

Rod Hanger Tapcon



Overhead threaded rod anchoring system.

Product Advantages

- Installs in less than half the time of drop-in anchors
- Single piece design, no nut and washer to assemble
- Suitable for concrete, steel and wood based materials
- Concrete installation requires smaller diameter drill bits than traditional drop-in anchors
- All metal fixings offer fire resistance
- Easily removable / replaceable
- Close to edge fixing giving high performance values
- Can be fixed closer together than traditional anchors without reducing performance values
- Self tapping in concrete and cuts its own thread in wood and steel
- Low cost condrive kits allow fast installation
- Allows vertical and horizontal installation in hard to reach locations
- Premium corrosion protection
- Shallow embedment gives flexibility in steel, concrete and wood
- Steel version employs proven Teks technology

Substrates

- Wood - joist, flooring, composite joist / truss
- Steel
- Concrete
- Pre-cast concrete beams
- Blockwork
- Brickwork

Applications

- Fire Protection - sprinkler systems
- Plumbing / Mechanical Contractors - air, water, hydraulics
- Electrical Contractors - conduit, cable trays, lighting, low voltage cabling
- HVAC - unit heaters, A/C units, duct work, refrigeration
- Industrial Maintenance - work in the rafters

Rod Hanger Tapcon Vertical for Concrete



Rod Hanger Tapcon Vertical for Steel



Rod Hanger Tapcon Horizontal for Steel



Rod Hanger Tapcon Vertical for Wood



The installation sockets are designed with a unique automatic release mechanism to prevent over tightening. This provides a fast and safe installation each time. When the face of the driver comes in contact with the material you are installing into, continue drilling until nut driver spins free. Installation is then complete.

Rod Hanger Tapcon Vertical for Concrete



Eurocode	Description	Anchor Ø	Drill Ø	Anchor Length	Drilling Depth	Box Qty
921649	M8 Rod Hanger Tapcon Vertical	8mm	6.5mm	44mm	54mm	25
921413	M10 Rod Hanger Tapcon Vertical	8mm	6.5mm	44mm	54mm	25

Product Range - Rod Hanger Tapcon Vertical for Concrete Cut Box Range

Eurocode	Description	Anchor Ø	Drill Ø	Anchor Length	Drilling Depth	Box Qty
921542	M10 Rod Hanger Tapcon Vertical	8mm	6.5mm	44mm	54mm	20 x 4

Product Range - Recommended Installation Kit

Eurocode	Description	Box Qty
921439	Concrete Condrive Kit	1

Specification

Diameter	8mm
Threaded Rod	M10
Thread form	Reversed Hi-Lo®
Point type	Nail
Finish	Blue Climaseal
Approvals	NFPA (National Fire Protection Association)
Head style	Female M10

Corrosion - Salt spray results (ASTM B117)

Kesternich Results (DIN 5008, 2.0L) = 30 Cycles - 10% or less red rust
 Salt Spray Results (ASTM B117) = 750 Hours - 10% or less red rust

Installation

1. When installing the self tapping screw into concrete, use up to 1,200 RPM drill (maximum).
2. Use either a standard 6.5mm SDS/masonry drill bit or a Hex receiver drill bit for use with the concrete condrive kit code 921433.
3. Drill a hole in the base material to a depth of 54mm with an electric impact/drill set on impact mode.
4. If using the condrive system install the sleeve over the drill bit (the drill bit should remain in the tool).
5. Insert the appropriate nut driver in the sleeve (Black Nut driver code 921406).
6. Insert the concrete screw into the nut driver.
7. Place the tip of the screw into the pre-drilled hole, ensuring it is switched to drill mode and begin insertion.
8. When the nut driver spins free on the screw, installation is complete.
9. Stop and remove the drill and screw threaded rod into the female threaded socket.

Note: Do not install the concrete screws while the drill is in impact mode - doing so will destroy the pull-out factor of the screw. When fixing into pre-cast hollow concrete beams ensure Rod Hanger Tapcon is fixed into the web for best pull-out result.

Performance Data - Rod Hanger Tapcon Vertical for Concrete Recommended Loads

Edge Distance	Embed Depth	Concrete Tensile	Concrete Shear	Hollow Block Grouted Core Tensile	Hollow Block Grouted Core Shear	Hollow Block No Grouted Core Tensile
40mm	32mm	1.55kN	1.62kN	-	-	-
56mm	32mm	1.78kN	2.55kN	-	-	-
79mm	32mm	1.78kN	3.22kN	-	-	-
102mm	32mm	-	-	-	1.54kN	3.38kN
40mm	44mm	2.99kN	2.26kN	-	-	-
44mm	44mm	-	-	-	-	-
56mm	44mm	3.34kN	3.71kN	-	-	-
79mm	44mm	3.45kN	3.72kN	-	-	-
102mm	44mm	-	-	2.89kN	4.18kN	-

Note: Concrete = 20.7N/mm² • Hollow Block 11.03N/mm² with grouted core minimum 13.8N/mm² • Hollow Block 11.03N/mm²
 A safety factor of 3 has been applied to indicate recommended/safe working loads

Rod Hanger Tapcon Vertical for Steel



Eurocode	Description	Anchor Diameter	Drill Diameter	Anchor Length	Box Qty
921410	Rod Hanger Tapcon Vertical for Steel + Nut	6.5mm	Self Drill	25mm	25

Product Range - Rod Hanger Tapcon Vertical for Steel Cut Box Range

Eurocode	Description	Anchor Diameter	Drill Diameter	Anchor Length	Box Qty
921541	Rod Hanger Tapcon Vertical for Steel + Nut	6.5mm	Self Drill	25mm	20 x 4

Product Range - Recommended Installation Kit

Eurocode	Description	Box Qty
921405	Universal Condrive Kit (For SDS drills)	1
921406	Vertical Installation Socket (For 3 jaw chuck drills)	1

Specification

Diameter	6.5mm
Threaded Rod	M10
Thread form	Self Tapping
Point type	Teks
Finish	Carbon Steel
Approvals	UL, FM, NFPA
Head style	Female M10

Installation

1. Insert vertical installation Socket into 3 jaw chuck of rotary percussion drill
Note: 500 - 1,500rpm drill for installation into steel.
2. Place Rod Hanger Tapcon into Socket (drill should be in a vertical position).
3. Ensure the Rod Hanger Tapcon and Socket are pressed firmly against the steel.
ensure drill is not in hammer action mode.
4. Drive Rod Hanger Tapcon until Socket spins free.
5. Insert Threaded Rod.
6. Add retainer nut and torque to 2.26N/mm² for maximum pull-out in steel purlin.

Note: If drill chips are blue in colour, this indicates drill RPM is too high

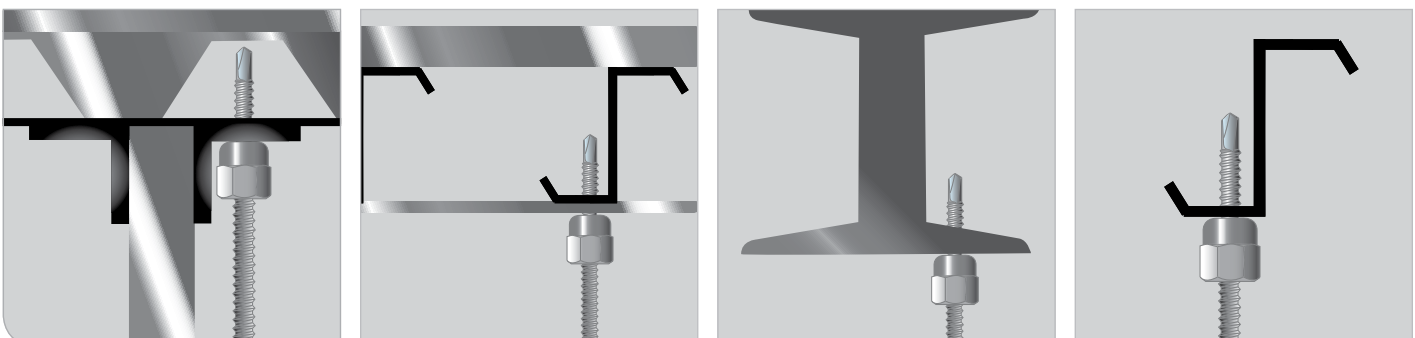
Performance Data - Rod Hanger Tapcon Vertical for Steel

Screw Description	FM Test Load	UL Test Load	UL/FM Pipe Size	Min Steel Thickness	Max Steel Thickness	Actual Pull-out
6.36 x 20 x 25	6.65kN	6.67kN	19 - 100mm	0.91mm	6.35mm	6.72kN (0.91mm)

NB. Pull-out loads are ultimate tensile loads

A safety factor of at least 4 should be given to the above figures to obtain the recommended/safe working loads

Rod Hanger Tapcon Vertical for Steel Typical Applications



Rod Hanger Tapcon Horizontal for Steel



Eurocode	Description	Anchor Diameter	Drill Diameter	Anchor Length	Box Qty
921411	Rod Hanger Tapcon Horizontal for Steel	6.5mm	Self Drill	25mm	25
921412	Rod Hanger Tapcon Horizontal for Steel + Nut	6.5mm	Self Drill	25mm	25

Product Range - Recommended Installation Kit

Eurocode	Description	Box Qty
921405	Universal Condrive Kit (For SDS drills)	1
921407	Horizontal Installation Socket (For 3 jaw chuck drills)	1

Specification

Diameter	6.5mm
Threaded Rod	M10
Thread form	Self Tapping
Point type	Teks
Finish	Carbon Steel
Approvals	UL, NFPA
Head style	Female M10

Installation

1. Insert horizontal installation Socket into 3 jaw chuck of rotary percussion drill
Note: 500 - 1,500rpm drill for installation into steel.
2. Place Rod Hanger Tapcon into Socket (drill should be in a vertical position).
3. Ensure the Rod Hanger Tapcon and Socket are pressed firmly against the steel. Ensure drill is not in hammer action mode.
4. Drive Rod Hanger Tapcon until Socket spins free.
5. Insert Threaded Rod.
6. Add retainer nut and torque to 2.26N/mm² for maximum pull-out in steel purlin.

Note: If drill chips are blue in colour, this indicates drill RPM is too high.

Performance Data - Rod Hanger Tapcon Horizontal for Steel

Code	Screw Description	UL Test Load	UL/FM Pipe Size	Min Steel Thickness	Max Steel Thickness	Actual Pull-out
921411	6.36 x 14 x 25	6.67kN	100mm	1.52mm	6.36mm	6.57kN (1.52mm)
921412	6.36 x 20 x 25	6.67kN	100mm	0.91mm	6.36mm	8.45kN (0.91mm)

NB. Pull-out loads are ultimate shear loads.

A safety factor of at least 4 should be given to the above figures to obtain the recommended/safe working loads.

Rod Hanger Tapcon Vertical for Wood



Eurocode	Description	Anchor Diameter	Drill Diameter	Anchor Length	Box Qty
921408	Rod Hanger Tapcon Vertical for Wood	6.5mm	Self Drill	25mm	25
921409	Rod Hanger Tapcon Vertical for Wood	6.5mm	Self Drill	50mm	25

Product Range - Rod Hanger Tapcon Vertical for Wood Cut Box Range

Eurocode	Description	Anchor Diameter	Drill Diameter	Anchor Length	Box Qty
921540	Rod Hanger Tapcon Vertical for Wood	6.5mm	Self Drill	25mm	20 x 4

Product Range - Recommended Installation Kit

Eurocode	Description	Box Qty
921405	Universal Condrive Kit (For SDS drills)	1
921406	Vertical Installation Socket (For 3 jaw chuck drills)	1

Specification

Diameter	6.5mm
Threaded Rod	M10
Thread form	Self Tapping
Point type	Screw
Finish	Carbon Steel
Approvals	UL, FM, NFPA
Head style	Female M10

Installation

1. Insert horizontal installation socket into 3 jaw chuck of rotary percussion drill
Note: max 1,200rpm drill for installation into wood.
2. Place Rod Hanger Tapcon into socket (drill should be in a vertical position).
3. Ensure the Rod Hanger Tapcon and socket are pressed firmly against the wood.
Ensure drill is not in hammer action mode.
4. Drive Rod Hanger Tapcon until socket spins free.
5. Insert Threaded Rod.

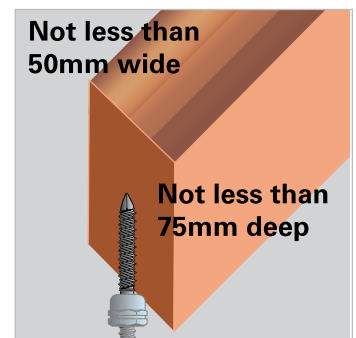
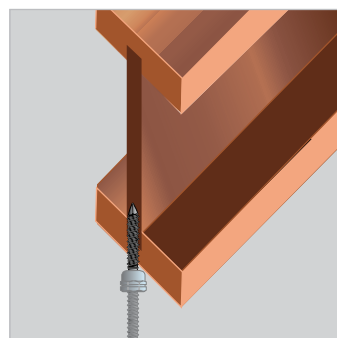
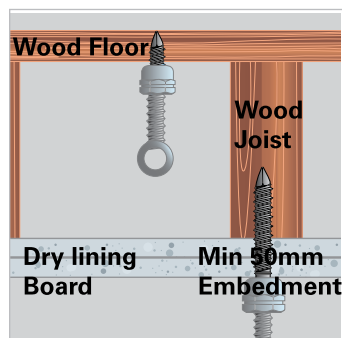
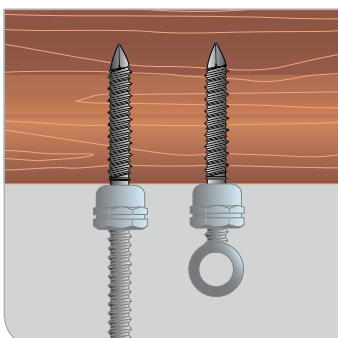
Performance Data - Rod Hanger Tapcon Vertical for Wood

Code	Screw Description	FM Test Load	UL Test Load	UL/FM Pipe Size	Actual Pull-out
921408	6.36 x 25	-	-	-	2.98kN (19mm plywood)
921409	6.36 x 50	4.18kN	3.78kN	19 - 62mm	7.83kN

NB. Pull-out loads are ultimate tensile loads

Above figures are a guide only, due to the varying density of timber, pull-out tests should be made to determine safety factors.

Rod Hanger Tapcon Vertical for Wood Typical Applications



Rod Hanger Tapcon

Product Range - Rod Hanger Tapcon Accessories

Eurocode	Description	Box Qty
921405	Rod Hanger Tapcon Universal Condrive Kit	1
921439	Rod Hanger Tapcon Concrete Condrive Kit	1
921406	Rod Hanger Tapcon Vertical Installation Socket	1
921407	Rod Hanger Tapcon Horizontal Installation Socket	1

Product Range - Rod Hanger Tapcon Drill Bits

Eurocode	Description	Box Qty
921433	6.5 x 170mm SDS Tapcon Drill Bit with Hex (for use with Condrive)	1
921438	6.5 x 130mm SDS Tapcon Drill Bit with Hex (for use with Condrive)	1
222768	6.5 x 160mm SDS Tapcon Drill Bit	1