

# Guidelines for **powerline** concrete frame screws

## Product summary

**powerline** concrete frame screws are a medium duty self tapping fixing suitable for the through fixing of wood, metal and UPVC frames to masonry.

Also suitable for securing wooden battens, brackets, signs, channel supports, electrical and plumbing fittings.

The screw will cut its own thread into the masonry once a pilot hole has been pre-drilled. There is no need for any additional plugs.

They are particularly useful in close to the edge fixing situations and were the fixing points are to be grouped closely together.

They are removable, reusable, fast and versatile.

The head is self-countersinking and has a Torx-30 drive to reduce the risk of cam out.

A T-30 bit is included free of charge within each box.

Recommended loads vary with substrate type, quality and consistency.

Hole diameter and embedment is also critical. The screw length should equal the fixture thickness + minimum embedment\*\* + 13mm.

## Technical recommendations

Diameter	Length (mm)	Min hole** Depth (mm) (embedment)	Drill size * (mm)	Drive bit	Recommended loads (Kn)			
					C20/25 concrete **		Solid brick**	
					Tensile	Shear	Tensile	Shear
7.5mm	42	30	6	T30	1.2	0.8	0.8	0.5
7.5mm	62	30	6	T30	1.2	0.8	0.8	0.5
7.5mm	82	30	6	T30	1.2	0.8	0.8	0.5
7.5mm	102	30	6	T30	1.2	0.8	0.8	0.5
7.5mm	122	30	6	T30	1.2	0.8	0.8	0.5
7.5mm	152	30	6	T30	1.2	0.8	0.8	0.5
7.5mm	182	30	6	T30	1.2	0.8	0.8	0.5

\* the drill diameter may change depending on the substrate , 6.5mm is recommended for very dense concrete or brick.

\*\* the min embedment increases depending on the substrate . 30mm in concrete, 40mm in solid brick , 60mm in aerated concrete or hollow brick.

## Installation advice

- ❑ Eye protection and gloves should be worn
- ❑ Drill hole to the correct diameter and depth
- ❑ Clean out the hole
- ❑ Position the screw in the hole through the part to be fixed
- ❑ Tighten until the head of the screw is flush within the fixture, (a 6.5 mm clearance hole can be pre-drilled in to the fixture to facilitate this)