

# PRODUCT CATALOGUE

 **AssanPanel**

**BUILD RIGHT**

# SELF DRILLING - TAPPING ROOFING & CLADDING SCREWS

## Correct Setting

In order to guarantee correct setting, the following points must be addressed:

### Insertion speed

- Drilling fasteners in general at 1,500-2,000 RPMs
- Drilling fasteners in high tensile steel at 1,200 RPMs

### Paint coated fasteners

- Clean tool, which fits exactly

The use impact wrench has to be individually checked for each product and application

## Washer Recommendations



### Recommendations

#### 12-16 mm washer: Cladding

For walling systems and secondary clamping fasteners, smaller diameters, typically 12-16 mm, is recommended.



### Recommendations

#### 19 mm washer: Roofing

For primary valley fixing of through-fixed metal roof weather sheets and insulated roof panels, 19 mm is usually the preferred diameter, in some instances 22 mm is recommended.



### Recommendations

#### 29 mm washer: Rooflights

For "plastics" rooflight profiles, typically GRP and polycarbonate, larger diameter washers, typically 29 mm is recommended.

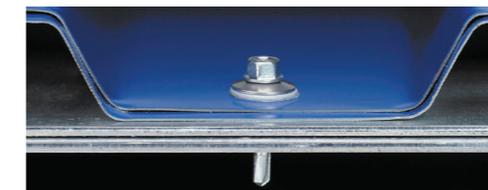
## COATING TYPES

Protecting the metal surface is to protect the metal itself. Because a tiny gap on the surface makes metal inerable for corrosion. Corrosion starts from this gap and moves inside of the metal. This shortens the economic life of the metal in use. According to application and environment conditions we have various coatings which do not contain CR+ 6 atoms harmful to health.



## ZINC (GALVANIZED) COATING

Most widely used type of coating at corrosion protection. Optionally provides 48+, 72+ and 96+ hours salt test strength according to EN ISO 9227. Blue and Black



## ZINC/NICKEL IS A TYPE OF COATING

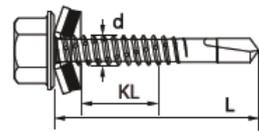
Zinc/Nickel is a type of coating and is preferred in high corrosion resistant in industrial applications. Appearance color is bright metallic, ensures 480+ hours salt test strength according to EN ISO 9227.

## HIGH CORROSION

Coating is in matt gray color and preferred in high corrosion resistance applications.

Coating ensures up to 500+, 750+ or 1000 + hours salt spay test according to EN ISO 9227. This surface coating makes a corrosion resistance superior to those commonly used in the construction industry.

## Self Drilling & Self Tapping Metal Sheet Screws

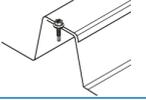
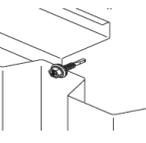
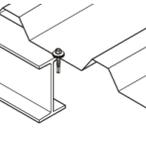


Hexagon 8 mm A/F  
  
 DIN EN ISO 15480  
 (DIN 7504K)

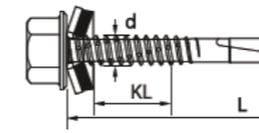


Coloured Head and Washer Alternatives  
 -Powder Coating  
 Material: Carbon Steel

VD: Max. Drilling capacity D: Panel Thickness KL: Clamping Length HD: Headform-Drive  
 W: Washer Material and diameter d: Thread Diameter L: Length  
 All measurements in mm

Application	Product	Order Code						Application Range
		VD	W	d	L	KL	Pieces Per Box	
		2	T14	4,8x	20	11	1500	Stell VD max:1+1 mm
		4	T14	4,8 X	16	5	5000	Stell VD max: 4,00 mm
		4	T14	4,8 X	19	8	5000	
		4	T14	4,8 X	25	14	4000	
		4	T14	4,8 X	32	21	3000	
		4	T14	4,8 X	38	27	3000	
		5	T16	5,5X	25	12	3500	Stell VD max: 5,00 mm
		5	T16	5,5X	32	19	3000	
		5	T16	5,5X	38	25	2500	
		5	T16	5,5X	50	37	2000	
		5	T16	5,5X	60	47	1500	
		*All screws are zinc coated *Tailor made solutions can be provided in accordance with customer needs. *Please contact us for detailed information about product which are not listed, different coating alternatives and ETA certified product range						

## Self Drilling & Self Tapping Metal Sheet Screws

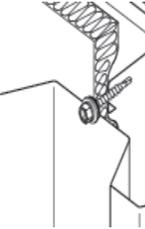
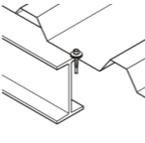


Hexagon 8 mm A/F  
  
 DIN EN ISO 15480  
 (DIN 7504K)

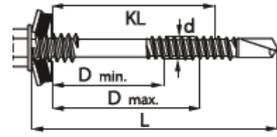


Coloured Head and Washer Alternatives  
 -Powder Coating  
 Material: Carbon Steel

VD: Max. Drilling capacity D: Panel Thickness KL: Clamping Length HD: Headform-Drive  
 W: Washer Material and diameter d: Thread Diameter L: Length  
 All measurements in mm

Application	Product	Order Code						Application Range			
		VD	W	d	L	KL	Pieces Per Box				
		5	T19	6,3x	25	12	2000	Stell VD max: 6,00 mm			
		5	T19	6,3X	32	19	2000				
		5	T19	6,3X	38	25	2000				
		5	T19	6,3X	50	37	1500				
		5	T19	6,3X	60	47	1000				
		5	T19	6,3X	70	57	1000				
		5	T19	6,3X	80	67	800				
		5	T19	6,3X	100	87	800				
				5		5,5X	25		15	4000	Stell VD max: 5,0/12,00 mm
				12		5,5X	36		18	3000	
		12	T16	5,5X	32	11	3000	Stell VD max: 12,0 mm			
		12	T16	5,5X	38	17	2500				
		12	T16	5,5X	50	29	2000				
		12	T16	5,5X	60	39	1500				
*All screws are zinc coated *Tailor made solutions can be provided in accordance with customer needs. *Please contact us for detailed information about product which are not listed, different coating alternatives and ETA certified product range											

# Composit (Sandwich) Panel Screws



Hexagon 8 mm A/F



Coloured Head and Washer Alternatives  
-Powder Coating  
Material: Carbon Steel

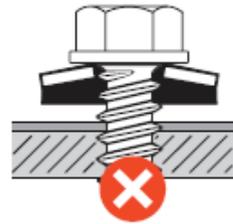
VD: Max. Drilling capacity D: Panel Thickness KL: Clamping Length HD: Headform-Drive  
W: Washer Material and diameter d: Thread Diameter L: Length  
All measurements in mm

Application	Product	Order Code							Pieces Per Box	Application Range
		VD	W	d	L	KL	D			
		5	T16	5,5X	66	53	23-48	1500	Stell VD max:5,00 mm Screw lenght: Clamping Length+13mm Clamping Length: Panel Thickness+Thickness of Substructure	
		5	T16	5,5X	75	62	32-57	1000		
		5	T19	5,5X	90	77	37-72	1000		
		5	T19	5,5X	105	92	52-87	800		
		5	T19	5,5X	120	107	62-102	600		
		5	T19	5,5X	135	122	47-117	500		
		5	T19	5,5X	140	127	52-122	500		
		5	T19	5,5X	145	132	57-127	500		
		5	T19	5,5X	155	142	67-137	500		
		5	T19	5,5X	165	152	57-147	500		
		5	T19	5,5X	175	162	67-157	400		
		5	T19	5,5X	180	167	72-162	400		
		5	T19	5,5X	190	177	82-172	400		
		5	T19	5,5X	195	182	87-177	400		
		5	T19	5,5X	200	187	92-182	400		

Application	Product	Order Code							Pieces Per Box	Application Range		
		VD	W	d	L	KL	D					
		12	T16	5,5X	66	53	16-41	1500	Stell VD max:12,0 mm Screw lenght: Clamping Length+21 mm Clamping Length: Panel Thickness+Thickness of Substructure			
		12	T16	5,5X	75	62	25-50	1000				
		12	T19	5,5X	90	77	30-65	1000				
		12	T19	5,5X	105	92	45-80	800				
		12	T19	5,5X	120	107	55-95	600				
		12	T19	5,5X	135	122	40-110	500				
		12	T19	5,5X	140	127	45-115	500				
		12	T19	5,5X	145	132	50-120	500				
		12	T19	5,5X	155	142	60-130	500				
		12	T19	5,5X	165	152	50-140	500				
		12	T19	5,5X	175	162	60-150	400				
		12	T19	5,5X	180	167	65-155	400				
		12	T19	5,5X	190	177	75-165	400				
		12	T19	5,5X	195	182	80-170	400				
		12	T19	5,5X	200	187	85-175	400				
					T16	6,3X	35	2			2500	Concrete VD max: 0 mm Pre drilling is needed
					T16	6,3X	45	11			2000	
					T16	6,3X	60	26			1500	
	T16			6,3X	75	41		1000				
	T16			6,3X	95	61		600				
	T16			6,3X	105	71		600				
	T16			6,3X	115	81		500				
	T16			6,3X	125	91		500				
	T16			6,3X	135	101		500				
	T16			6,3X	145	111		500				
	T16			6,3X	175	141		400				
	T16			6,3X	180	146		400				
	T16			6,3X	195	161		400				
	T16			6,3X	200	166		400				

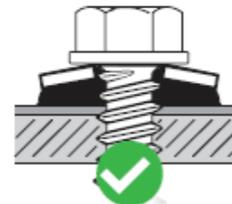
## Installation Manual

- 1) Do not use an impact type screw gun.
- 2) Use standart screw gun. Screw gun: min. 4 amp, 0-2500 RPM: Revolution/Minute
- 3) Stated drilling speed values are screw gun's required turnover rates (speed).  
Use these mentioned values for your application.
- 4) 'KGD' stated in axial force section refer to the required forces expressed as weight in kg.  
Do not apply excessive force, consider the specified values.
- 5) Adjust screw gun nosepiece to the same level properly just below of the screw head.
- 6) Mount screws perpendicular (90) to the material surface
- 7) After proper fixing is completed, do not continue to drive. Over driving may result in torsional failure of the fastener (screw breaks) or strip out of the metal surface and fastening can not be done.
- 8) Mount screws as at least three (3) threads out from the metal substructure.
- 9) Do not apply self drilling-tapping screw on the welded area's and/or close more than 2 cm.
- 10) Self drilling-tapping screws are not recommended to be used on stainless steel and age hardened steels.



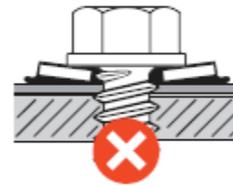
Insufficient tightening

\*Possible to cause leakage under seal and around screw.



Correct installation

\*Seal surface firmly. EPDM flows inward to The empty spaces of threads and to the cavities of the surface.

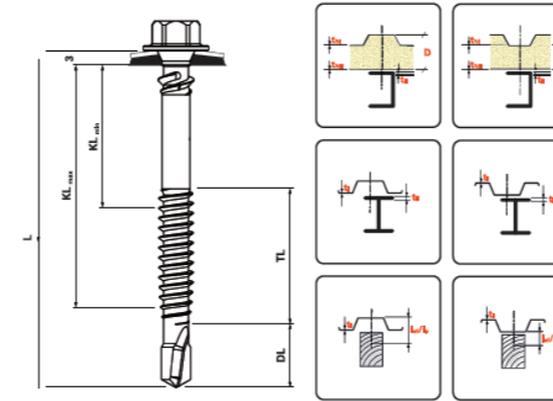


Excessive torque

\*Cause reverse dishing possible to cause, leakage under seal.

## Definition Clamping Length KL

Steel, Aluminium and Timber



**KL**

Clamping length of the fastener

**L**

Length of the fastener

**D**

Thickness of component I (sandwich panel)

**Tin**

Thickness of the inner skin of component (sandwich panel)

**Ti**

Thickness of component I

**I ef/lp**

Effective embedment depth in component II made timber  
(I ef without drill point) (lp with drill point)

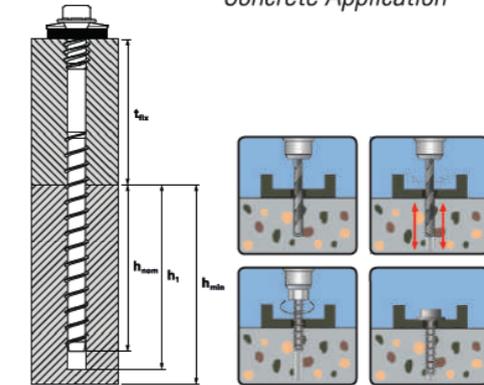
**ti**

Thickness of component I

**Tii**

Thickness of component II made of metal

Concrete Application



**Tfix**

Thickness of fixture

**Hnom**

Nominal anchor depth

**H1**

Drill hole depth

**Hmin**

Minimum thickness of concrete subconstruction

## Installation Guide

Steel, Aluminium

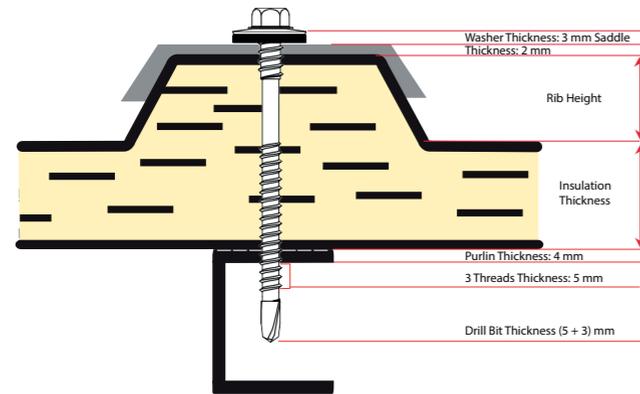
Screw Length Selection

$L$  (Screw Length) > Washer + Saddle + Rib Height + Insulation Thickness + Purlin + 3 Threads + Drill Bit

$L > 3 + 2 + 32 + 50 + 4 + 5 + (5+3)$

$L >$  Must be selected longer then 104 mm.

Suitable Product: 5,5 x 105



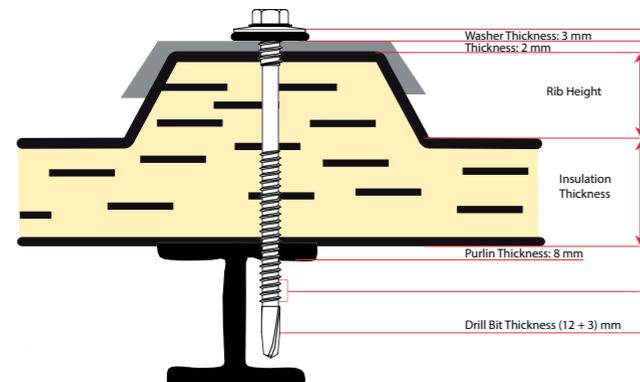
Screw Length Selection

$L$  (Screw Length) > Washer + Saddle + Rib Height + Insulation Thickness + Purlin + 3 Threads + Drill Bit

$L > 3 + 2 + 32 + 60 + 8 + 5 + (12+3)$

$L >$  Must be selected longer then 125 mm.

Suitable Product: 5,5 x 135



## Concrete Application

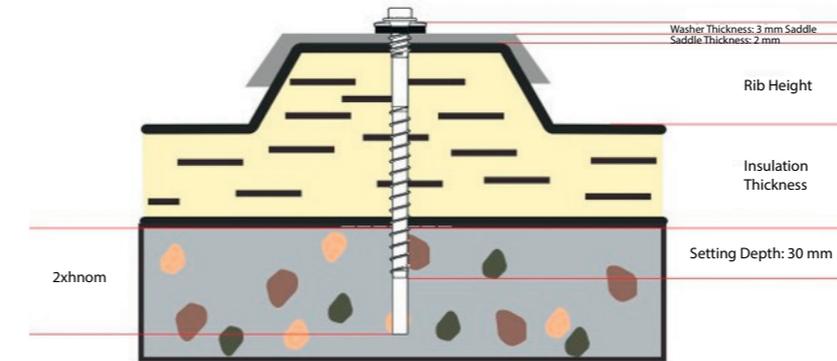
Screw Length Selection

$L$  (Screw Length) > Washer+ Saddle + Rib Height + Insulation Thickness + Screw length in concrete

$L > 3 + 2 + 32 + 50 + 30$

$L >$  Must be selected longer then 117 mm.

Suitable Product: 6,3x125



Installation of Concrete Range (DB)

\*According to the concrete strenght and quality recommended drill bit  $\phi$  5-5,5 mm.

\*Screw must be embedded into the hole min.  $h_{nom} \geq 30$  mm.

\*Pilot hole depth must be min. twice than the screw lenght in the hole.

\* $h_{nom}$ : Setting Depth min. 30 mm  $h_1$  Pilot Hole Depth  $2xh_{nom}$

Saddle Washer and Screw Cap

SADDLE WASHER	ORDER CODE	
	20x45	
	30x45	
	42x45	
	25x25	

\*Contack for color alternatives.

\*All dimensions are in mm.

SCREW CAP	ORDER CODE
	HEXAGON HEAD

\*Special screw cap is can be prodeded for different head types.



**Tuzla** Capacity: 7,500,000 m<sup>2</sup> / year



**Jordan** Capacity: 4,500,000 m<sup>2</sup> / year



**İskenderun** Capacity: 3,000,000 m<sup>2</sup> / year



**Balıkesir** Capacity: 3,000,000 m<sup>2</sup> / year