

# ARDER

In the constant pursuit of lowering greenhouse gases and the carbon footprint attributed to the construction industry: "moreand-more" steel is produced by re-forging of scrapped steel in electric arc furnaces.

This introduces impurities and inclusions into the alloy that are not present in virgin material.

This, when combined with slight inconsistences and the nuances of hot-rolling steels leads to more "hot-spots" and areas of work hardening appearing in finished steels.

Essentially, steel is becoming harder & tougher and the Evolution® SuperTEK® range is stepping up to meet the constantly evolving challenges of the industry.



The Evolution® SuperTEK® range was designed and developed to provide ultimate drilling performance without compromising mechanical performance.

This was achieved through rigorous research and development by our expert team of multi-disciplined Engineers: pooling their combined expertise in civil, structural and mechanical engineering.

The end result is an industry-leading fastener solution that can penetrate, drill and tap into mild steels up to 15mm thick in as little as 6 seconds with the additional capacity to meet the challenge of 35mm steel in only 20 seconds.

In an industry where time is valued at a premium: **the Evolution® SuperTEK® range** provides a significant time saving and reduces labour effort over traditional fastener solutions.





# TO SUSTAIN LONGEVITY: YOU HAVE TO EVOLVE.

The Evolution® SuperTEK® range uses the latest generation of our proprietary EvoShield® organic coating which offers a corrosion resistance in excess of 1,000 hours against attack from Sodium Chloride vapour (Neutral Salt Spray Test) and 100 cycles of exposure to Sulphur Dioxide (Kesternich Test).

This allows the range to survive in corrosivity categories up to C3.

Our extensive expertise in the fields of tribology and chemical engineering has resulted in the formulation of coatings that are extremely resistant to oxidisation, chemical attack and physical deterioration (abrasion & ablation).

Where the ultimate in corrosion resistance is required, the **Evolution® SuperTEK® MARINE®** 

synergises the un-rivalled drilling performance of a SAE C1018 carbon steel SuperTEK® self-drilling point to an A4 (EN 1.4401/ SAE 316) stainless steel body, thread and head.

This ensures exception performance and survivability in corrosivity categories up to C4.

Further Detail on the **Evolution**® **SuperTEK**® **MARINE**® on pages 6 and 7.

#### **CALL TO PLACE ORDER**

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# SUPERTEK® 6 & 7

HEX HEAD TEK 6 / 7



#### **TSBW**

# SuperTEK® 6 (w/washer)

## For 4mm - 18.0mm Steel

CODE	SIZE	WASHER	вох
TSBW5.5-38-6	5.5 x 38mm	YES	200



#### **TSBW**

# SuperTEK® 7(w/washer)

#### For 4mm - 18.0mm Steel

CODE	SIZE	WASHER	вох
TSBW5.5-50-7	5.5 x 50mm	YES	100
TSBWHT5.5-150-7	5.5 x150mm	YES	100



#### **TSHW**

# **Unwashered Hex Head Tek 7**

#### For 4mm - 18.0mm Steel

CODE	SIZE	WASHER	вох
TSHW5.5-50-7	5.5 x 50mm	NO	100
TSHW5.5-75-7	5.5 x 75mm	NO	100
TSHW5.5-100-7	5.5 x 100mm	NO	100
TSHW5.5-125-7	5.5 X 125mm	NO	100
TSHW5.5-150-7	5.5 x 150mm	NO	100



#### **Washered Hex Head Tek 6**

High-end general construction fixing for use in demanding structural applications. This variant is especially suited to fixing brick ties, components and bracketry to wind-posts, stanchions and columns

- Revolutionary SuperTEK® double-helical point consistently provides industry-leading drilling performance due to its aggressive rake and flank angling and honed blade-edge. This product will self-drill and self-tap in mild steels from 4.0 mm to 18.0 mm in overall thickness.
- Aggressive 60° thread angle and 1.06mm (24 TPI) fine thread pitches ensure that maximum positive thread engagement with substrates is achieved.
- SAE C1018 carbon steel (hardened >55 HRC) construction provides exceptional mechanical performance including tensile and shear resistances.

#### Washered Hex Head Tek 7

High-end general construction fixing for use in demanding structural applications. This variant is especially suited to fixing brick ties, components, bracketry and secondary frame elements/ sections to primary and secondary steel framing where a weather sealing washer is required.

- Integrated 16mm ØD weather sealing washer constructed of a 3.0mm EPDM gasket bonded to a galvanised steel compression plate.
- This product will self-drill and self-tap in mild steels from 4.0 mm to 18.0 mm in overall thickness.
- Composite panel variant suitable for fixing 75mm to 100mm thick composite insulation panels as well as retention of brick-tie channels to primary and secondary steel frames.

#### **Unwashered Hex Head Tek 7**

This variant is especially suited to fixing brick ties, components, bracketry and secondary frame elements/ sections to primary and secondary steel framing where a weather sealing washer is required is not required. Longer available lengths are particularly suited to fixing through twin-walled structural sections such as Square (SHS) or Rectangular (RHS) Hollow Box Sections or Parallel Flange Channels (PFC).

- 5/16" (8.0mm AF) hexagonal (male) socket head allows rapid installation using standard non-impacting screwdrivers and non-impact drive bits.
- EvoShield® coating provides superior corrosion protection over traditional galvanised and sherardised coatings.



# SUPERTEK® 7/8/X

### SuperTEK® 7 - Wing-Drill

High-end general construction fixing for use in demanding applications. This variant is especially suited to fastening construction board and timber fixture elements to primary and secondary steel framing.

- This product will self-drill and self-tap in mild steels from 4.0 mm to 18.0 mm in overall thickness.
- Aggressive 60° thread angle and 1.06mm (24 TPI) fine thread pitches ensure that maximum positive thread engagement with substrates is achieved.
- Wing elements ream clearance hole in timber and board material fixture elements to eliminate the risk of "jacking" phenomenon and subsequent damage to the board finish.
- Double countersunk head with Phillips No. 3 (male) socket ensures both positive-driving and self-countersinking characteristics are achieved. The double countersinking also increases inherent resistance to pull-over.

#### **Unwashered Hex Head Tek 8**

This variant is especially suited to fixing brick ties, components, bracketry and secondary frame elements/ sections to primary and secondary steel framing where a weather sealing washer is required is not required.

- EvoShield® coating provides superior corrosion protection over traditional galvanised and sherardised coatings.
- SAE C1018 carbon steel (hardened >55 HRC) construction provides exceptional mechanical performance.
- Aggressive 60° thread angle and 1.80mm (14 TPI) coarse thread pitches ensure that maximum positive thread engagement with substrates is achieved.
- This product will self-drill and self-tap in mild steels from 4.0 mm to 22.0 mm in overall thickness.

#### **Hex Head Tek X**

This variant is especially suited to fixing brick ties, components, bracketry and secondary frame elements/ sections to primary and s econdary steel framing where a weather sealing washer is required is not required. Longer available lengths are particularly suited to fixing through twin-walled structural sections such as Square (SHS) or Rectangular (RHS) Hollow Box Sections or Parallel Flange Channels (PFC).

- 5/16" (8.0mm AF) hexagonal (male) socket head allows rapid installation using standard non-impacting screwdrivers and non-impact drive bits.
- This product will self-drill and self-tap in mild steels from 4.0 mm to 35.0 mm in overall thickness: an industry-leading feat.

# TSTF Countersunk Tek 7 For 4mm - 18.0mm Steel

CODE	SIZE	WASHER	вох
TSTF5.5-73-7	5.5 x 73mm	NO	100
TSTF5.5-93-7	5.5 x 93mm	NO	100
TSTF5.5-118-7	5.5 x 118mm	NO	100

NO

100

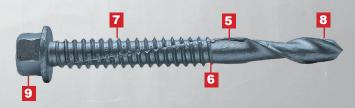


5.5 x 143mm

TSTF5.5-143-7

# TSHW SuperTEK® 8 Hex Head For 4mm - 22.0mm Steel

CODE	SIZE	WASHER	вох
TSHW6.3-60-8	6.3 x 60mm	NO	100
TSHW6.3-100-8	6.3 x 100mm	NO	100



# TSHW SuperTEK® X Hex Head

#### For 4mm - 35.0mm Steel

CODE	SIZE	WASHER	вох
TSHW6.3-85-10	6.3 x 85mm	NO	100
TSHW6.3-135-10	6.3 x 135mm	NO	100



# **SUPERTEK® MARINE**



## **BMTSHW**

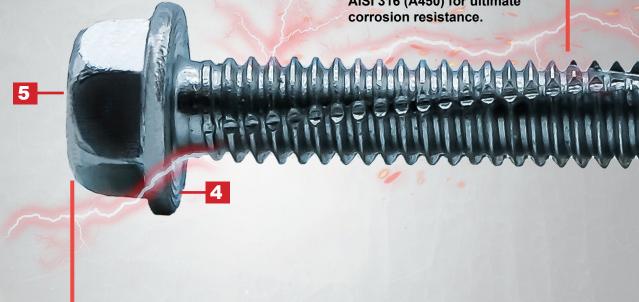
# SuperTEK® MARINE® 7 A2 BI-METAL

#### For 4mm - 18.0mm Steel

	CODE	SIZE	WASHER	вох
	BMTSHW5.5-55-7	5.5 x 55 mm	NO	100
*	BMTSHW6.3-60-8	6.3 x 60 mm	NO	100

# A2 BI-METAL SuperTEK®7

Bi-Metal construction marries the performnace of a carbon steel self-drilling tip to a thread and head made of AISI 316 (A450) for ultimate corresion resistance.



# **DESIGNED FOR:**

FASTENING APPLICATIONS TO SUPER-HEAVY GAUGE COLD FORMED STEEL, HOT-ROLLED STEEL AND EXTRUDED ALUMINIUM SUBSTRATES.

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# **Un-washered Hex-Head SuperTEK® 7**

High-end general construction fixing for use in demanding structural applications. This variant is especially suited to fixing brick ties, components, bracketry and secondary frame elements/ sections to primary and secondary steel framing in aggressive environments. Bi-Metal™ stainless steel construction makes these ideal for mitigation against bi-metallic corrosion in aluminium or copper/ tin substrates.

Revolutionary SuperTEK® double-helical point consistently provides industry-leading drilling performance due to its aggressive rake and flank angling and honed blade-edge. This product will self-drill and self-tap in mild steels from 4.0 mm to 18.0 mm in overall thickness.

Bi-Metal<sup>™</sup> construction synergises the self-drilling performance of a SAE C1018 carbon steel self-drilling point with the exceptional corrosion resistance of an AISI 316 austenitic stainless steel body and head.



- Aggressive 60° thread angle and 1.06mm (24 TPI) fine thread pitches ensure that maximum positive thread engagement with substrates is achieved.
- A4-50 (EN 1.4401 / AISI 316) stainless steel body and head provide ultimate corrosion protection that exceeds organic coating performance. This allows this product to be used in environments with a corrosivity category of up to C4.
- 5/16" (8.0mm AF) hexagonal (male) socket head allows rapid installation using standard non-impacting screwdrivers and non-impact drive bits.



#### QUALITY ASSURANCE AND LABORATORY TESTING

The Evolution® Gold Standard™ is continuously maintained through rigorous batch testing in our UKAS accredited testing laboratory which utilises state-of-the-art equipment and is staffed with a team of Structural, Civil, Mechanical and Chemical Engineers.



SHIMAD

For more information on our extensive testing capabilities or if you wish to receive free training and Continued Professional Development, please e-mail

technical@evolutionfasteners.co.uk.

AVAILABLE FOR DOWNLOAD ON OUR WEBSITE:

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