

## TRUTEK TT G – HDG WEDGE ANCHOR

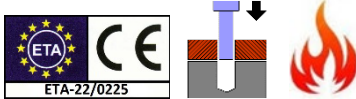


### Usage:

- an anchor intended for fastening in the range of medium loads of elements of building structures, facades, barriers, handrails, etc.
- fixing structural elements and installations
- fastening on road and industrial infrastructure

### Advantages:

- easy and quick assembly
- can be fixed at a reduced depth
- fire resistance in the range from R30 to R120
- cold formed expansion cone
- expansion clip made of stainless steel
- increased zinc thickness ensures increased corrosion resistance of the anchor



### Marking method for TT G anchors

Trutek Throughbolt	Thread diameter d [mm]	Anchor length L [mm]
<b>TT G</b>	<b>08</b>	<b>080</b>

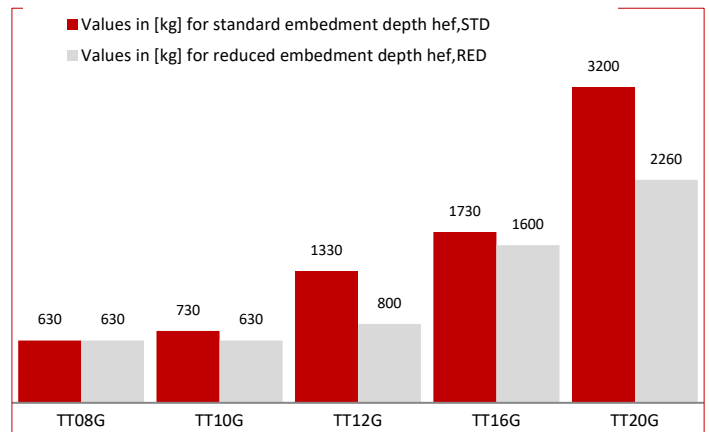
### Anchor material:

TT G anchors are made of carbon steel class C1008 minimum grade 4.8acc. EN ISO 898-1:2013 and hot dip galvanized minimum 40µm thick acc. EN ISO 1461:2011

### Substrate material:

Non-cracked concrete class from C20/25 up to C50/60

### Design load capacity for pulling out of concrete C20 / 25 in kg



### Technical parameters of TT G anchors

Product Code	Standard embedment depth			Reduced embedment depth			Hole diameter in fastened element	Anchor length
	Hole diameter and depth	Effective anchorage depth	Max. thickness of fixed element	Hole diameter and depth	Effective anchorage depth	Max. thickness of the fixed element		
	d <sub>o</sub> x h <sub>1,STD</sub> [mm]	h <sub>ef,STD</sub> [mm]	t <sub>fix,STD</sub> [mm]	d <sub>o</sub> x h <sub>1,RED</sub> [mm]	h <sub>ef,RED</sub> [mm]	t <sub>fix,RED</sub> [mm]		
TT08060G	8x53	45	-	8x43	35	5	9	60
TT08080G			15			25		80
TT08090G			25			35		90
TT08115G			50			60		115
TT10065G	10x58	50	-	10x48	40	1	12	65
TT10090G			15			25		90
TT10105G			30			40		105
TT10120G			45			55		120
TT10140G			65			75		140
TT12080G	12x80	70	-	12x60	50	1	14	80
TT12100G			1			20		100
TT12120G			20			40		120
TT12140G			40			60		140
TT12180G			80			100		180
TT16105G	16x99	85	-	16x79	65	5	18	105
TT16125G			5			25		125
TT16150G			30			50		150
TT16175G			55			75		175
TT20130G	20x110	100	-	20x90	80	10	22	130
TT20160G			20			40		160
TT20220G			80			100		220
TT20240G			100			120		240
TT20280G			140			160		280

## Design bearing capacity of TT G anchors in non-cracked concrete, class min. C20/25\*

Anchor size	TT08G	TT10G	TT12G	TT16G	TT20G
Standard embedment depth $h_{ef,STD}$ [mm]	45	50	70	85	100
Reduced embedment depth $h_{ef,RED}$ [mm]	35	40	50	65	80
Minimum substrate thickness $h_{min}$ [mm]	100	100	140	170	200
Pull-out capacity $N_{Rd}$ [kN] - uncracked concrete	6,3	7,3	13,3	17,3	32,0
Shear load capacity $V_{Rd}$ [kN] - uncracked concrete	5,8	9,2	13,5	25,1	39,2
Anchor spacing $s_{cr,N}$ [mm]	135	150	210	255	300
Edge distance $c_{cr,N}$ [mm]	67,5	75	105	127,5	150
Minimum anchor spacing $s_{min}$ [mm]	35	40	50	65	80
Minimum edge distance $c_{min}$ [mm]	35	40	50	65	80
Installation torque $T_{inst}$ [Nm]	25	34	60	120	200
Wrench size SW [mm]	13	17	19	24	30

\* The entire European Technical Assessment ETA-22/0225 should be considered when designing

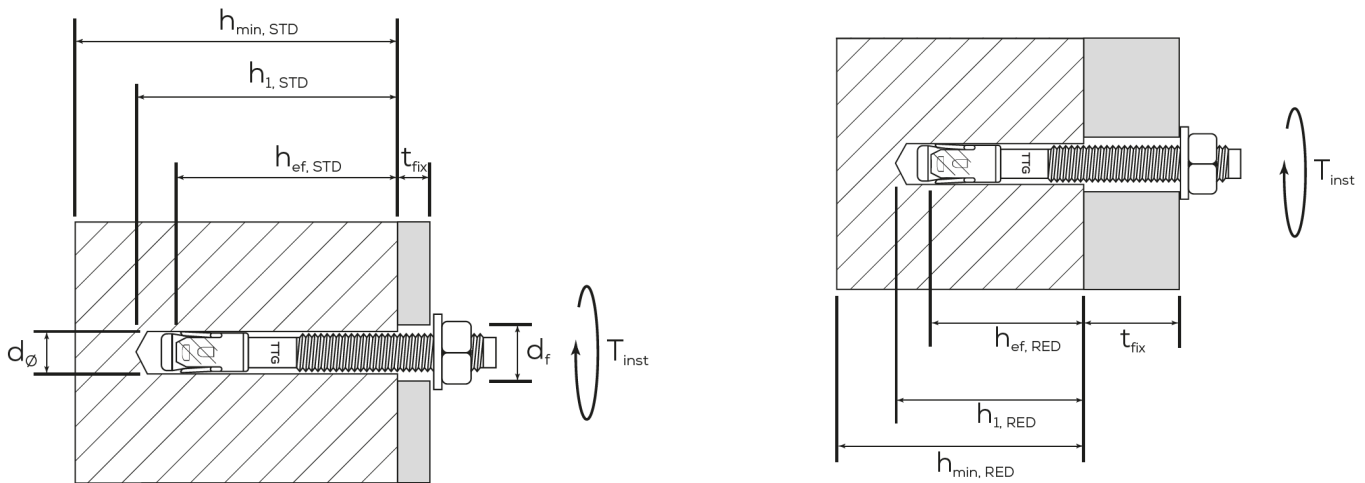
## Characteristic bearing capacity of TT G anchors in non-cracked concrete class min. C20/25 in case of fire\*



Anchor size	TT08G	TT10G	TT12G	TT16G	TT20G
Effective embedment depth $h_{ef,STD}/h_{ef,RED}$ [mm]	35/45	40/50	50/70	65/80	80/100
Pull-out and shear capacity R30 $N_{Rk,s,fi} - V_{Rk,s,fi}$ [kN]	0,4	0,9	1,7	3,1	4,9
Pull-out and shear capacity R60 $N_{Rk,s,fi} - V_{Rk,s,fi}$ [kN]	0,3	0,8	1,3	2,4	3,7
Pull-out and shear capacity R90 $N_{Rk,s,fi} - V_{Rk,s,fi}$ [kN]	0,3	0,6	1,1	2,0	3,2
Pull-out and shear capacity R120 $N_{Rk,s,fi} - V_{Rk,s,fi}$ [kN]	0,2	0,5	0,8	1,6	2,5
Anchor spacing $S_{cr,N,fi}$ [mm]	180	200	280	320	400
Edge distance $C_{cr,N,fi}$ [mm]	90	100	140	160	200
Installation torque $T_{inst}$ [Nm]	25	34	60	120	200

\* The entire European Technical Assessment ETA-22/0225 should be considered when designing

## Installation scheme of TT G anchors



## Installation instruction of TT G anchors

