

TAPSCREW BLUE - CONCRETE SCREW ANCHOR

Features:

- Through fixing
- Suitable for a wide range of materials
- Variable embedment depth
- Mechanical Galvanised
- Class A1 Reaction to Fire

Benefits:

- Quick and simple installation
- No special tools required
- Small hole size
- Centralizing point
- Hardened screw that cuts its own thread



HEAD STYLES

- Slotted Hex Washer Head
- Phillips Flat Head

HEAD MARKING

Hex Washer Head

Phillips Flat Head



Description of Product:

A hardened, self-tapping screw which cuts its own thread in a pre-drilled pilot hole. Suitable for use in a number of base materials including concrete, brick, masonry and dense concrete blocks.

Method of marking TKS anchors

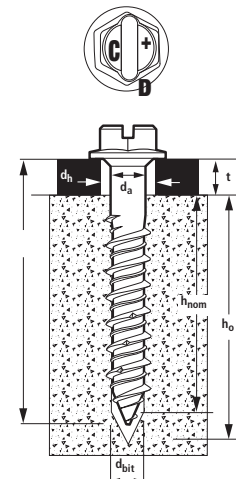
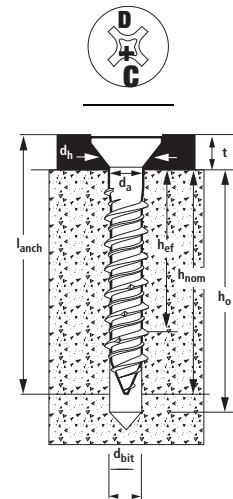
Symbol	Screw diameter d [mm]	Screw length L [mm]
TKS06057C	6	57
TKS06045H	6	45

Product Range - Countersunk

Product Code	Thread Diameter	Anchor Length	Drill Hole Diameter	Fixture Clearance Hole	Drill Hole Depth	Embedment Depth	Maximum Fixture Thickness
	d	L	d _o	d _f	h _{min}	h _{nom}	t _{fix}
	mm	mm	inches	mm	mm	mm	mm
TK05032C	5	32	5/32	6	35	30	2
TK05045C		45					15
TK05070C		70					40
TK05082C		82					52
TK06045C	6	45	3/16	7	35	30	15
TK06057C		57					27
TK06070C		70					40
TK06100C		100					60
TK06125C		125					95

Product Range - Hex Head

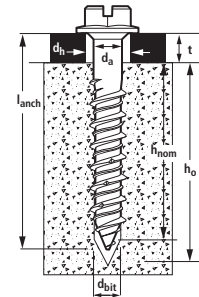
Product Code	Thread Diameter	Anchor Length	Drill Hole Diameter	Fixture Clearance Hole	Drill Hole Depth	Embedment Depth	Maximum Fixture Thickness
	d	L	d _o	d _f	h _{min}	h _{nom}	t _{fix}
	mm	mm	inches	mm	mm	mm	mm
TK05032H	5	32	5/32	6	35	30	2
TK05045H		45					15
TK05057H		57					27
TK05070H		70					40
TK05082H		82					52
TK06032H	6	32	3/16	7	35	30	2
TK06045H		45					15
TK06057H		57					27
TK06070H		70					40
TK06082H		82					52
TK06100H		100					70
TK06125H	125	95					



Installation Data

Anchor Outside Diameter			Minimum Embedment	
			5mm	6mm
Nominal Anchorage Depth	h_{nom}		30	30
Characteristic Spacing	$S_{cr,N}$		90	90
Characteristic Edge Distance	$C_{cr,N}$		45	45
Minimum Concrete Thickness	h_{min}	[mm]	100	100
Minimum Spacing	s_{min}	[mm]	30	30
Minimum Edge Distance	c_{min}	[Nm]	30	30
Tightening Torque	T_{inst}	[mm]	5	10

Installation diagram of TKS anchors



Load Data

Standard Embedment

Characteristics Resistance (Non-Cracked concrete)

Anchor Outside Diameter			C20/25 Concrete		Lightweight Brick	
			5mm	6mm	5mm	6mm
N_{Rk}	Tensile	[kN]	1.8	3.2	1.0	1.5
V_{Rk}	Shear	[kN]	2.6	3.8	1.0	1.5

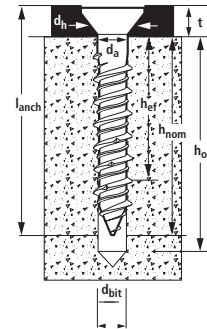
Design Resistance (Non-Cracked concrete)

Anchor Outside Diameter			C20/25 Concrete		Lightweight Brick	
			5mm	6mm	5mm	6mm
N_{Rd}	Tensile	[kN]	0.8	1.6	0.5	0.7
V_{Rd}	Shear	[kN]	1.7	2.5	0.5	0.7

Recommended Resistance (Non-Cracked concrete)

Anchor Outside Diameter			C20/25 Concrete		Lightweight Brick	
			5mm	6mm	5mm	6mm
N_{rec}	Tensile	[kN]	0.6	1.1	0.4	0.5
V_{rec}	Shear	[kN]	1.2	1.8	0.4	0.5

Includes Partial Safety Factor $\gamma = 1.4$ in the absence of national regulations and type of loading Data is for Static and Quasi Static Loads for a single anchor



Concrete Strength Factor

Concrete Factor			5mm	6mm
Ψ_c C30/37	Factor	[-]	1.1	1.1

Installation diagram of TKS anchors

