

FIXING TO METAL

These Metal Tek[®] self-drilling screws have a hardened drill point that will drill and thread in structural steel and mild steel.

There are two main criteria of a Tek's point.

1. The point must be in perfect diameter ratio relationship to the thread, so as to not overdrill. This allows the thread to engage in the steel at an acceptable tapping torque. The pullout load is also determined by the ratio of the thread diameter to the hole diameter.
2. The point must have a swarf flute longer than the total thickness of the steel being drilled. This prevents problems with fastener installation due to swarf clogging the flue.

It is important that the drill point has completed drilling the total thickness of the steel before the thread engages.

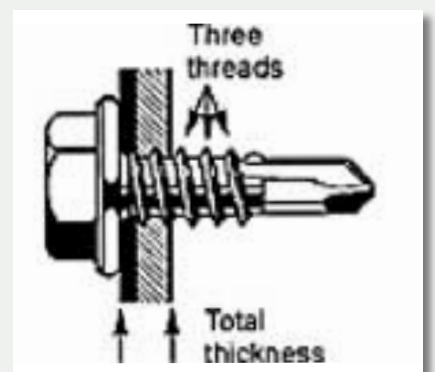
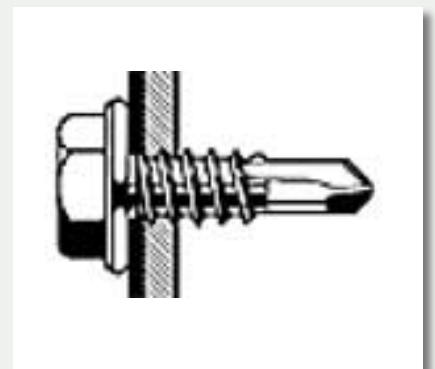
To choose the correct fastener, it is necessary to select one where the length of the drill point is equal to or greater than the total thickness of the material to be drilled including the air-gap. If the drill point is less than the total thickness of the material and the thread engages, then the fastener can break or become impossible to drive.

As a rule the correct length screw should have at least 3 threads protruding behind the metal you are fastening to.

The table indicates the metal thickness capacity of each gauge size available. When the gauge size has been determined, the length and head style for the intended application would then need to be determined.

Screw Gauge	Threads per inch	Drilling Capacity (max)
6	20	2.3mm
8	18	2.5mm
10	16	3.5mm
10	24	4.5mm
12	14	4.5mm
12	24	6.0mm
13	13	1.0mm
14	10	3.0mm
14	20	6.4mm
15	15	1.0mm
Series 500-12g	24	12.5mm

Buildex Metal Tek[®] are available in a variety of finishes with unique product features to suit a wide range of environmental conditions.



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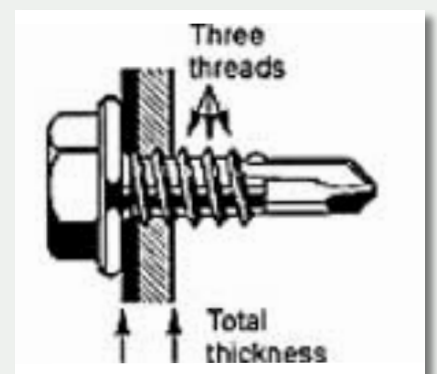
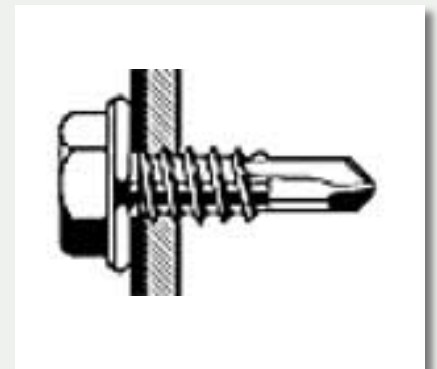
How To Use

1. Measure the total thickness of the materials to be drilled.
2. Choose a screw that has a drilling capacity equal to or greater than the total thickness of materials to be drilled.

Screw Gauge-TPI	Drilling Capacity
6-20	2.3mm
8-18	2.5mm
10-16	3.5mm
10-24	4.5mm
12-14	4.5mm
12-24	6.0mm
13-13	1.0mm
14-10	3.0mm
14-20	6.4mm
15-15	1.0mm

3. Determine the best head style for the intended application.
4. Choose a screw long enough to allow at least three threads to protrude beyond the metal being fastened to.

NOTE: The lengths shown for countersunk, countersunk rib and bugle head screws indicate the distance from the top of the screw head to the screw point. For all other screw types, the length is measured from the underside of the screw head to the screw point.



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How To Use Continued

5. Select the correct driver for the screw being used.

Head Style	Driver
Wafer Hd 8/10g	#2 Phillips bit
Wafer Hd 12g	#3 Phillips bit
Pan Hd	#2 Phillips bit
CSK 6/8/10g	#2 Phillips bit
CSK 14g	#3 Phillips bit
CSK Rib 6/8/10g	#2 Phillips bit
CSK Rib 14g	#2 Phillips bit
Tamper Resistant Hd	* Special Driver
Hex Hd 8g	1/4" Hex Socket
Hex Hd 10/12/13g	5/16" Hex Socket
Hex Hd 14/15g	3/8" Hex Socket
Button Head	#2 Phillips Bit
Bugle Head	#2 Phillips bit
Self-Embedding Head	#2 Phillips bit
Ripple Tek's	#2 Phillips bit

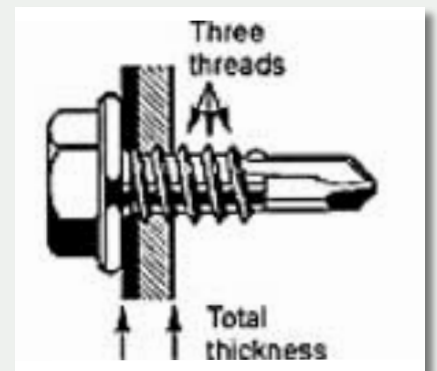
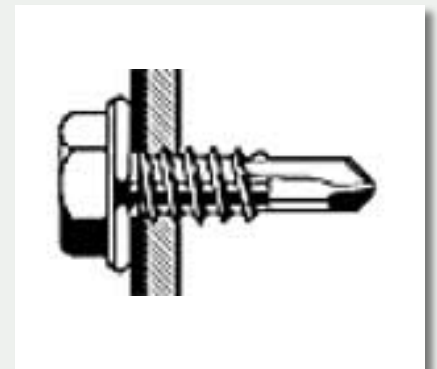
* Available from the Buildex Customer Service Centre

6. Fit driver to a power screwdriver (Tek Gun) set to HIGH (approx. 2500rpm).

7. Put screw onto driver and place at fastening position.

8. Push sharply on screwdriver to create a starting point.

9. Squeeze screwdriver trigger and maintain firm end pressure until screw has drilled and fastened.



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