

KONNECT



UNITITE SCREW

CLASS 5 COATING

- 45 Microns of Mechanical galvanising
- 70% Zinc - 30% Tin mix
- Minimum Porosity rating of 8
- 2 Hybrid top coatings

HEADMARKING

'K5' indicates 'K' Konnect, H.P.F. branding & Class 5 coating.



NEOPRENE SEAL

- Manufactured from 100% E.P.D.M
- Non Conductive
- Low Carbon

TOP THREAD

Allows roofing sheets to be pulled tight against the neo resulting in waterproof seal.

SHANK CUTTERS

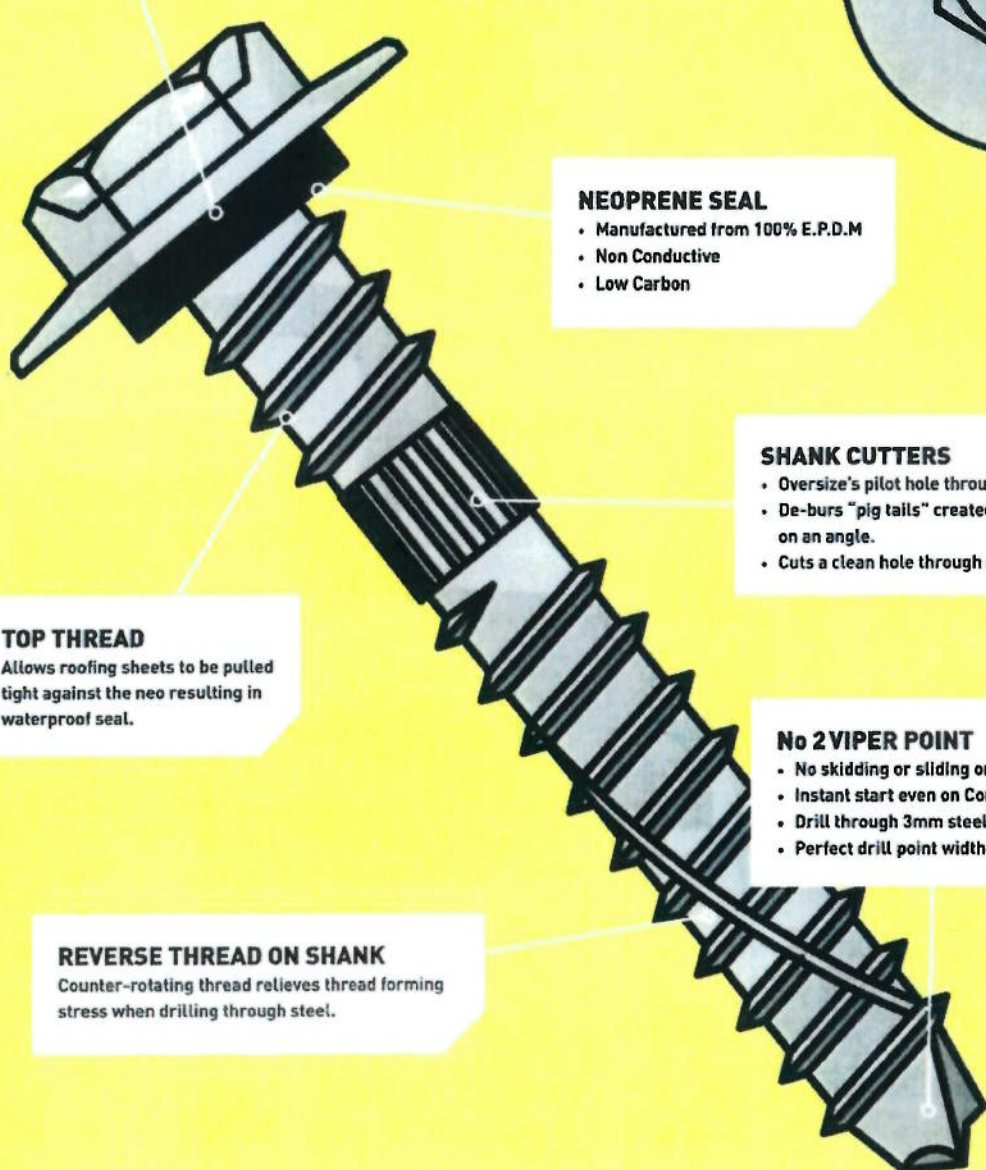
- Oversize's pilot hole through roof sheeting.
- De-burs "pig tails" created when drilling on an angle.
- Cuts a clean hole through roofing sheet.

No 2 VIPER POINT

- No skidding or sliding on roofing sheets.
- Instant start even on Corrugated profile.
- Drill through 3mm steel.
- Perfect drill point width for holding into Timber.

REVERSE THREAD ON SHANK

Counter-rotating thread relieves thread forming stress when drilling through steel.



SIZE

NEW M6-14X35
M6-14X55
M6-14X65

PART N^o.

UT6-14X35CL5N
UT6-14X55CL5N
UT6-14X65CL5N

Drill Capacity

Konnect® Self-Drilling Screws

Screw Gauge - TPI (Threads per inch)	RECOMMENDED SCREW DRILLING CAPACITY INTO STEEL												
	Steel Thickness												
	0.55 mm Batten	0.75 mm Batten	1 mm Steel	1.2 mm Steel	1.5 mm Steel	1.9 mm Steel	2.5 mm Steel	3 mm Steel	3.5 mm Steel	5 mm Steel	6 mm Steel	8 mm Steel	12 mm Steel
M6 - 14 UNITITE	*	*	*	*	*	*	*	*	*	*			
6G - 20 TPI		*	*	*	*	*	*						
8G - 18 TPI		*	*	*	*	*	*						
10G - 16 TPI		*	*	*	*	*	*	*	*				
10G - 24 TPI				*	*	*	*	*	*	*			
12G - 14 TPI			*	*	*	*	*	*	*	*			
12G - 24 TPI				*	*	*	*	*	*	*			
12G - 24 TPI No. 5 Drill Point Deep Drill								*	*	*	*	*	*
14G - 10 TPI			*	*	*	*	*	*	*	*			
14G - 14 TPI			*	*	*	*	*	*	*	*			
14G - 20 TPI				*	*	*	*	*	*	*	*		

Drill Speed Testing

Konnect® Self-Drilling Screws

DRILLING SPEED TEST						
ITEM	POINT LENGTH	POINT DIA.	LOAD (kg)	DRILL SPEED (rpm)	PLATE THICKNESS (mm)	DRILL TIME (Sec)
8G POINT NO. 2	4.00 - 5.00mm	3.35 - 3.50mm	20	1800	2.00	3.0
8G POINT NO. 3	5.00 - 6.00mm	3.35 - 3.50mm	20	1800	2.00	3.0
10G POINT NO. 2	5.00 - 6.00mm	3.85 - 3.95mm	20	1800	2.00	3.5
10G POINT NO. 3	6.00 - 7.00mm	3.85 - 3.95mm	20	1800	2.00	3.5
12G POINT NO. 2	6.00 - 7.00mm	4.45 - 4.60mm	22	1800	3.00	4.0
12G POINT NO. 3	7.00 - 8.00mm	4.45 - 4.60mm	22	1800	3.00	4.0
12G POINT NO. 4	8.00 - 9.00mm	4.45 - 4.60mm	22	1800	3.00	4.0
12G POINT NO. 5	14.00 - 15.00mm	4.45 - 4.60mm	Manual Test	Manual Test	8.00 - 12.00	Manual Test
14G POINT NO. 2	7.00 - 8.00mm	5.45 - 5.60mm	24	1800	4.00	5.0
14G POINT NO. 3	8.00 - 9.00mm	5.45 - 5.60mm	24	1800	4.00	5.0
14G POINT NO. 4	11.00 - 12.00mm	5.45 - 5.60mm	24	1800	4.00	5.0
14G POINT NO. 5	14.00 - 15.00mm	5.45 - 5.60mm	Manual Test	Manual Test	8.00 - 12.00	Manual Test

NOTE: DRILLING TIME - BASED ON DRILLING POINT THROUGH STEEL PLATE.

Pullout Values Testing

Konnect® Self-Drilling Screws

Screw Gauge - TPI (Threads per inch)	PULLOUT VALUES (NEWTONS) - METAL DRILLING								
	Steel Thickness								
	0.55 mm Batten	0.75 mm Batten	1.2 mm Steel	1.5 mm Steel	1.9 mm Steel	2.4 mm Steel	6 mm Steel	8 mm Steel	12 mm Steel
M6 - 14 UNITITE®	1600	2560	3360	5320	6020				
10G - 16 TPI STEELTITE®		1940	2400	4280	5580	7900			
10G - 24 TPI STEELTITE®			2400	4360	5900	7760			
12G - 14 TPI STEELTITE® Screw Length 20mm or Shorter			2280	4160	5500	7440			
12G - 14 TPI STEELTITE® Screw Length 20mm or Longer			2060	3120	5240	7040			
12G - 24 TPI STEELTITE®						7860			
12G - 24 TPI STEELTITE® No. 5 Drill Point						6340			
14G - 10 TPI STEELTITE®			2680	4760	6580	8180			
14G - 20 TPI STEELTITE®			2480	4280	5580	7780	19940		

Pullout Values (Newtons)

Timber Drilling

ITEM	PULLOUT VALUE (NEWTONS) - TIMBER DRILLING							
	0.55 mm Batten	0.75 mm Batten	1.2 mm Steel	1.5 mm Steel	1.9 mm Steel	F7 Pine Timber	F17 Hard Wood	Ultra Hard Timber
8G POINT NO. 2						4380	6680	6960
8G POINT NO. 3						5780	6100	
10G POINT NO. 2						4000	6580	
10G POINT NO. 3						3920	7060	

NOTE: Appropriate safety factors should be applied for design purposes.

All values are averages obtained under laboratory conditions

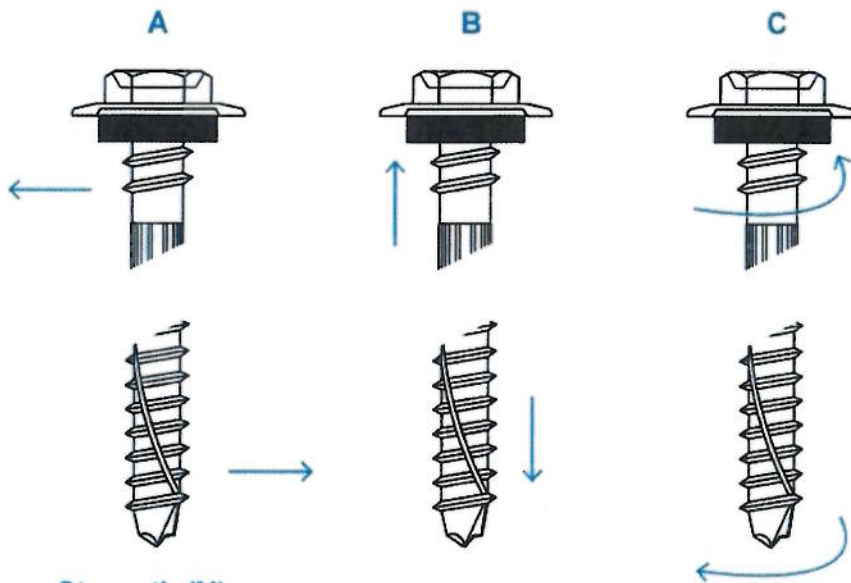
These figures apply **ONLY** to KONNECT® branded products.

Mechanical Strength

Konnect® Self-Drilling Screws

MECHANICAL STRENGTH PROPERTIES			
Screw Gauge TPI	Single Shear Strength (N)	Axial Tensile Strength (N)	Torsional Strength (Nm)
M6 - 14 UNITITE®	8500	15400	14.8
10G - 16	6800	11900	8.8
10G - 24	6200	11400	9.1
12G - 11	8400	13900	13.8
12G - 14	8800	15300	13.8
12G - 24	9000	16700	14.1
14G - 10	10900	19700	19.4
14G - 14	10900	19700	19.2
14G - 20	11200	21200	22.6

NOTE: Appropriate safety factors should be applied for design purposes.
 All values are averages obtained under laboratory conditions
 These figures apply **ONLY** to KONNECT® branded products.



A: Single Shear Strength (N)

The shear load required to break the screw

B: Axial Tensile Strength (N)

The tensile load required to break the screw

C: Torsional Strength (Nm)

The torque required to break the screw



Mechanical Properties:

UNITITE® Performance Data

For conforming to AS3566.2-2002

TECHNICAL REQUIREMENTS		
Specification;	Unit	Diameter and Thread pitch
		M6-14
Axial Withdrawal Force	kN	2.8
Axial Tensile Strength	kN	15.0
Minimum Torque for Torsional Strength	Nm	10.9
Drilling & Threading Capacity	mm	5.0

NOTE:

1. AS3566.2-2002 specifies that Withdrawal Tests be carried out from F5 seasonal radiata pine with a maximum moisture content of 15% and a minimum density of 380kg/M3, determined in accordance with AS1649 and AS1080.1, respectively. Penetration depth shall be 24/256mm for No.10 screws; 29/31mm for 12 g screws; 34/36mm for No.14 g screws
2. All hexagon washer headed screws shall be able to penetrate steel of 0.42mm thickness made from steel grade G550 to AS1397
3. AS3566.2-2002 specifies that Withdrawal Tests be carried out from 1.6mm thick zinc coated steel, Type G450-Z275 in accordance with AS1397

ACTUAL DATA		
Specification;	Unit	Diameter and Thread pitch
		M6-14
Axial Withdrawal Force	kN	4.32
Single Shear Load	kN	11.85
Axial Tensile Strength Timber	kN	24.87
Axial Tensile Strength Steel	kN	21.54

NOTE:

1. Values quoted are the average of all tests. All samples exceed the minimum requirements specified in AS3566.2-2002
2. AS3566.2-2002 does not specify the values of single shear load. Values shown are for loading through the shank and are provided information