	75	60	120	Torx Drive T45	40
9086735			75		35			15					
9086744			100		60			40					
9086747	10	12	60	14	10	70	50	N/A	95	75	125	Torx Drive T50	60
9086741			75		25			N/A					
9086750			100		50			25					





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NON-CRACKED CONCRETE - SHALLOW EMBEDMENT

Performance Data (C20/25 non-cracked concrete)												
Drill Diam (d_o)	Overall Embedment Depth (h_{nom})	Minimum Concrete Thickness (h_{min})	Characteristic Resist- ance		Design Resistance		Approved Resistance		Design Spacing (s)		Design Edge Distance (c)	
			Tensile (N_{Rk})	Shear (V_{Rk})	Tensile (N_{Rd})	Shear (V_{Rd})	Tensile (N_{Ra})	Shear (V_{Ra})	Tensile	Shear	Tensile	Shear
mm	mm	mm	kN	kN	kN	kN	kN	kN	mm	mm	mm	mm
6	30	100	3.9	3.8	2.1	2.5	1.5	1.7	60	60	40	40
8	40	100	6.3	6.3	3.4	4.2	2.4	3.0	70	80	50	50
10	50	100	9.3	9.1	5.0	6.0	3.5	4.2	100	100	60	70

NON-CRACKED CONCRETE - DEEP EMBEDMENT

Performance Data (C20/25 non-cracked concrete)												
Drill Diam (d_o)	Overall Embedment Depth (h_{nom})	Minimum Concrete Thickness (h_{min})	Characteristic Resist- ance		Design Resistance		Approved Resistance		Design Spacing (s)		Design Edge Distance (c)	
			Tensile (N_{Rk})	Shear (V_{Rk})	Tensile (N_{Rd})	Shear (V_{Rd})	Tensile (N_{Ra})	Shear (V_{Ra})	Tensile	Shear	Tensile	Shear
mm	mm	mm	kN	kN	kN	kN	kN	kN	mm	mm	mm	mm
6	45	100	7.5	8.7	4.1	5.6	2.9	4.0	70	90	40	70
8	60	120	10.0	13.7	5.5	9.1	3.9	6.5	70	130	50	90
10	75	125	15.0	20.0	8.3	13.1	5.9	9.3	90	160	60	120

SUPPLEMENTARY DATA

Influence Of Concrete Strength (Non-cracked Concrete)					
Concrete strength		C20/25	C30/37	C40/50	C50/60
Cylinder	N/mm ²	20	30	40	50
Cube	N/mm ²	25	37	50	60
Factor	M8, M10, M12	1.0	1.17	1.32	1.42
	M14, M16	1.0	1.22	1.41	1.55

Important Note:
When using concrete factors ensure that loads do not exceed Steel Design Resistance.

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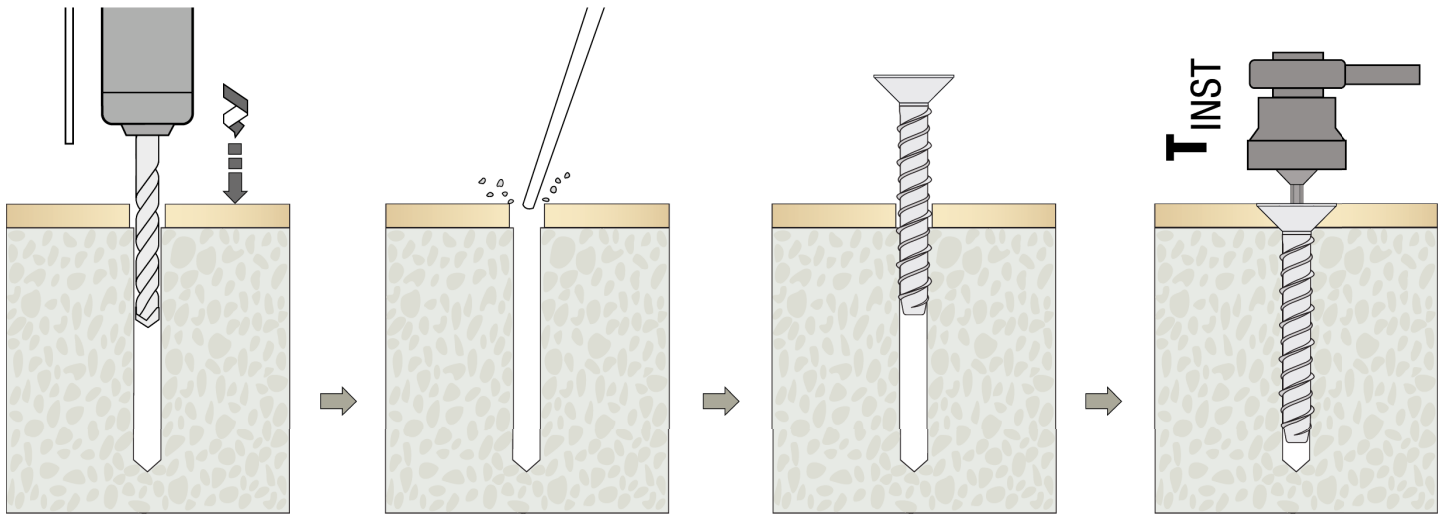
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Steel Failure						
Thread Diam (d_{nom})	Tensile Resistance			Shear Resistance		
	Characteristic Resistance ($N_{Rk,s}$)	Design Resistance ($N_{Rd,s}$)*	Approved Resistance ($N_{Ra,s}$)	Characteristic Resistance ($V_{Rk,s}$)	Design Resistance ($V_{Rd,s}$)**	Approved Resistance ($V_{Ra,s}$)
mm	kN	kN	kN	kN	kN	kN
8	44.2	31.6	22.6	28.5	19.0	13.6
10	70.1	50.1	35.8	46.4	30.9	22.1
12	101.2	72.3	51.6	57.2	38.1	27.2

* A partial safety factor (γ_{MS}) equal to 1.4 is included.

** A partial safety factor (γ_{MS}) equal to 1.5 is included.

Installation Instructions



-Position fixture and drill correct diameter hole to corresponding depth

-Clean hole by blowing to remove drilling debris and dust

-Insert anchor through fixture into concrete using suitable impact wrench

-Tighten with torque wrench to recommended torque