



Handan Xiaojun Fastener Manufacturing Co.,Ltd

📍 Beiduanzhuang Industrial Park, Linmingguan Town,
Yongnian, Handan, Hebei, China 057150

☎ +86 137 3005 6979

☎ +86 310 7056 936

✉ xj@xj-fastener.com

🌐 www.xj-fastener.com



Feel the Power of the Screws

Carbon Steel • Stainless Steel • Bi-Metal



Company Introduction

Handan Xiaojun Fastener Manufacturing Co.,Ltd. It' s located in China's largest fastener production base in Yongnian, Hebei province. Xiaojun is a large private enterprise with high standards of fastener production and scientific research, whose industrial products are sold all over the world. The company adheres to the business tenet of quality excellence, strict management and put reputation first. We have been selecting superior steel raw materials and employing senior technical staffs. As the industry develops, upgrades and transforms, the high strength threaded bars brought us new opportunities since 2009. Under this background we decide to produce self drilling screws.
















The main products are: Carbon Steel and Stainless Steel Self-Drilling Screws and Self-Tapping Screws, Xiaojun has thousand sets of cold-forming machines, tapping, drilling, punching machines and other CNC equipment.


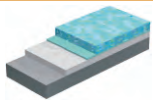







Xiaojun focus on manufacturing high quality products and providing professional sales service, we are also willing to cooperate with clients world wide sincerely.



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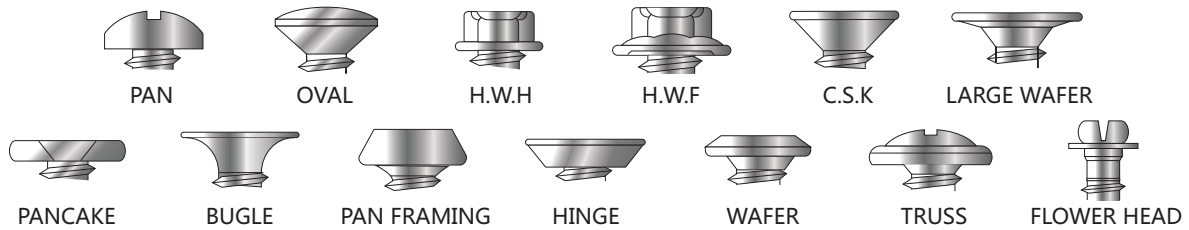
XIAOJUN®

***Feel the Power
of the Screws***

- **Professional**
Provides expertise and technology in fasteners and construction
Hardware industry
- **Positive**
Continuously provide customers with high-quality products and services
- **Trustworthy**
With 15 years of experience, with the famous **XIAOJUN®** brand
- **Typical**
Provide unique solutions to fastener problems
- **Ambitious**
Offer a range of activities to meet client expectations

Screw Data

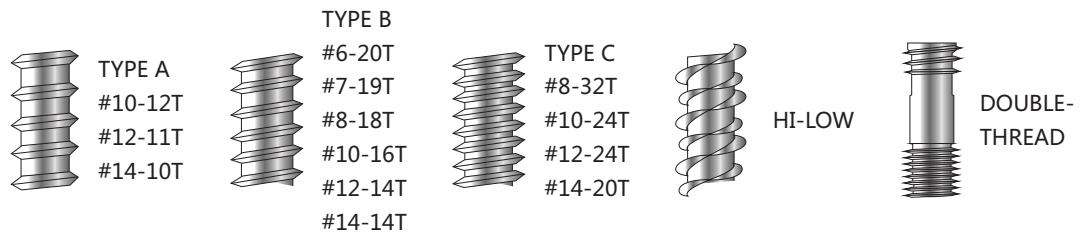
Head Styles



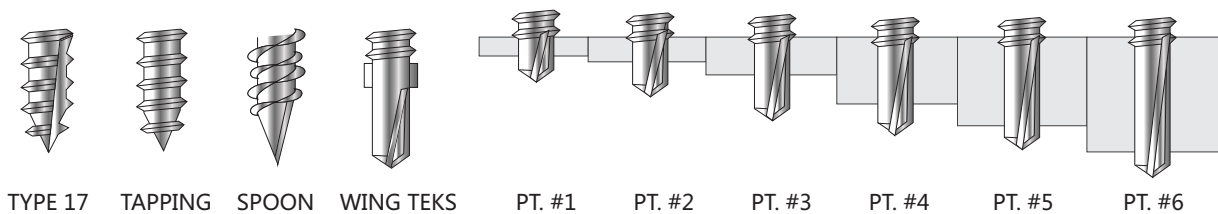
Head Recess



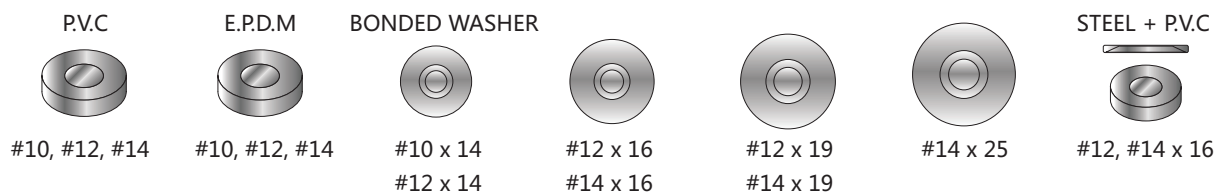
Threads



Points



Washer



Plating

PL : Plain
YZ : Yellow Zinc
ZN : Zinc

KP : Black Phosphated
BP : Grey Phosphated
BZ : Black Zinc

BO : Black Oxide
DC : Dacrotized
RS : Ruspert
XY : Xylan

Mechanical Data I

• Material

C-1022 Steel Case Hardened
IND Flange Washer

• Specia

High Grip

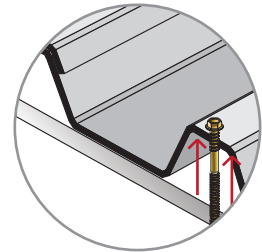
• Coating and Finish

• Standard

AS 3566
ASTMD 2247
DIN 50018

• E.P.D.M Seal

• High grip



• Hexagon

Washer Face with E.P.D.M Seal

Nanoplating

Technical description

It is innovative nano scale surface treatment technology that provides inexpensive, high quality and extreme corrosion resistance properties in current competitive markets. Nanoplating is no toxic and no pollution to the environment as reach to world standard.

Characteristics

- Stronger than Bi-metal screws or alloy steel screw without breaking during usage.
- Extreme corrosion resistance for more than 2000 hours salt spray test
- Environment friendly process reduces waste effluent
- Available for ACQ with treated wood
- Excluded lead, cadmium and other heavy metal
- Meets WEEE and ROHS directive from European Union and ELF (End of Life Vehicle) directive for eliminating hazardous chemicals

Resistance Performance

Salt Spray [ASTM B117]	2000 hours
Kesternich [DIN 50018 2.0L (SO ₂)]	25 cycles
Acid Resistance [ASTM D-1308]	320 hours
Heat Resistance [250°C]	15 hours
Meet Australia Standard	As 3566 CLASS 4

Resistance Performance

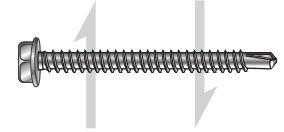
	Thickness	Salt Spray Test	Kesternich
Nanoplating	20 mu	2000 hours passed	25 cycles
C4 + Coating	60 - 70 mu	1500 hours passed	20 cycles

Note : the test results shown above are the result of laboratory tests and are guidance purpose only

Mechanical Data II

Shear Strength

Gauge	#6	#8	#10	#12	#14
MM	3.5	4.2	4.8	5.5	6.3
Kn	2.93	4.36	6.28	8.36	12.27



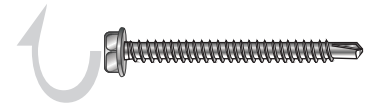
Tensile Strength

Gauge	#6	#8	#10	#12	#14
MM	3.5	4.2	4.8	5.5	6.3
Kn	5.0	7.0	10.0	12.5	17.0



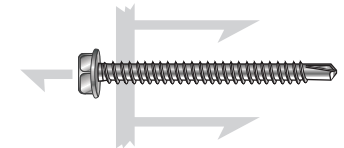
Torsional Strength

Gauge	#6	#8	#10	#12	#14
MM	3.5	4.2	4.8	5.5	6.3
Kn	2.8	4.5	6.5	10.0	14.0



Pull-out Strength

Gauge	Drill Point #2, #3					#5	
MM	1.6	2.0	2.5	3.0	3.2	5.0	6.0
Kn	3.82	4.93	6.32	7.92	9.30	11.21	12.50



Performance And Mechanical Data

	Steel Thickness	4.8mm (#10)	5.5mm (#12)	6.3mm (#14)
Shear Strength (N)		6700	10400	13400
Tensile Strength (N)		9500	13900	15500
Torsional Strength (N-M)		6.5	10.0	14.0
Pull-out Strength (N)	2.3 mm	4690	4700	5000
	3.2 mm	7480	7610	7930
	4.5 mm	9680	12700	13500
	6.0 mm		13900	15000
Drilling Capacity	max. mm	3.5	4.5	6.0

The test results shown above are the result of laboratory tests and are guidance purpose only.

Mechanical Data III

Shear Strength

Self Drilling Screws	Size	Drill Point	Drill Capacity (m/m) max.
	M3.5 (#6), M3.9 (#7)	#2	0.5 - 1.0 mm
	M4.2 (#8)	#2	1.0 - 2.0 mm
	M4.8 (#10)	#2	1.0 - 2.0 mm
	M4.8 (#10)	#3	1.0 - 3.0 mm
	M5.5 (#12), M6.3 (#14)	#3	2.0 - 4.0 mm
		#4	7.0 - 8.0 mm
		#5	10.0 - 12.0 mm
Drywall Screws		Point NO.	Drill Capacity (m/m) max.
			0.7 - 1.0 mm

Plating

Types	Salt Spray Test/hrs	Kesternich/cycles
Zinc	24 - 36	—
Yellow Zinc	24 - 36	—
Black Phosphate	24 - 36	—
Grey Phosphate	24 - 36	—
Dacromet	500 - 1000	—
Ruspert	500 - 1000	—
Mechanical Galvanizing	500 - 1000	—
Mechanical Galvanizing+Coating	1000 - 1500	15 - 20
Nanoplating	1500 - 2000	20 - 25

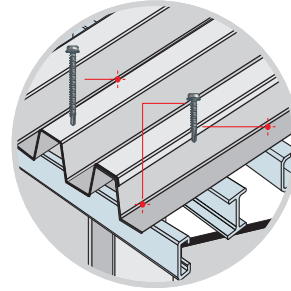
Washer Material' s General Properties

Physical Properties	E.P.D.M	P.V.C
Age-Heat Resistance	●	×
Cold Resistance	●	×
Weather Resistance	●	×
Ozone Resistance	●	○
Oil Resistance	●	×
Bending Strength	○	×
Wear Resistance	○	×
Repulsive Elasticity	○	×
Compressive Distortion	○	○

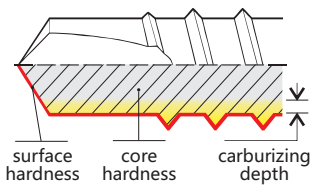
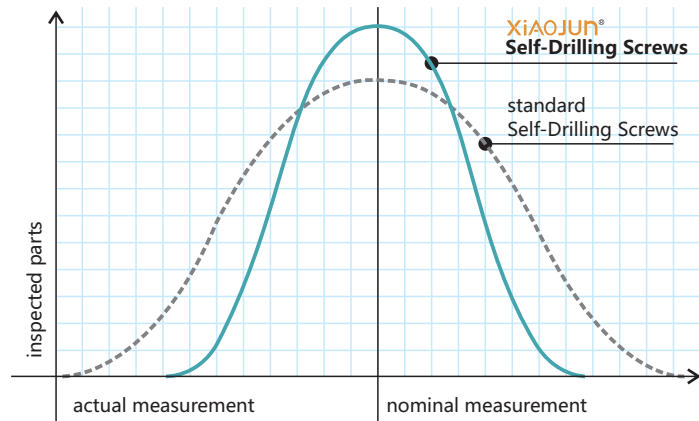
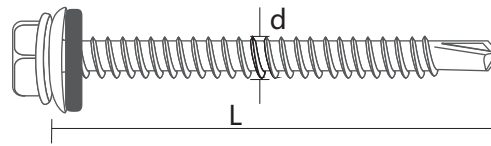
● EXCELLENT ○ POOR × GOOD

The test results shown above are the result of laboratory tests and are guidance purpose only.

Medium duty Hex Washer Head



XiAOJUN® Suggested drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Point



Drill Point #3



Drill Point #5

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- For medium duty purpose
- Roof deck to steel framing
- Accessories to steel framing

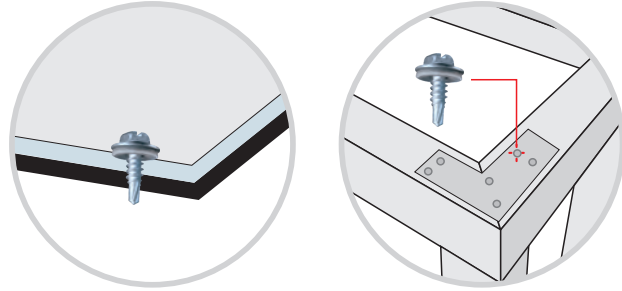
Features

- Precise cutting edges to improve drill performance with less effort
- Point to thread design maximize pullout performance and minimizes backout

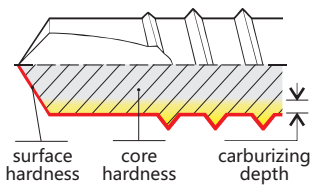
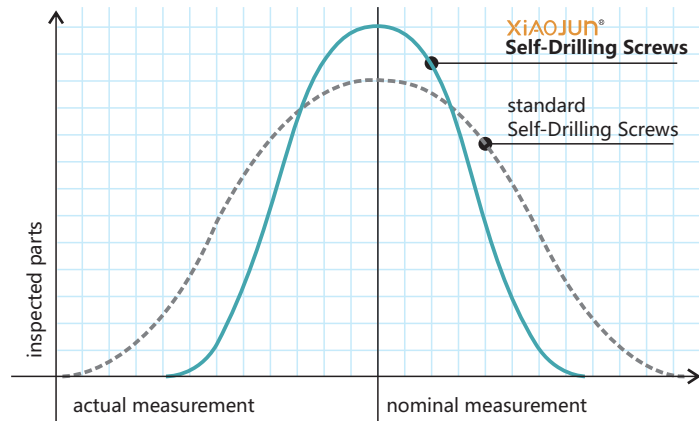
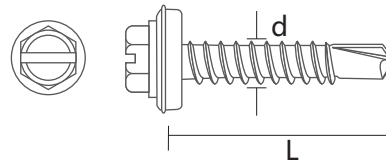
Specifications			
Drive Socket	3/8"	Loading Bearing Length [Inches]	0.380"
Loading Bearing Length [mm]	Hex9.7	Product Type	Self-drilling screw
Diameter	#14	Diameter [mm]	6.3 mm
Drill Capacity Max [Inches]	0.237"	Drill Capacity Range [mm]	6mm
Drill Point	Xiaojun®-#3 drill point	Head Style	Hex Washer head
Material	Grade 5 Carbon steel	Thread Major Dia	0.248"
Thread Major Dia [mm]	6.3 mm	Thread Minor Dia	0.2"
Thread Minor Dia [mm]	5.1mm	Threads Per Inch	14
Washer	EPDM Washer		

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#12-14 M5.5	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
#14-14 M6.3	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
	4"	100	#3	2.0 - 4.0
	5"	125	#3	2.0 - 4.0

Slotted Hex Washer Head



XiAOJUN® Suggested drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Point



Drill Point #3



Drill Point #5

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Roof and skin sheet to steel
- Residential steel frame construction
- For light duty purpose

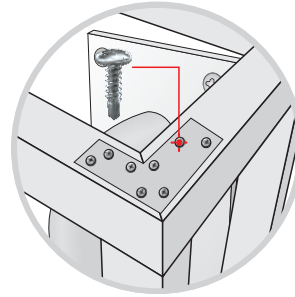
Features

- Precise cutting edges to improve drill performance with less effort
- Point to thread design maximize pullout performance and minimizes backout

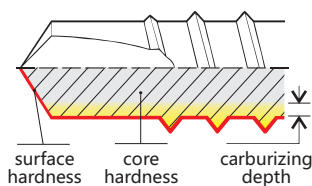
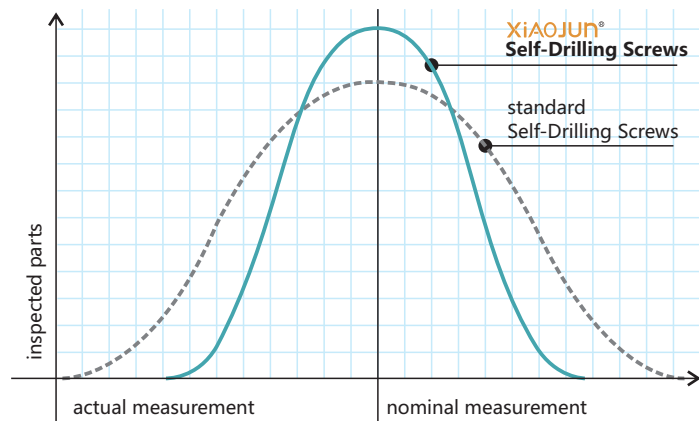
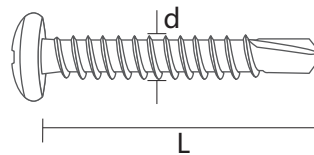
Specifications			
Drive Socket	3/8"	Loading Bearing Length [Inches]	0.380"
Loading Bearing Length [mm]	Hex9.7	Product Type	Self-drilling screw
Diameter	#14	Diameter [mm]	6.3 mm
Drill Capacity Max [Inches]	0.237"	Drill Capacity Range [mm]	6mm
Drill Point	Xiaojun®-#3 drill point	Head Style	Hex Washer head
Material	Grade 5 Carbon steel	Thread Major Dia	0.248"
Thread Major Dia [mm]	6.3 mm	Thread Minor Dia	0.2"
Thread Minor Dia [mm]	5.1mm	Threads Per Inch	14
Washer	EPDM Washer		

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#12-14 M5.5	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
#14-14 M6.3	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
	4"	100	#3	2.0 - 4.0
	5"	125	#3	2.0 - 4.0

Phillips Pan Head



XiAOJUN® Suggested drill point #2
maximum drill capacity of 2mm and drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Point



Drill Point #2



Drill Point #3

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Skin sheet to steel
- Residential steel frame construction
- For light duty purpose
- Suitable for stitching 1 thick & 1 thin steel plate

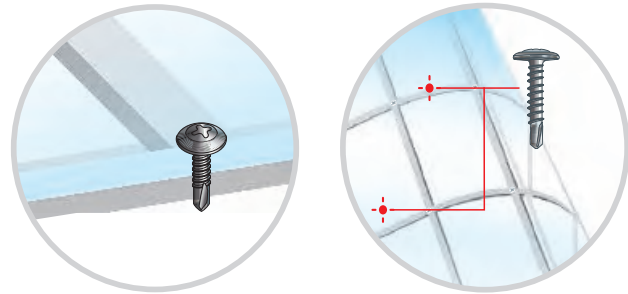
Features

- Pan head design on puorst using
- Non-walking point provides fast material engagement

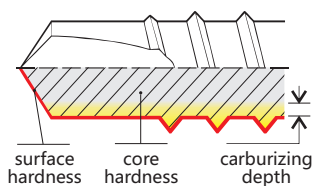
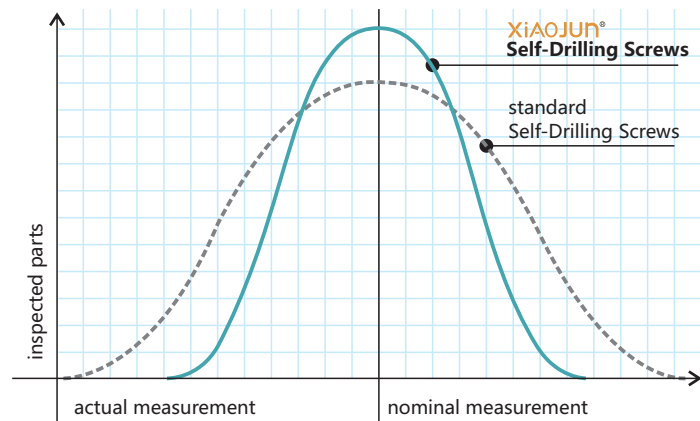
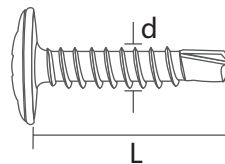
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	Pan	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#6-20 M3.5	3/8"	10	#2	0.5 - 1.0
	1/2"	13	#2	0.5 - 1.0
	5/8"	16	#2	0.5 - 1.0
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-1/2"	38	#2	1.0 - 2.0
	1-1/2"	38	#2	1.0 - 2.0
#10-16 M4.8	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#3	1.0 - 3.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0
	2"	50	#3	1.0 - 3.0

Phillips Truss Head



XiAOJUN® Suggested drill point #2
maximum drill capacity of 2mm



Material



Carbon Steel



Stainless Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Point



Drill Point #2

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Residential steel frame construction
- For using in object like polycarbonate sheet, shadow cover

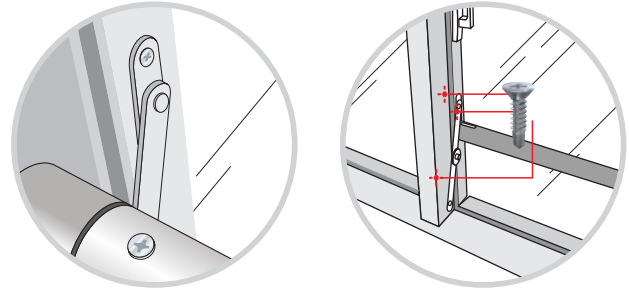
Features

- Truss head design on purpose using
- Non-walking point provides fast material engagement

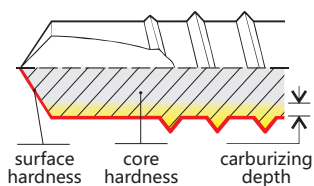
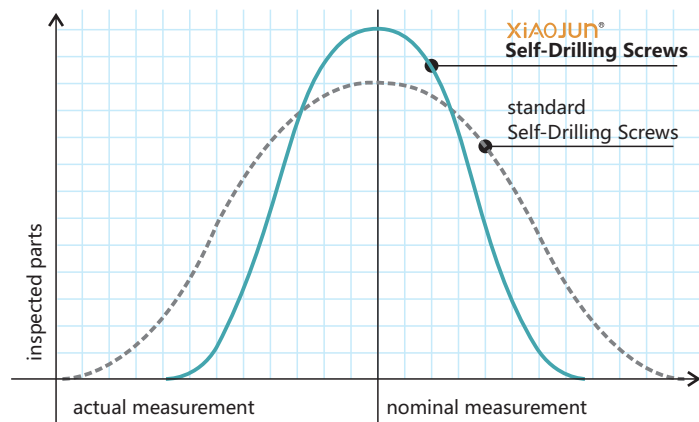
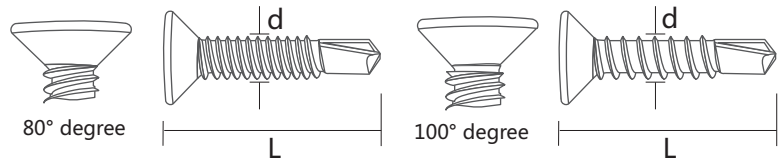
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	Truss	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-5/8"	41	#2	1.0 - 2.0

Phillips Countersunk Head



XiAOJUN® Suggested drill point #2
maximum drill capacity of 2mm and drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Point



Drill Point #2



Drill Point #3

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Best choice for fastening in window or door frames purpose
- Using in flat surface required
- Using in per-drilled hole for fitting

Features

- Precise cutting edges to improve drill performance
- Countersunk head available for working purpose

Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	CSK	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

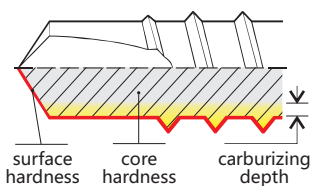
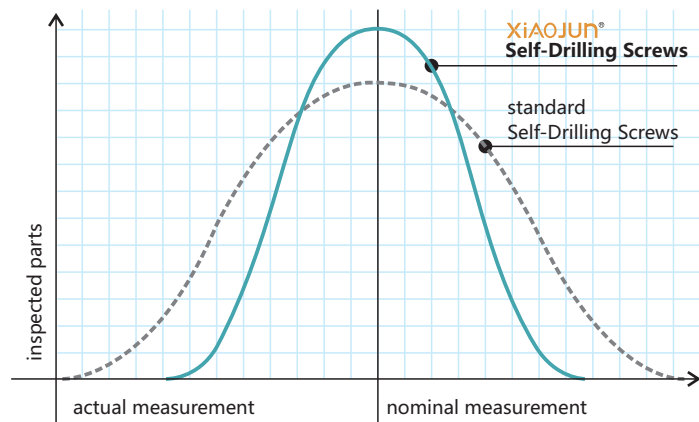
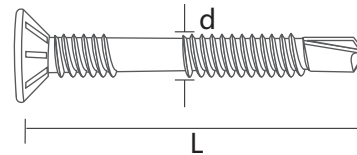
Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#6-20 M3.5	3/8"	10	#2	0.5 - 1.0
	1/2"	13	#2	0.5 - 1.0
	5/8"	16	#2	0.5 - 1.0
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-1/2"	38	#2	1.0 - 2.0
	2"	50	#2	1.0 - 2.0
#10-16 M4.8	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#3	1.0 - 3.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0
	2"	50	#3	1.0 - 3.0

Phillips

Countersunk Head With Ribs(Nibs)



XiAOJUN® Suggested drill point #2
maximum drill capacity of 2mm and drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Point



Drill Point #2



Drill Point #3

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Best choice for fastening in window or door frames purpose
- Using in flat surface required
- Using in per-drilled hole for fitting

Features

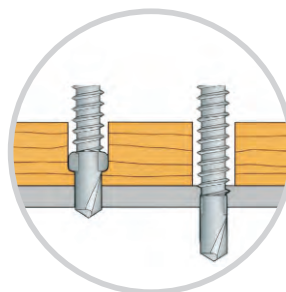
- Precise cutting edges to improve drill performance
- Countersunk head available for working purpose

Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	CSK	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

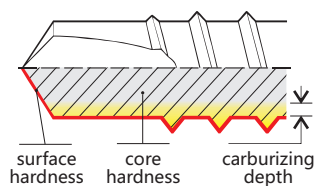
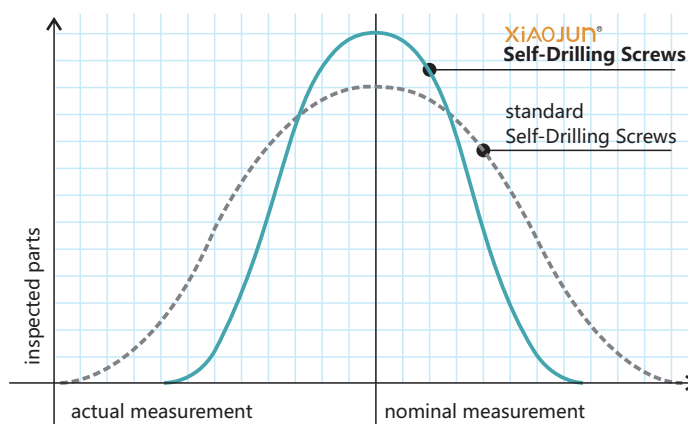
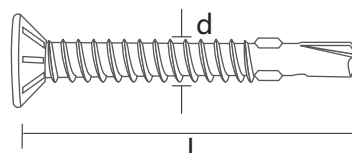
Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#6-20 M3.5	3/8"	10	#2	0.5 - 1.0
	1/2"	13	#2	0.5 - 1.0
	5/8"	16	#2	0.5 - 1.0
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-1/2"	38	#2	1.0 - 2.0
	2"	50	#2	1.0 - 2.0
#10-16 M4.8	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#3	1.0 - 3.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0
	2"	50	#3	1.0 - 3.0

Phillips

Countersunk Head With Ribs(Nibs) And Wings



XiAOJUN® Suggested drill point #3
maximum drill capacity of 5mm and drill point #4
maximum drill capacity of 8mm



Material



Carbon Steel



Stainless Steel

Point



Drill Point #3



Drill Point #4

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Best choice for fastening in window or door frames purpose
- Using in flat surface required
- Using in per-drilled hole for fitting

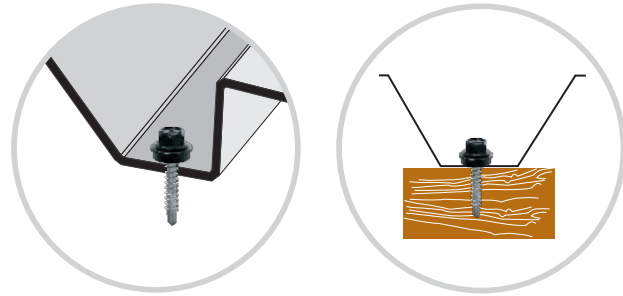
Features

- Precise cutting edges to improve drill performance
- Countersunk head available for working purpose

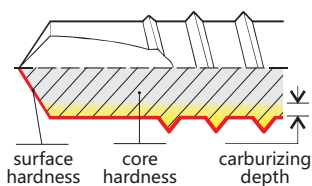
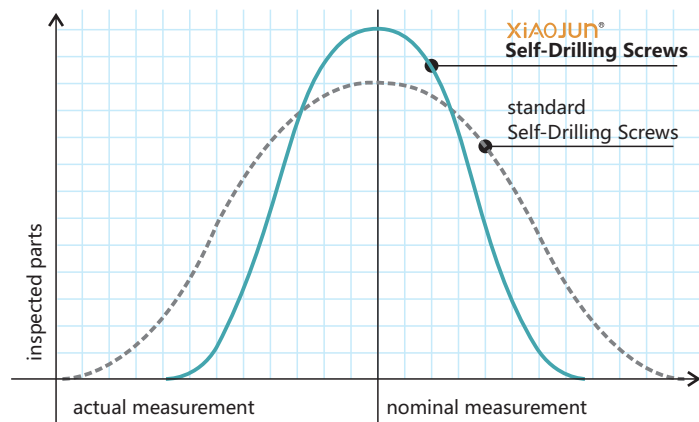
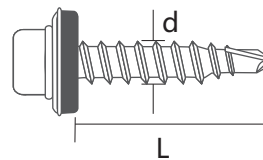
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	CSK	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#6-20 M3.5	3/8"	10	#2	0.5 - 1.0
	1/2"	13	#2	0.5 - 1.0
	5/8"	16	#2	0.5 - 1.0
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-1/2"	38	#2	1.0 - 2.0
	2"	50	#2	1.0 - 2.0
#10-16 M4.8	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#3	1.0 - 3.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0
	2"	50	#3	1.0 - 3.0

Medium duty Hex Washer Head



XiAOJUN® Suggested drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel



Bi-Metal

Point



Drill Point #3

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Features

- Used for fasten sheet-metal to walls and roofs, the aluminium washer with EPDM rubber covering ensures an effective seal and resistance to aging. Moreover, farmer screws are electro galvanised with coating thickness as available, and various colors as in RAL and RR for selection.

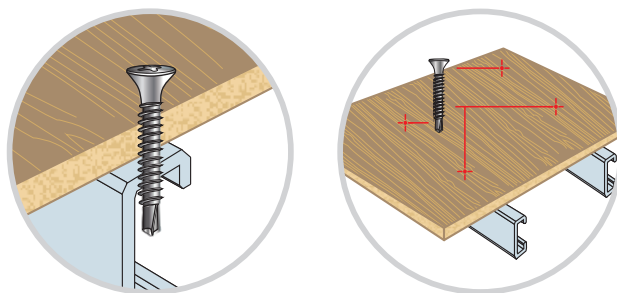
Conditions

- Durable painting
- Ideal for walls and roofs with overlap joints
- Aluminium/Steel washer
- 2.5/3 mm EPDM thickness

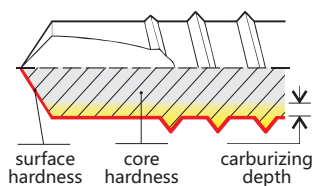
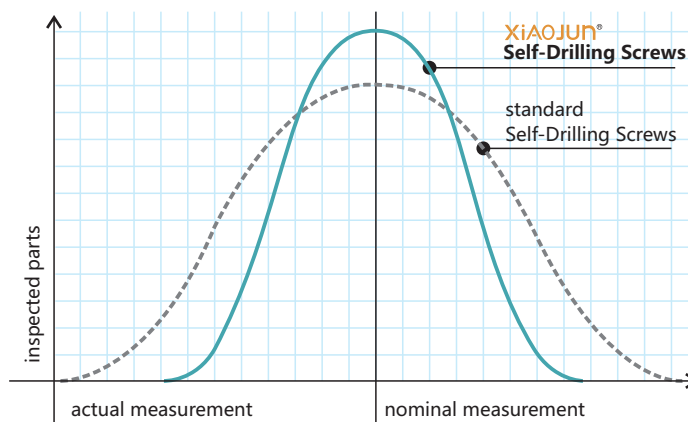
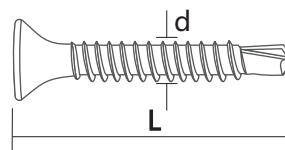
Specifications			
Drive Socket	3/8"	Loading Bearing Length [Inches]	0.380"
Loading Bearing Length [mm]	Hex9.7	Product Type	Self-drilling screw
Diameter	#14	Diameter [mm]	6.3 mm
Drill Capacity Max [Inches]	0.237"	Drill Capacity Range [mm]	6mm
Drill Point	Xiaojun®-#3 drill point	Head Style	Hex Washer head
Material	Grade 5 Carbon steel	Thread Major Dia	0.248"
Thread Major Dia [mm]	6.3 mm	Thread Minor Dia	0.2"
Thread Minor Dia [mm]	5.1mm	Threads Per Inch	14
Washer	EPDM Washer		

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#12-14 M5.5	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
#14-14 M6.3	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
	4"	100	#3	2.0 - 4.0
	5"	125	#3	2.0 - 4.0

Phillips Bugle Head



XiAOJUN® Suggested drill point #2
maximum drill capacity of 2mm and drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Point



Drill Point #2



Drill Point #3

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- For using in stitch wood to metal
- Using in flat surface required
- Using in pre-drilled hole for fitting

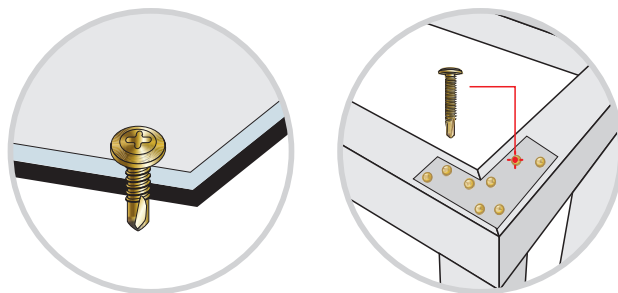
Features

- Precise cutting edges to improve drill performance with less effort
- Bugle head available for working purpose

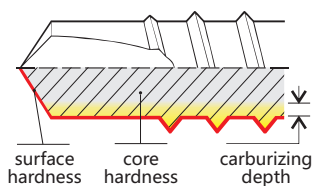
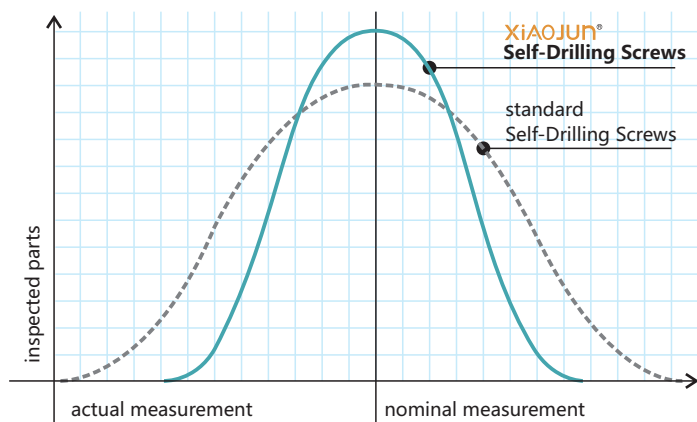
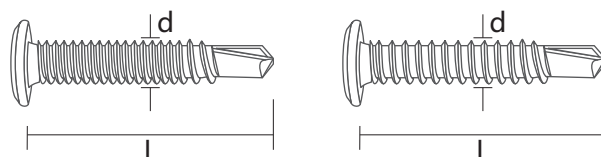
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	Bugle	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#6-20 M3.5	1"	25	#2	0.5 - 1.0
	1-1/8"	28	#2	0.5 - 1.0
	1-1/4"	32	#2	0.5 - 1.0
	1-5/8"	41	#2	0.5 - 1.0
	2"	50	#2	0.5 - 1.0
#8-18 M4.2	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	2"	50	#2	1.0 - 2.0
	2-3/8"	60	#2	1.0 - 2.0
	2-5/8"	65	#2	1.0 - 2.0
	3"	75	#2	1.0 - 2.0

Phillips Wafer Head



XiAOJUN® Suggested drill point #3
maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Point



Drill Point #3

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Roof and skin sheet to steel
- Residential steel frame construction
- For light duty purpose

Features

- Wafer head design on purpose using
- Non-walking point provides fast material engagement

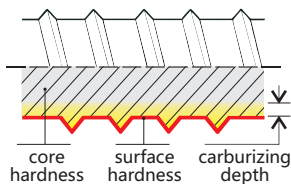
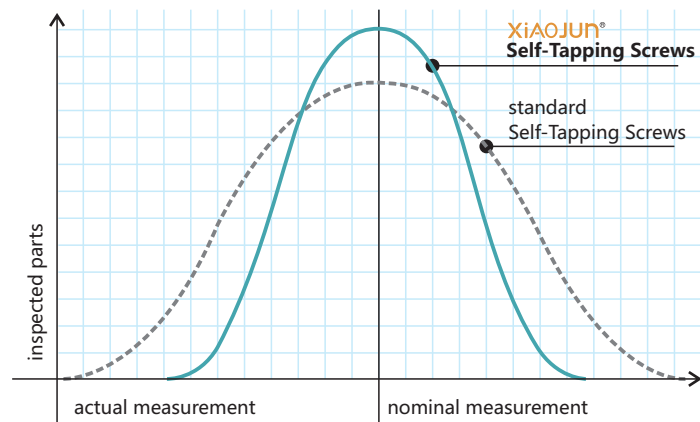
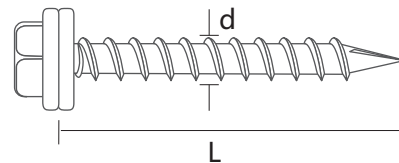
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	Wafer	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#10-16 M4.8	5/8"	16	#2	1.0 - 2.0
	7/8"	22	#2	1.0 - 2.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0
#10-24 M4.8	5/8"	16	#2	1.0 - 2.0
	7/8"	22	#2	1.0 - 2.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0

Unslotted Hex Washer Head



XiAOJUN® Suggested use for self starting in thin (.015-.050 thick) metal or resin-filled plywood.



Material



Carbon Steel



Stainless Steel

Point



Type-A



Type-AB

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



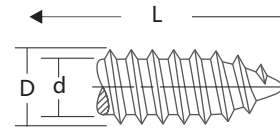
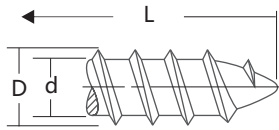
Magni



Climaseal



Dacromet



THREADS FOR SELF-TAPPING SCREWS TYPE A										ANSI B18.6.4
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		These Lengths or Shorter Have AB Threads			
			Max	Min	Max	Min	90o Heads	Csk Heads		
6	0.1380	18	.141	.136	.102	.096	1/4	5/16	24	
7	0.1510	16	.158	.152	.114	.108	5/16	3/8	30	
8	0.1640	15	.168	.162	.123	.116	3/8	7/16	39	
10	0.1900	12	.194	.188	.133	.126	3/8	1/2	48	
12	0.2160	11	.221	.215	.162	.155	7/16	9/16	83	
14	0.2420	10	.254	.248	.185	.178	½	5/8	125	
20	0.3200	9	.333	.327	.234	.226	11/16	13/16	250	
24	0.3720	9	.390	.383	.291	.282	3/4	1	492	
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05			

THREADS FOR SELF-TAPPING SCREWS TYPE AB										ASME B18.6.4-1998
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		Minimum Practical Screw Length			
			Max	Min	Max	Min	90o Heads	Csk Heads		
2	.0860	32	.088	.082	.064	.060	3/16	7/32	4	
3	.0990	28	.101	.095	.075	.071	3/16	1/4	9	
4	.1120	24	.114	.108	.086	.082	7/32	9/32	13	
5	.1250	20	.130	.123	.094	.090	1/4	5/16	18	
6	.1380	20	.139	.132	.104	.099	9/32	11/32	24	
7	.1510	19	.154	.147	.115	.109	5/16	3/8	30	
8	.1640	18	.166	.159	.122	.116	5/16	3/8	39	
10	.1900	16	.189	.182	.141	.135	3/8	7/16	56	
12	.2160	14	.215	.208	.164	.157	7/16	21/32	88	
1/4	.2500	14	.246	.237	.192	.185	1/2	19/32	142	
5/16	.3125	12	.315	.306	.244	.236	5/8	3/4	290	
3/8	.3750	12	.380	.371	.309	.299	3/4	29/32	590	
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05			

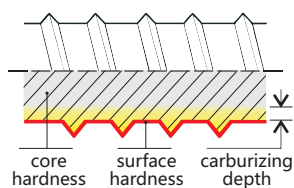
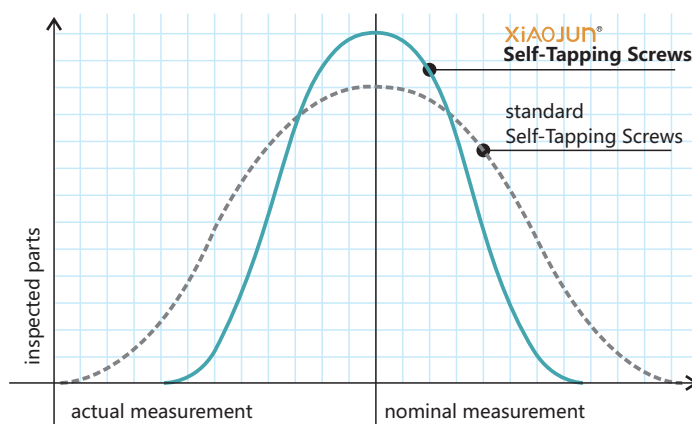
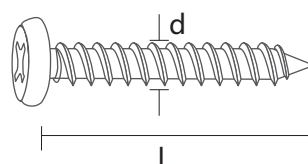
Description	A thread forming tapping screw with wider spaced threads than a Type-AB and a gimlet point
Applications/Advantages	For self starting in thin (.015-.050 thick) metal or resin-filled plywood. 18-8 Stainless steel tapping screws may be used in applications which require general atmospheric corrosion resistance. Fastening stainless steel parts to aluminum or steel can cause a type of corrosion known as a galvanic couple in some environments.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: Austenitic 18-8 stainless steel
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for information on plating of steel screws.

Description	A thread forming tapping screw with spaced threads and a gimlet point
Applications/Advantages	For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: 18-8 stainless steel.
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 4 thru 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for plating information.

Phillips Pan Head



XiAOJUN® Suggested use for self starting in thin (.015-.050 thick) metal or resin-filled plywood.



Material



Carbon Steel



Stainless Steel

Point



Type-A



Type-AB

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



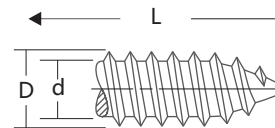
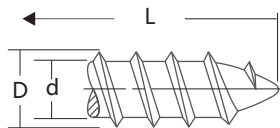
Magni



Climaseal



Dacromet



THREADS FOR SELF-TAPPING SCREWS TYPE A										ANSI B18.6.4
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		These Lengths or Shorter Have AB Threads			
			Max	Min	Max	Min	90o Heads	Csk Heads		
6	0.1380	18	.141	.136	.102	.096	1/4	5/16	24	
7	0.1510	16	.158	.152	.114	.108	5/16	3/8	30	
8	0.1640	15	.168	.162	.123	.116	3/8	7/16	39	
10	0.1900	12	.194	.188	.133	.126	3/8	1/2	48	
12	0.2160	11	.221	.215	.162	.155	7/16	9/16	83	
14	0.2420	10	.254	.248	.185	.178	½	5/8	125	
20	0.3200	9	.333	.327	.234	.226	11/16	13/16	250	
24	0.3720	9	.390	.383	.291	.282	3/4	1	492	
Tolerance on Length				Up to 1" Incl.: ±0.03				Over 1": ±0.05		

THREADS FOR SELF-TAPPING SCREWS TYPE AB										ASME B18.6.4-1998
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		Minimum Practical Screw Length			
			Max	Min	Max	Min	90o Heads	Csk Heads		
2	.0860	32	.088	.082	.064	.060	3/16	7/32	4	
3	.0990	28	.101	.095	.075	.071	3/16	1/4	9	
4	.1120	24	.114	.108	.086	.082	7/32	9/32	13	
5	.1250	20	.130	.123	.094	.090	1/4	5/16	18	
6	.1380	20	.139	.132	.104	.099	9/32	11/32	24	
7	.1510	19	.154	.147	.115	.109	5/16	3/8	30	
8	.1640	18	.166	.159	.122	.116	5/16	3/8	39	
10	.1900	16	.189	.182	.141	.135	3/8	7/16	56	
12	.2160	14	.215	.208	.164	.157	7/16	21/32	88	
1/4	.2500	14	.246	.237	.192	.185	1/2	19/32	142	
5/16	.3125	12	.315	.306	.244	.236	5/8	3/4	290	
3/8	.3750	12	.380	.371	.309	.299	3/4	29/32	590	
Tolerance on Length				Up to 1" Incl.: ±0.03				Over 1": ±0.05		

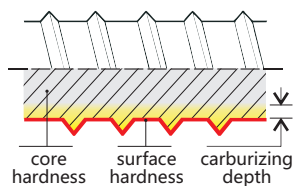
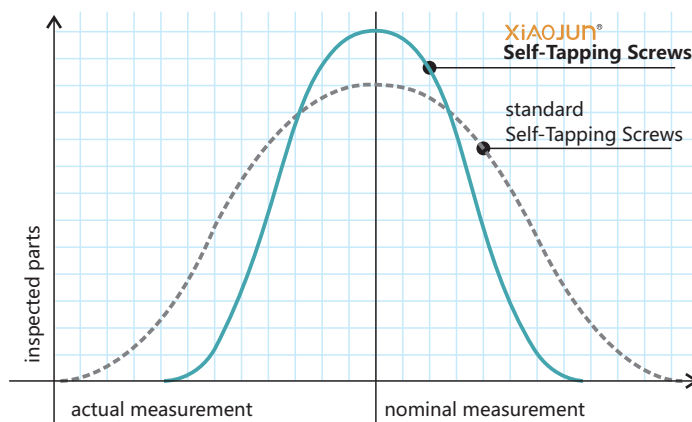
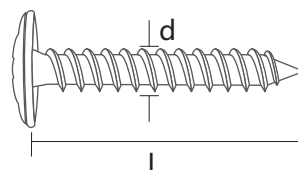
Description	A thread forming tapping screw with wider spaced threads than a Type-AB and a gimlet point
Applications/Advantages	For self starting in thin (.015-.050 thick) metal or resin-filled plywood. 18-8 Stainless steel tapping screws may be used in applications which require general atmospheric corrosion resistance. Fastening stainless steel parts to aluminum or steel can cause a type of corrosion known as a galvanic couple in some environments.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: Austenitic 18-8 stainless steel
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for information on plating of steel screws.

Description	A thread forming tapping screw with spaced threads and a gimlet point
Applications/Advantages	For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: 18-8 stainless steel.
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 4 thru 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for plating information.

Phillips Truss Head



XiAOJUN® Suggested use for self starting in thin (.015-.050 thick) metal or resin-filled plywood.



Material



Carbon Steel



Stainless Steel

Point



Type-A



Type-AB

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



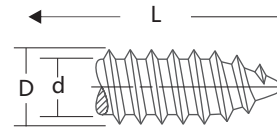
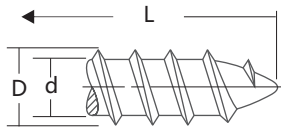
Magni



Climaseal



Dacromet



THREADS FOR SELF-TAPPING SCREWS TYPE A										ANSI B18.6.4	
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)		
			Major Diameter		Minor Diameter		These Lengths or Shorter Have AB Threads				
			Max	Min	Max	Min	90o Heads	Csk Heads			
6	0.1380	18	.141	.136	.102	.096	1/4	5/16	24		
7	0.1510	16	.158	.152	.114	.108	5/16	3/8	30		
8	0.1640	15	.168	.162	.123	.116	3/8	7/16	39		
10	0.1900	12	.194	.188	.133	.126	3/8	1/2	48		
12	0.2160	11	.221	.215	.162	.155	7/16	9/16	83		
14	0.2420	10	.254	.248	.185	.178	½	5/8	125		
20	0.3200	9	.333	.327	.234	.226	11/16	13/16	250		
24	0.3720	9	.390	.383	.291	.282	3/4	1	492		
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05				

THREADS FOR SELF-TAPPING SCREWS TYPE AB										ASME B18.6.4-1998
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		Minimum Practical Screw Length			
			Max	Min	Max	Min	90o Heads	Csk Heads		
2	.0860	32	.088	.082	.064	.060	3/16	7/32	4	
3	.0990	28	.101	.095	.075	.071	3/16	1/4	9	
4	.1120	24	.114	.108	.086	.082	7/32	9/32	13	
5	.1250	20	.130	.123	.094	.090	1/4	5/16	18	
6	.1380	20	.139	.132	.104	.099	9/32	11/32	24	
7	.1510	19	.154	.147	.115	.109	5/16	3/8	30	
8	.1640	18	.166	.159	.122	.116	5/16	3/8	39	
10	.1900	16	.189	.182	.141	.135	3/8	7/16	56	
12	.2160	14	.215	.208	.164	.157	7/16	21/32	88	
1/4	.2500	14	.246	.237	.192	.185	1/2	19/32	142	
5/16	.3125	12	.315	.306	.244	.236	5/8	3/4	290	
3/8	.3750	12	.380	.371	.309	.299	3/4	29/32	590	
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05			

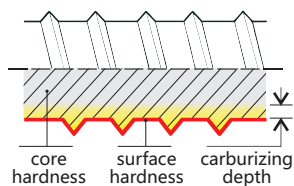
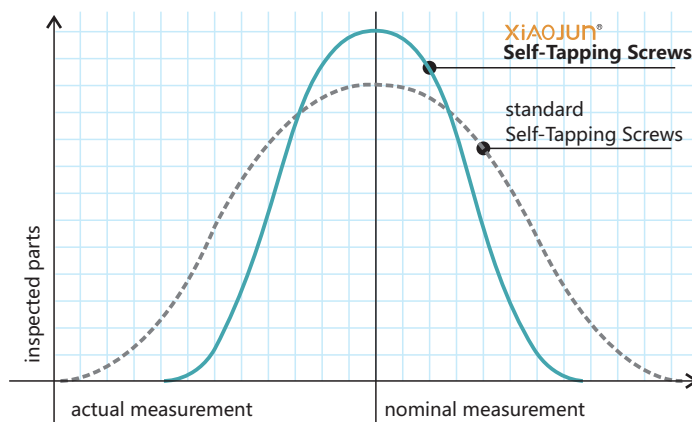
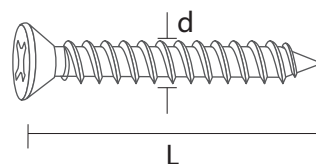
Description	A thread forming tapping screw with wider spaced threads than a Type-AB and a gimlet point
Applications/Advantages	For self starting in thin (.015-.050 thick) metal or resin-filled plywood. 18-8 Stainless steel tapping screws may be used in applications which require general atmospheric corrosion resistance. Fastening stainless steel parts to aluminum or steel can cause a type of corrosion known as a galvanic couple in some environments.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: Austenitic 18-8 stainless steel
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for information on plating of steel screws.

Description	A thread forming tapping screw with spaced threads and a gimlet point
Applications/Advantages	For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: 18-8 stainless steel.
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 4 thru 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for plating information.

Phillips Countersunk Head



XiAOJUN® Suggested use for self starting in thin (.015-.050 thick) metal or resin-filled plywood.



Material



Carbon Steel



Stainless Steel

Point



Type-A



Type-AB

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



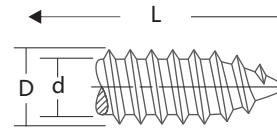
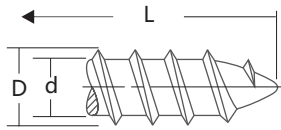
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Climaseal



Dacromet



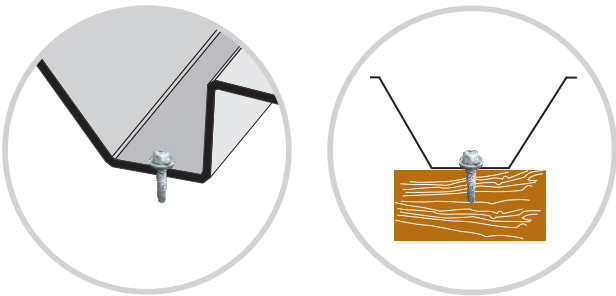
THREADS FOR SELF-TAPPING SCREWS TYPE A										ANSI B18.6.4	
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)		
			Major Diameter		Minor Diameter		These Lengths or Shorter Have AB Threads				
			Max	Min	Max	Min	90o Heads	Csk Heads			
6	0.1380	18	.141	.136	.102	.096	1/4	5/16	24		
7	0.1510	16	.158	.152	.114	.108	5/16	3/8	30		
8	0.1640	15	.168	.162	.123	.116	3/8	7/16	39		
10	0.1900	12	.194	.188	.133	.126	3/8	1/2	48		
12	0.2160	11	.221	.215	.162	.155	7/16	9/16	83		
14	0.2420	10	.254	.248	.185	.178	½	5/8	125		
20	0.3200	9	.333	.327	.234	.226	11/16	13/16	250		
24	0.3720	9	.390	.383	.291	.282	3/4	1	492		
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05				

THREADS FOR SELF-TAPPING SCREWS TYPE AB										ASME B18.6.4-1998
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		Minimum Practical Screw Length			
			Max	Min	Max	Min	90o Heads	Csk Heads		
2	.0860	32	.088	.082	.064	.060	3/16	7/32	4	
3	.0990	28	.101	.095	.075	.071	3/16	1/4	9	
4	.1120	24	.114	.108	.086	.082	7/32	9/32	13	
5	.1250	20	.130	.123	.094	.090	1/4	5/16	18	
6	.1380	20	.139	.132	.104	.099	9/32	11/32	24	
7	.1510	19	.154	.147	.115	.109	5/16	3/8	30	
8	.1640	18	.166	.159	.122	.116	5/16	3/8	39	
10	.1900	16	.189	.182	.141	.135	3/8	7/16	56	
12	.2160	14	.215	.208	.164	.157	7/16	21/32	88	
1/4	.2500	14	.246	.237	.192	.185	1/2	19/32	142	
5/16	.3125	12	.315	.306	.244	.236	5/8	3/4	290	
3/8	.3750	12	.380	.371	.309	.299	3/4	29/32	590	
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05			

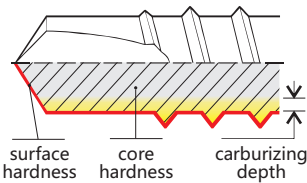
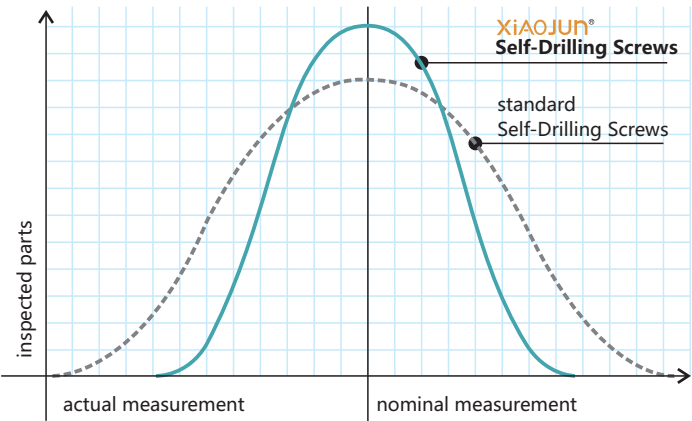
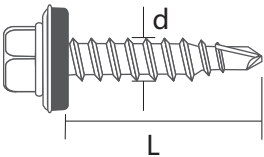
Description	A thread forming tapping screw with wider spaced threads than a Type-AB and a gimlet point
Applications/Advantages	For self starting in thin (.015-.050 thick) metal or resin-filled plywood. 18-8 Stainless steel tapping screws may be used in applications which require general atmospheric corrosion resistance. Fastening stainless steel parts to aluminum or steel can cause a type of corrosion known as a galvanic couple in some environments.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: Austenitic 18-8 stainless steel
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for information on plating of steel screws.

Description	A thread forming tapping screw with spaced threads and a gimlet point
Applications/Advantages	For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: 18-8 stainless steel.
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 4 thru 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for plating information.

Bi-Metal
Hex Washer Head



XiAOJUN® Suggested drill point #3 maximum drill capacity of 5mm and drill point #5 maximum drill capacity of 12mm



Material



Bi-Metal

Plated



White Zinc-plated



Yellow Zinc-plated

Point



Drill Point #3



Drill Point #5

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- For medium duty purpose
- Roof deck to steel framing
- Accessories to steel framing

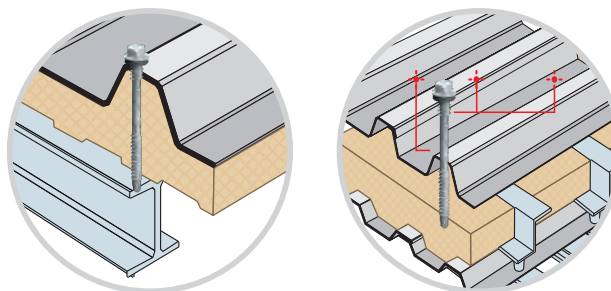
Features

- Precise cutting edges to improve drill performance with less effort
- Point to thread design maximize pullout performance and minimizes backout

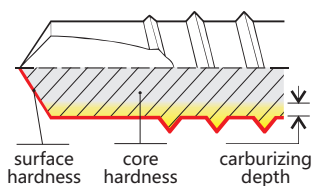
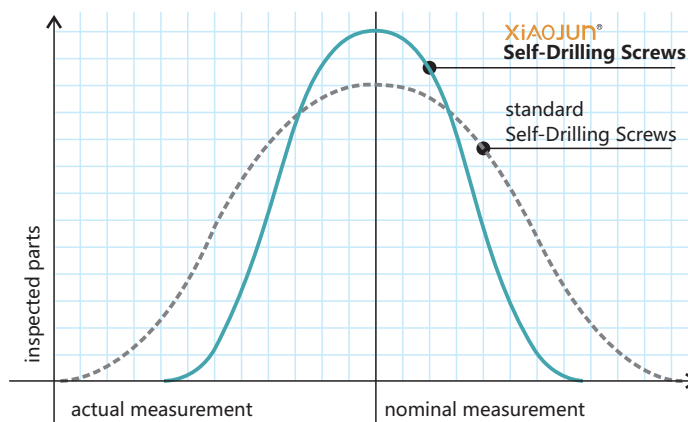
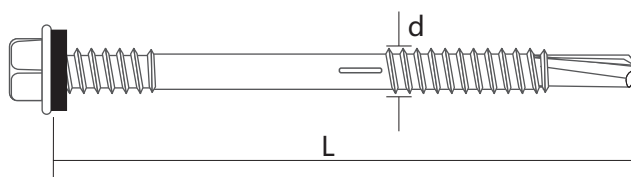
Specifications			
Drive Socket	3/8"	Loading Bearing Length [Inches]	0.380"
Loading Bearing Length [mm]	Hex9.7	Product Type	Self-drilling screw
Diameter	#14	Diameter [mm]	6.3 mm
Drill Capacity Max [Inches]	0.237"	Drill Capacity Range [mm]	6mm
Drill Point	Xiaojun®-#3 drill point	Head Style	Hex Washer head
Material	Grade 5 Carbon steel	Thread Major Dia	0.248"
Thread Major Dia [mm]	6.3 mm	Thread Minor Dia	0.2"
Thread Minor Dia [mm]	5.1mm	Threads Per Inch	14
Washer	EPDM Washer		

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#12-14 M5.5	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
#14-14 M6.3	3/4"	19	#3	2.0 - 4.0
	1"	25	#3	2.0 - 4.0
	1-1/4"	32	#3	2.0 - 4.0
	1-1/2"	38	#3	2.0 - 4.0
	2"	50	#3	2.0 - 4.0
	2-1/2"	63	#3	2.0 - 4.0
	3"	75	#3	2.0 - 4.0
	4"	100	#3	2.0 - 4.0
	5"	125	#3	2.0 - 4.0

Knurled Double Thread Hex Washer Head



XiAOJUN® Suggested drill point #3 maximum drill capacity of 5mm and drill point #5 maximum drill capacity of 12mm



Material



Carbon Steel



Stainless Steel



Bi-Metal

Point



Drill Point #3



Drill Point #5

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Roof and wall panel over rigid insulation to steel framing
- Roof panel over spacer block and insulation to eaves purlin

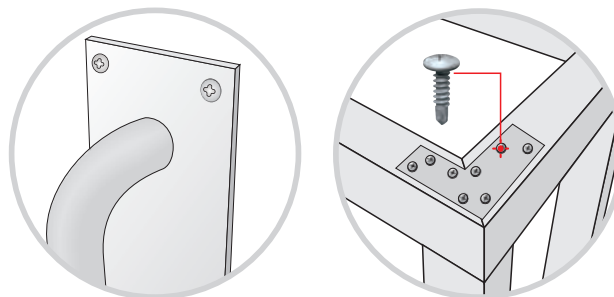
Features

- Double thread for the purpose using exterior roofing environment
- High thread under the head prevents panel stripout
- Point to thread design maximizes pullout performance and minimizes backout

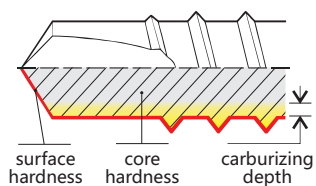
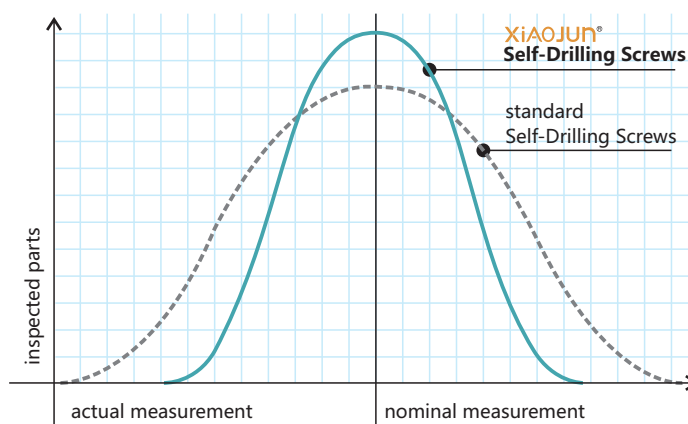
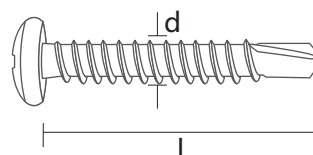
Specifications			
Drive Socket	3/8"	Loading Bearing Length [Inches]	0.380"
Loading Bearing Length [mm]	Hex9.7	Product Type	Self-drilling screw
Diameter	#14	Diameter [mm]	6.3 mm
Drill Capacity Max [Inches]	0.237"	Drill Capacity Range [mm]	6mm
Drill Point	Xiaojun®-#3 drill point	Head Style	Hex Washer head
Material	Grade 5 Carbon steel	Thread Major Dia	0.248"
Thread Major Dia [mm]	6.3 mm	Thread Minor Dia	0.2"
Thread Minor Dia [mm]	5.1mm	Threads Per Inch	14
Washer	EPDM rubber		

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#14-14 / #12-24 M6.3 / M5.5	2-3/8"	60	#5	12.0
	3-5/32"	80	#5	12.0
	4"	100	#5	12.0
	5"	125	#5	12.0
	6"	150	#5	12.0
	2-3/8"	60	#5	12.0
	3-5/32"	80	#5	12.0
	4"	100	#5	12.0
	5"	125	#5	12.0
	6"	150	#5	12.0
	7"	175	#5	12.0
	8"	200	#5	12.0
	10"	250	#5	12.0
	11"	275	#5	12.0

Phillips Pan Head



XiAOJUN® Suggested drill point #2 maximum drill capacity of 2mm and drill point #3 maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Point



Drill Point #2



Drill Point #3

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Skin sheet to steel
- Residential steel frame construction
- For light duty purpose
- Suitable for stitching 1 thick & 1 thin steel plate

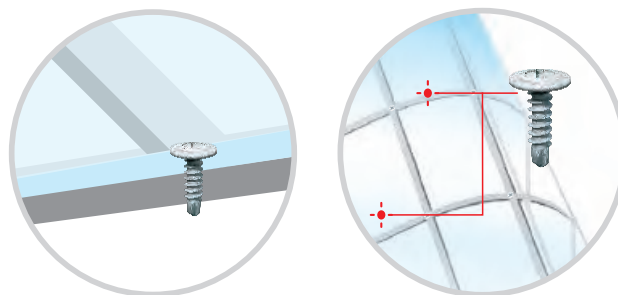
Features

- Pan head design on puorst using
- Non-walking point provides fast material engagement

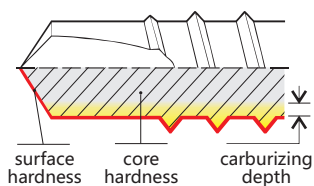
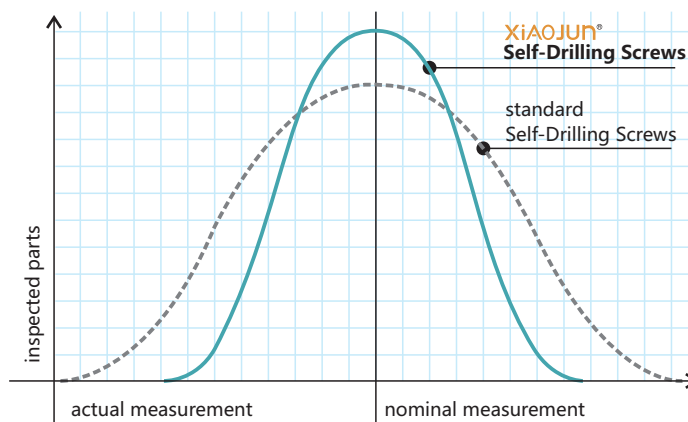
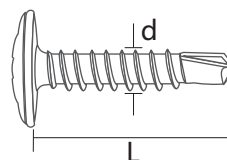
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	Pan	Material	Stainless steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#6-20 M3.5	3/8"	10	#2	0.5 - 1.0
	1/2"	13	#2	0.5 - 1.0
	5/8"	16	#2	0.5 - 1.0
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-1/2"	38	#2	1.0 - 2.0
	1/2"	13	#2	1.0 - 2.0
#10-16 M4.8	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#3	1.0 - 3.0
	1-1/4"	32	#3	1.0 - 3.0
	1-1/2"	38	#3	1.0 - 3.0
	2"	50	#3	1.0 - 3.0
	1/2"	13	#2	1.0 - 2.0

Phillips Truss Head



XiAOJUN® Suggested drill point #3 maximum drill capacity of 5mm



Material



Carbon Steel



Stainless Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Point



Drill Point #3

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Residential steel frame construction
- For using in object like polycarbonate sheet, shadow cover

Features

- Truss head design on purpose using
- Non-walking point provides fast material engagement

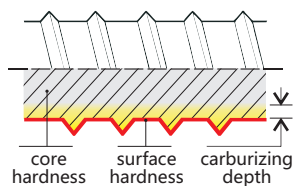
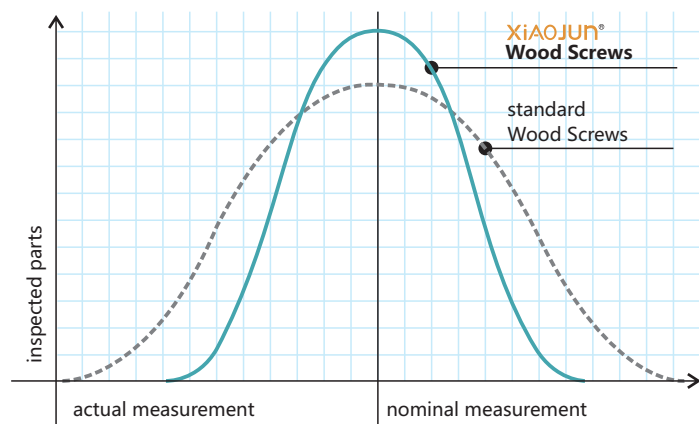
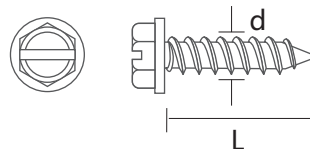
Specifications			
Drive Socket	#2 Phillips	Product Type	Self-drilling screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	XiaoJun®-#2 drill point
Head Style	Truss	Material	Stainless steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Length (mm)	Drill Point (m/m)	Drill Capacity (m/m)
#8-18 M4.2	1/2"	13	#2	1.0 - 2.0
	5/8"	16	#2	1.0 - 2.0
	3/4"	19	#2	1.0 - 2.0
	1"	25	#2	1.0 - 2.0
	1-1/4"	32	#2	1.0 - 2.0
	1-5/8"	41	#2	1.0 - 2.0

Slotted Hex Washer Head



XiAOJUN® Suggested use for self starting in thin (.015-.050 thick) metal or resin-filled plywood.



Material



Carbon Steel



Stainless Steel

Point



Type-A



Type-AB

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



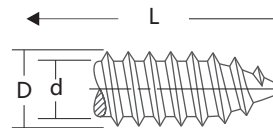
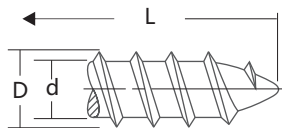
Magni



Climaseal



Dacromet



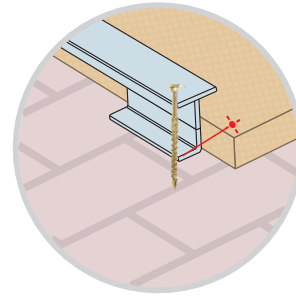
THREADS FOR SELF-TAPPING SCREWS TYPE A										ANSI B18.6.4
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		These Lengths or Shorter Have AB Threads			
			Max	Min	Max	Min	90o Heads	Csk Heads		
6	0.1380	18	.141	.136	.102	.096	1/4	5/16	24	
7	0.1510	16	.158	.152	.114	.108	5/16	3/8	30	
8	0.1640	15	.168	.162	.123	.116	3/8	7/16	39	
10	0.1900	12	.194	.188	.133	.126	3/8	1/2	48	
12	0.2160	11	.221	.215	.162	.155	7/16	9/16	83	
14	0.2420	10	.254	.248	.185	.178	½	5/8	125	
20	0.3200	9	.333	.327	.234	.226	11/16	13/16	250	
24	0.3720	9	.390	.383	.291	.282	3/4	1	492	
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05			

THREADS FOR SELF-TAPPING SCREWS TYPE AB										ASME B18.6.4-1998
Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)	
			Major Diameter		Minor Diameter		Minimum Practical Screw Length			
			Max	Min	Max	Min	90o Heads	Csk Heads		
2	.0860	32	.088	.082	.064	.060	3/16	7/32	4	
3	.0990	28	.101	.095	.075	.071	3/16	1/4	9	
4	.1120	24	.114	.108	.086	.082	7/32	9/32	13	
5	.1250	20	.130	.123	.094	.090	1/4	5/16	18	
6	.1380	20	.139	.132	.104	.099	9/32	11/32	24	
7	.1510	19	.154	.147	.115	.109	5/16	3/8	30	
8	.1640	18	.166	.159	.122	.116	5/16	3/8	39	
10	.1900	16	.189	.182	.141	.135	3/8	7/16	56	
12	.2160	14	.215	.208	.164	.157	7/16	21/32	88	
1/4	.2500	14	.246	.237	.192	.185	1/2	19/32	142	
5/16	.3125	12	.315	.306	.244	.236	5/8	3/4	290	
3/8	.3750	12	.380	.371	.309	.299	3/4	29/32	590	
Tolerance on Length			Up to 1" Incl.: ±0.03				Over 1": ±0.05			

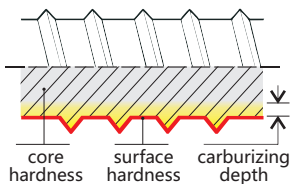
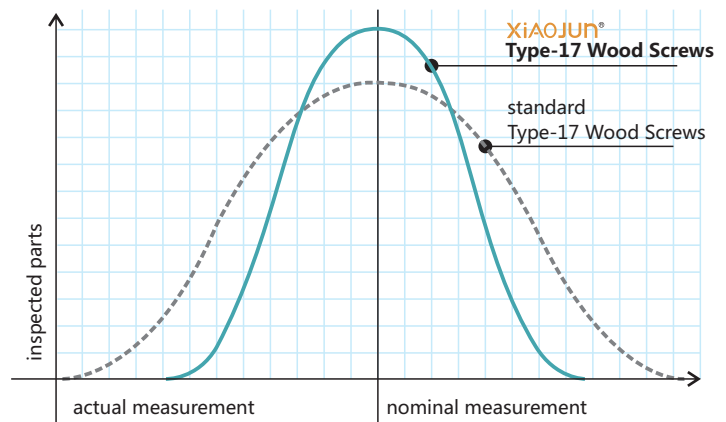
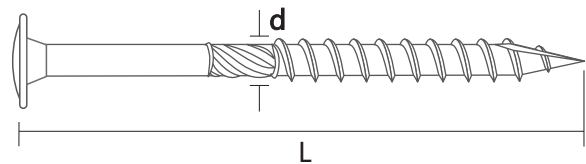
Description	A thread forming tapping screw with wider spaced threads than a Type-AB and a gimlet point
Applications/Advantages	For self starting in thin (.015-.050 thick) metal or resin-filled plywood. 18-8 Stainless steel tapping screws may be used in applications which require general atmospheric corrosion resistance. Fastening stainless steel parts to aluminum or steel can cause a type of corrosion known as a galvanic couple in some environments.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: Austenitic 18-8 stainless steel
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for information on plating of steel screws.

Description	A thread forming tapping screw with spaced threads and a gimlet point
Applications/Advantages	For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials.
Material	Steel: AISI 1016 - 1024 or equivalent steel. Stainless: 18-8 stainless steel.
Heat Treatment (Steel only)	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.
Surface Hardness	Steel: Rockwell C45 minimum
Case Depth (Steel only)	No. 4 thru 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011
Core Hardness (after tempering)	Steel: Rockwell C28 - 38
Plating	See Appendix-A for plating information.

Torx Washer Head Knurled



XiAOJUN® Suggested use Type-17 suitable any timber to timber applications



Material



Carbon Steel



Stainless Steel

Point



Type-17

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Type 17 timber screws are suitable for fixing metal roofing into timber battens (both hardwood and softwood)

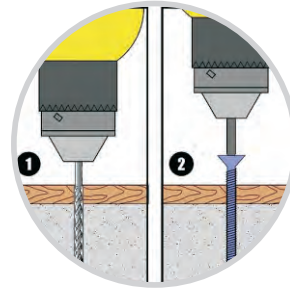
Features

- Fast and Easy application into both Hardwood and Softwood battens
- Inner-roof Corrosion Protection with Shank Guard feature which prevents the scratching and scouring of the fastener shank that can happen during installation.

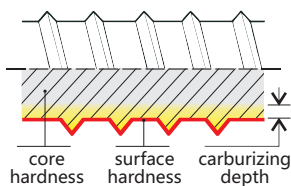
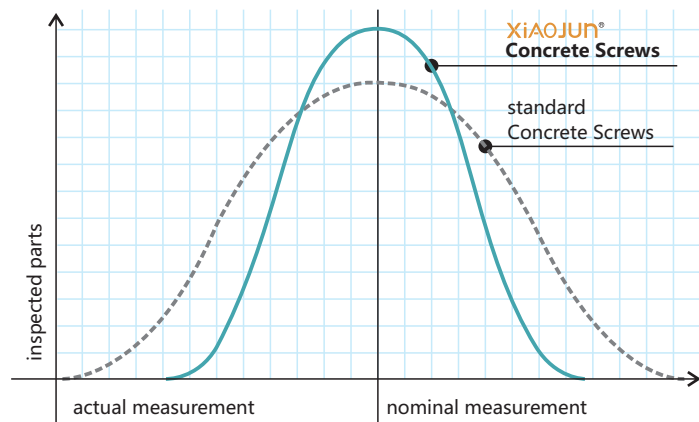
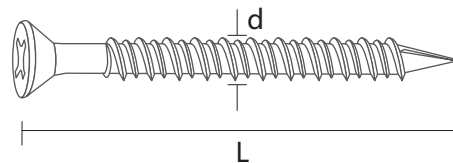
Specifications			
Drive Socket	Torx	Product Type	Wood screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	Xiaojun®-Type 17
Head Style	Wafer	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

PRODUCT	GAUGE	THREAD	LENGTH	HEAD TYPE	SEAL
Type 17	12	11	50mm	Washer Head	With seal
Type 17	12	11	50mm	Washer Head	With Seal
Type 17	12	11	65mm	Washer Head	With seal
Type 17	14	10	50mm	Washer Head	With seal
Type 17	14	10	50mm	Washer Head	With Seal
Type 17	14	10	50mm	Washer Head	With seal
Type 17	14	10	65mm	Washer Head	With seal
Type 17	14	10	65mm	Washer Head	With Seal
Type 17	14	10	75mm	Washer Head	With seal
Type 17	14	10	90mm	Washer Head	With seal

Phillips Countersunk Head Hi-Low



XiAOJUN® Suggested application maximum thickness of material is 0.6 mm



Material



Carbon Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Thread



Hi-Low Thread

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Concrete material fixtures
- Flexible flashing
- Suitable for soft brick & masonry work

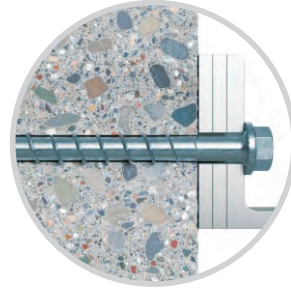
Features

- Can be using in exterior environment
- Interl washer design provides more bearing surface
- Hi-lo thread provides smooth power for drilling
- Pre-drilled hole are requested

Specifications			
Drive Socket	#2 Phillips	Product Type	Concret screw
Diameter	#10	Diameter [mm]	4.72 mm
Drill Capacity Max [Inches]	0.150"	Drill Point	Xiaojun®-#2 drill point
Head Style	CSK	Material	Carbon steel
Thread Major Dia	0.186"	Thread Major Dia [mm]	4.72 mm
Thread Minor Dia	0.138"	Thread Minor Dia [mm]	3.51mm
Threads Per Inch	16	Washer	No washer

Size	Length (inch)	Dia. x Length (m/m)	Drill Point (m/m)
#14 M6.3	2-3/8"	60	Diamond
	3"	75	Diamond
	3-5/32"	80	Diamond
	3-1/2"	90	Diamond
	4"	100	Diamond
	5"	125	Diamond
	5-1/2"	140	Diamond
	6-5/16"	160	Diamond
	7-1/8"	180	Diamond
	7-7/8"	200	Diamond

Unslotted Hex Flange Head

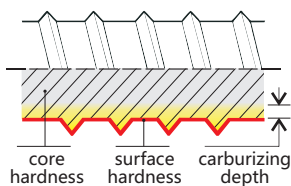
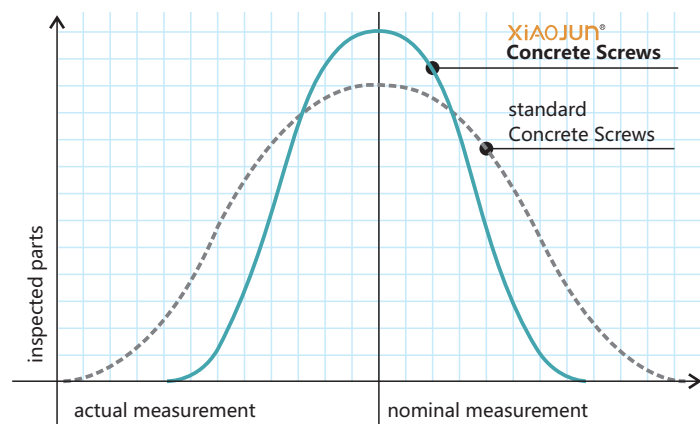
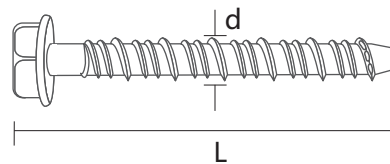


XIAOJUN® Suggested Installing with concrete screws are one of the easiest and quickest ways to install on concrete and can be achieved in 3 easy steps:

Step 1: Drill hole.

Step 2: Clean out hole.

Step 3: Drive in the screw!



Material



Carbon Steel

Plated



White Zinc-plated



Yellow Zinc-plated



Chrome-plated



Nickel-plated

Coating



Ruspert



Magni



Climaseal



Dacromet

Applications

- Concrete material fixtures
- Flexible flashing
- Suitable for soft brick & masonry work

Features

- Can be using in exterior environment
- Interl washer design provides more bearing surface
- Hi-lo thread provides smooth power for drilling
- Pre-drilled hole are requested

Specifications			
Drive Socket	3/8"	Loading Bearing Length [Inches]	0.380"
Loading Bearing Length [mm]	Hex9.7	Product Type	Concrete Strew
Diameter	#14	Diameter [mm]	6.3 mm
Drill Capacity Max [Inches]	0.237"	Drill Capacity Range [mm]	6mm
Drill Point	Xiaojun®-#3 drill point	Head Style	Hex Flange head
Material	Grade 5 Carbon steel	Thread Major Dia	0.248"
Thread Major Dia [mm]	6.3 mm	Thread Minor Dia	0.2"
Thread Minor Dia [mm]	5.1mm	Threads Per Inch	14
Washer	No washer		

Size	Length (inch)	Dia. x Length (m/m)	Drill Point (m/m)
#14 M6.3	2-3/8"	60	Diamond
	3"	75	Diamond
	3-5/32"	80	Diamond
	3-1/2"	90	Diamond
	4"	100	Diamond
	5"	125	Diamond
	5-1/2"	140	Diamond
	6-5/16"	160	Diamond
	7-1/8"	180	Diamond
	7-7/8"	200	Diamond

More Products of Stainless Steel Screws

XiAOJUN®

*Feel the Power
of the Screws*

Introduction:

Choose from **XiAOJUN®** selection of stainless steel screws in a wide range of styles and sizes.

We offer 304, 304L, 316, 316L, 410, 420, 435, 201grade stainless steel in stock and ready to ship.

Application:

XiAOJUN® Stainless steel screws can be used in a wide variety of applications. From various building projects to construction, renovation, home improvement and DIY applications. They are particularly useful for building, decking and outdoor projects.





Environment Characteristics

To determine the type of environment, an inspection of building in the area is usually necessary

Very Severe Marine (ISO Category 5)



Includes off-shore areas and up to 100m from the high waterline of area with breaking surf.

Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head	☒		
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Moderate Marine (ISO Category 3)

Generally between 300m and 1000m from marine surf, although strong prevailing wind may extend this distance. Characterized by occasionally noticeable slight salt. Airborne salt present but not visible as haze.



Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head		▲	
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Severe Marine (ISO Category 4)



Generally between 100m from the beach front to approximately 300m inland. In high wind area may extend further inland depending on prevailing winds and geography of the area. Characterized by Strong salt structures generally a very noticeable deterioration of most building material is evident.

Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head	☒		
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Very Severe Industrial (ISO Category 5)

Characterized by heavy fall-out and emission from stacks and strong sulphur and smells. Generally very high rates of corrosion in most building structures is evident.



Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head		▲	
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Note : Warranty period is based on 20-years duration of constructions.

☒ not recommended ▲ no warranty ● available

Severe Industrial (ISO Category 4)

Characterized by fall-out and emission from stack sulphur and acid smell. Include only plant buildings themselves and any building immediately under stacks. Also includes buildings with high internal humidity and/or corrosion from operation within.



Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head		▲	
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Light Industrial/Urban (ISO Category 2-3)

This environment is widespread in industrial urban area, away from all environments listed above and typically more than 500m from heavy industrial fall-out or where small industrial lead to a moderate level of fall-out from small stacks etc.



Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head		▲	
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Note : Warranty period is based on 20-years duration of constructions.

Industrial (ISO Category 3)

Characterized by fall-out from adjoining severe industrial environments of were small industries lead to significant industrial fall-out. Generally includes other service buildings located near heavy industrial plants, including out-buildings of the plant itself.



Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc	☒		
Painted head		▲	
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

Mild Urban/Rural (ISO Category 1-2)

Always from all above environments and corrosive fall out with 2kms.

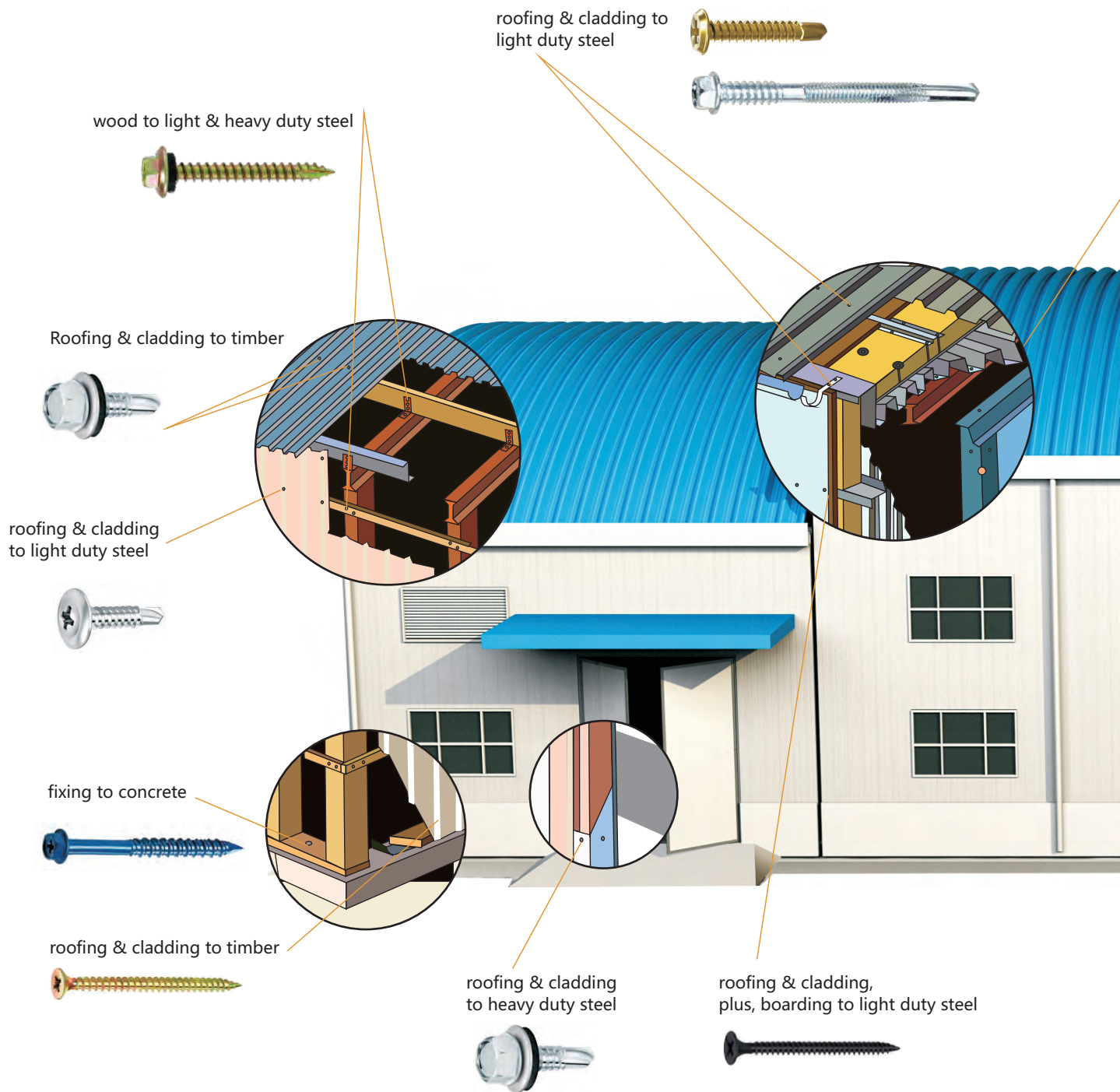


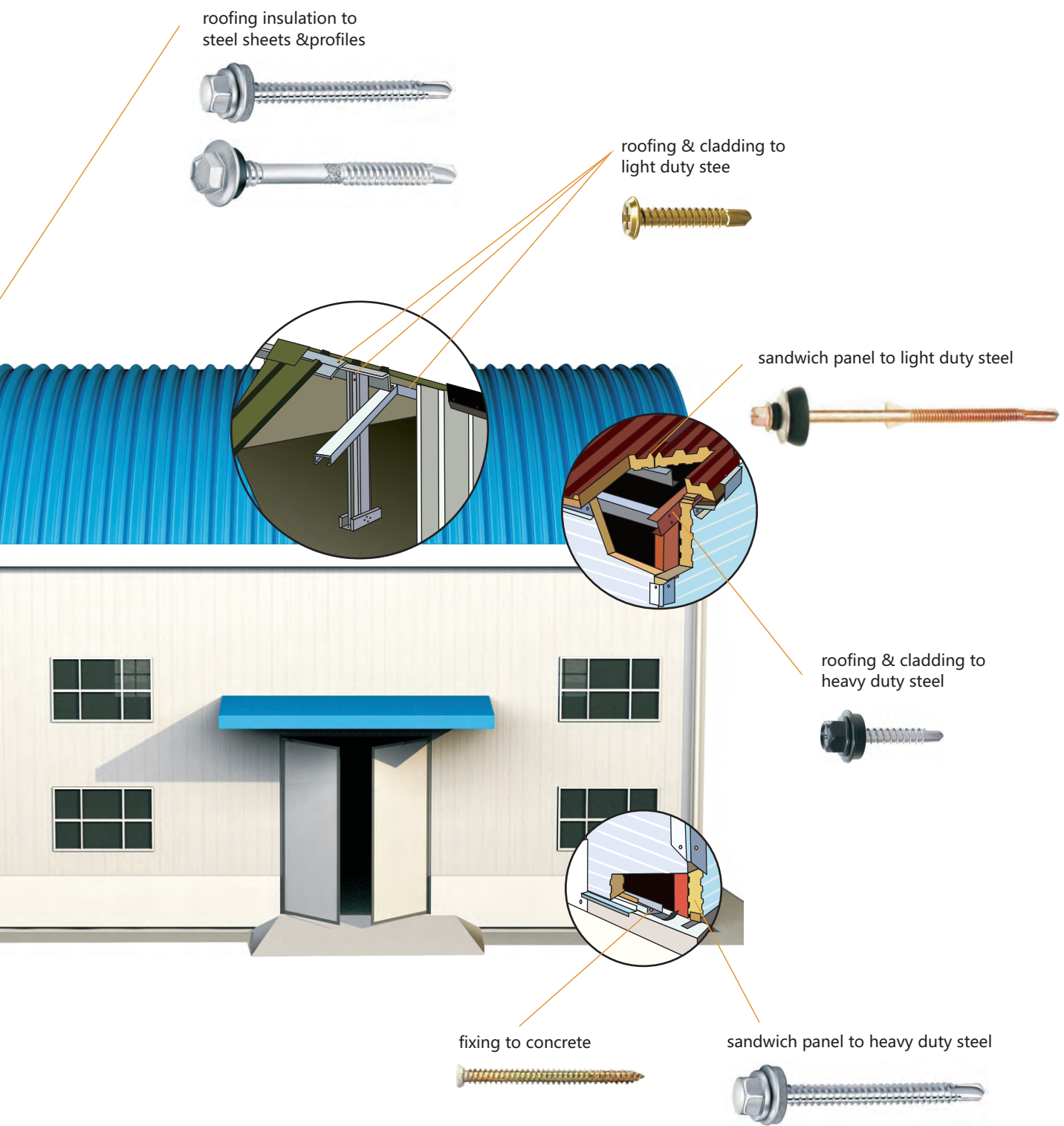
Warranty Periods	not recommended	no warranty	available
Zinc or yellow zinc		▲	
Painted head		▲	
410 Stainless steel		▲	
Anti-corrosion R3			●
Anti-corrosion R4			●
304 Stainless steel			●

☒ not recommended ▲ no warranty ● available

XIAOJUN®

Feel the Power of the Screws





410 Stainless Steel



























SUS410 Stainless Steel screws

Stainless steel fasteners are a natural choice with stainless steel building components.

Where possible, a fastener of similar or superior corrosion resistance to the component should be used.

Type 410 is a general-purpose martensitic stainless steel that is frequently used for fasteners.

Its resistance to corrosion is not as good as Type 304, but it is satisfactory for many architectural applications.

Pan Phillips	Countersunk Phillips	Hex Washer Head
 M4 x 13	 M4 x 13	 M4 x 13
 M4 x 16	 M4 x 16	 M4 x 16
 M4 x 19	 M4 x 19	 M4 x 19
 M5 x 13	 M5 x 16	 M4 x 25
 M5 x 16	 M5 x 19	 M5 x 16
 M5 x 19	 M5 x 25	 M5 x 19
 M5 x 25	 M5 x 32	 M5 x 25
 M5 x 32	 M5 x 38	 M5 x 32
 M5 x 38		 M5 x 38

Custom Options

All our products come in various sizes, styles and can be customized to fit your needs.

What Is Anti-corrosion R3 & R4?

Abstraction

Not solely the omnigenous usage of metal material or as the conductor medium be performed, that particularly issues which come into notice for the metal material are their exposure to every potential destruction and deteriorate environment hence enormous pecuniary loss resulted in.

Lately, statistics shows thereabouts 1million tons above narrated or relative. Therefore, the research of their protection has been the momentous task and the pressing need for engineers and scientists.

Surface Anti-corrosion Treatment

Means apply kinds of protection on the surface of metal to quarantine itself from the corrosives environment and restrain the progress of or reduce the adjoining between corrosive media and metal surface to avoid or mitigate the corrosion situation.

The Reason of Metal Corrosion

Produced by industrial pollution and plenty exhausted fume emission of vehicles, the gaseous, minute particle corrosiveness sulfides as well as chloride teemed within the air and made the major reason of metal eroding.

Anti-corrosion R3, Anti-corrosion R4

This advance technology now are all available to apply to screw & nuts, helps to defense the corrosion once exposure to the sever marine, industrial, critical and air pollution as well. To determine the type of usage and cost, we have contained total solution for your essential.

Typical appearance of heads of fasteners using the salt-spray test

Anti-corrosion R3 & R4 is a superior corrosion resistant fastener finish. When a fastener is treated with Anti-corrosion R3 & R4, its entire surface is covered with polymer coating not susceptible to oxidation. Anti-corrosion R3 & R4 outperform all other existing electro-plating and prevent corrosion caused by chemical reaction between dissimilar metals. Anti-corrosion R3 & R4 create an attractive, metallic-grey finish that provide an excellent base surface for color matching paint. It is compatible with all painted and metal-coated surface.

Anti-corrosion Fasteners Deemed to Comply

Self drilling screws shall exhibit the minimum properties appropriate to the intended usage as given in below.

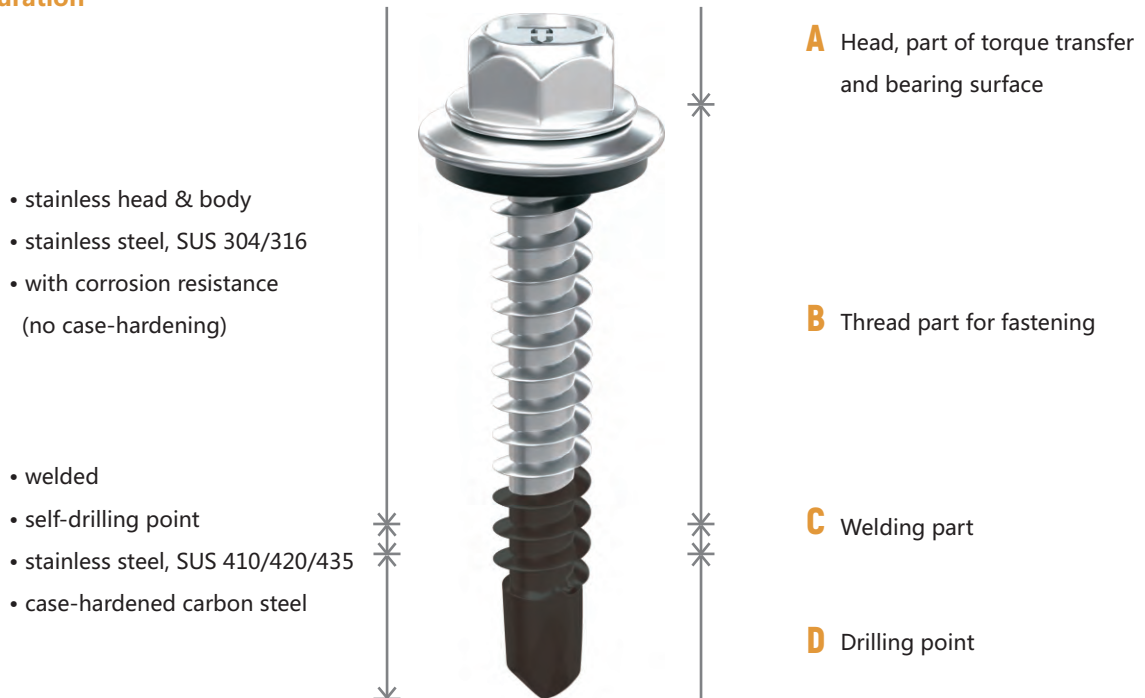
Anti-corrosion	Maximum Coating Porosity	Coating Type	Minimum Average Coating Thickness	Salt-spray Test
R3	30%	Mechanically plated Tin-Zinc	25μ	1000 hrs
R4	30%	Mechanically plated Tin-Zinc	45μ	1500 hrs

304/316 Bi-metal

SUS304 Bi-metal screws

combined together two parts by welding, the one consisting of a stainless head which shall be exposed air and a stainless shank which undergoes the full-stress after fastened into materials, and the another is a carbon steel hardened for self-drilling and self-tapping.

Configuration



Strength

- A - No case-hardening for keeping anti-corrosion high. Surface hardness 350HV
- B - Tensile stress value over A2 (700N/mm)
- C - Welding strength over the breaking values for torsion and tensile of part B
- D - Case-hardening for over 600HV



#12-24x1" (5.5x25mm)



#12-24x1-1/2" (5.5x38mm)



#12-24x2" (5.5x50mm)



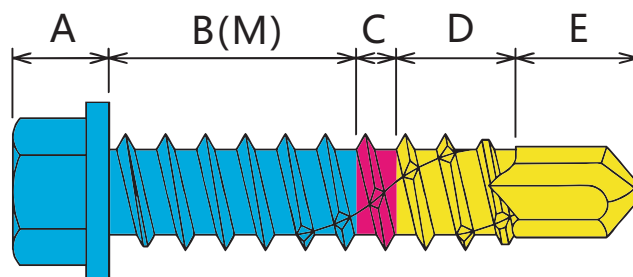
#12-24x2-1/2" (5.5x65mm)



#12-24x3" (5.5x75mm)

Basic Concept

XiAOJUN® screw combined together two parts by welding, the one consisting of a stainlesshead which shall be exposed air and a stainless shank which undergoes the pull-stress after fastened into materials, and the another is a carbon steel hardened for self-drilling and self-tapping.



Basic Configuration

- | | |
|---|--|
| A : Head part for torque transfer and bearing surface |) Stainless steel with corrosion resistance
(No case-hardening) |
| B : Thread part for fastening | |
| C : Welding part |) Case-hardened carbon steel |
| D : Thread part for tapping | |
| E : Drilling point | |

Basic strength

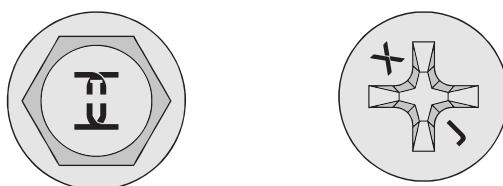
- A : No case-hardening for keeping anti-corrosion high, Surface hardness 350HV
 B : Tensile stress value over A2 (700N/mm)
 C : Welding strength over the breaking values for torsion and tensile of part B
 D : Case-hardening for over 600HVE : Case-hardening for over 600HV

Basic surface treatment

Ruspert silver about 8~12μ , Non-Chrome

Head marking

Basically, the marking is XJ. On Hex Head, each J placed reversely back to back and on Pan Head, XJ placed in symmetry diagonally. These head marks are registered.



Strength of XIAOJUN®

The stainless part of XIAOJUN® screws are manufactured with more than A2-70 strength

It consists of 2 sections divided with a hyphen. First section represents stainless steel classes, of which the alphabet indicates stainless steel materials, table 1, and the number chemical compound types, table 2, Second section represents strength classes and the two-digit number is tenth part of tensile strength of a completed product.

POINT

In other words, A2-70 is austenitic stainless, which is non-magnetic and high corrosion resistance, 18-8 stainless SUS-300 series, whose tensile strength is at over 700N/mm (700MPa)

Table 1

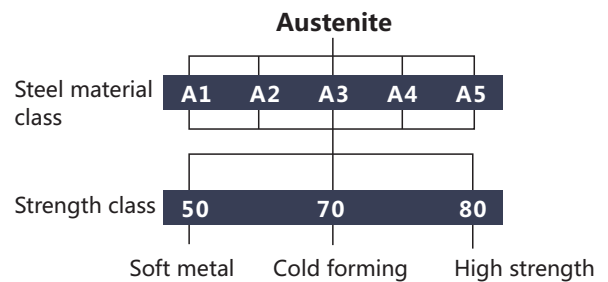
Steel material	Magnetism	Hardenability
A : Austenite	×	×
C : Martensite	○	○
F : Ferrite	○	×

Table 2

Chemical compounds of A2 (%)							
Ni	C	Si	Mn	P	S	Cr	CU
8~19	0.1	1	2	0.05	0.03	15~20	4

Chemical compounds of A4 (%)								
Ni	C	Si	Mn	P	S	Cr	CU	Mo
10~15	0.08	1	2	0.045	0.03	16~18.5	1	2~3

※ Values without range indicates the maximal ones.



Reference : JIS Handbook Fasteners & Screw Threads 2003

The material of XIAOJUN® screws is mostly XM7 which is equivalent to A2, 18-8 stainless. but if the cold-forming is not enough, the tensile strength gets no more than around 600N/mm (600MPa) and hence twisting and bending occurs during use. However, we produce XIAOJUN® screws at over 700N/mm (700MPa) with our special manufacturing know-how.

Therefore A2 stainless steel is of high corrosion resistance and used for kitchenware and equipments in an ordinary factory, but not suitable for use under such environments as contacting non-oxidized acid and chloride, such as swimming pool and sea. For such environments, A4 stainless steel, which is often used for food industry and shipbuilding industry, is recommended. A4 XIAOJUN® is available on all items on order.

Technical data of XIAOJUN®

Technical data of stainless parts "A" and "B"

Chemical Composition

Austenite SUS-305J1 (%)

Ni	C	Si	Mn	P	S	Cr
11.00~13.50	max 0.08	max 1.00	max 2.00	max 0.045	max 0.03	16.5~19.00

Austenite SUS-XM7 (%)

Ni	C	Si	Mn	P	S	Cr	Cu
8.50~13.50	max 0.08	max 1.00	max 2.00	max 0.045	max 0.03	17.0~19.00	3.0~4.0

Pull Out Value (N)

Thread Dia	Thickness 1.2mm	Thickness 1.6mm	Thickness 2.3mm	Thickness 3.2mm	Thickness 4.0mm	Thickness 6.0mm
4	3260	3618	5952	6702		
5		5490	6060	8624	7716	
5.5			6030	8022	10204	11532
6			6112	9662	10704	13732

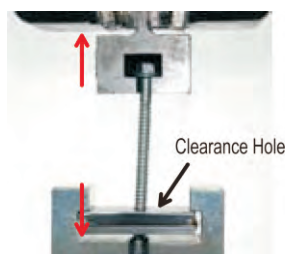
Tensile and Shear Strength ※Test Sheet :2.3mm (N)

Thread Dia	Tensile Strength	Shear Strength
4	6606	5194
5	8502	6256
5.6	11634	8042
6	15440	10732

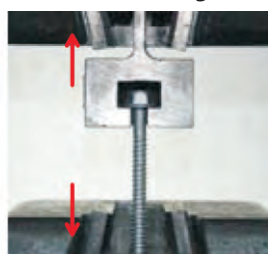
Torsion Strength (N.m)

Thread Dia	Torsion Strength
4	4.8
5	6.9
5.6	9.6
6	14.7

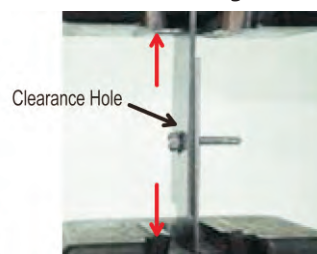
Pull-Out Value



Tensile Strength



Shear Strength



Torsion Strength



Clearance Hole For Pull-Out Test (mm)

Thread Dia	Clearance Hole Dia
4	4.4
5	5.4
5.6	5.9
6	6.4

Clearance Hole For Shearing Test (mm)

Thread Dia	Clearance Hole Dia
4	4.7
5	5.7
5.6	6.2
6	6.7

These are measured values, not guaranteed one.

Thread and drill point in carbon steel aren't concerned with the values.

Stainless strength for all screws over A2-70.

For anti-corrosion, hexavalent chromate treatment over zinc plating had been generally applied.

Hexavalent chromium has high corrosion resistance, however, on the other hand, there are hazardous natures that it causes dermatitis and tumor if contacting with your skin for a long time, and causes cancer if it is stored in a certain amount in your body.

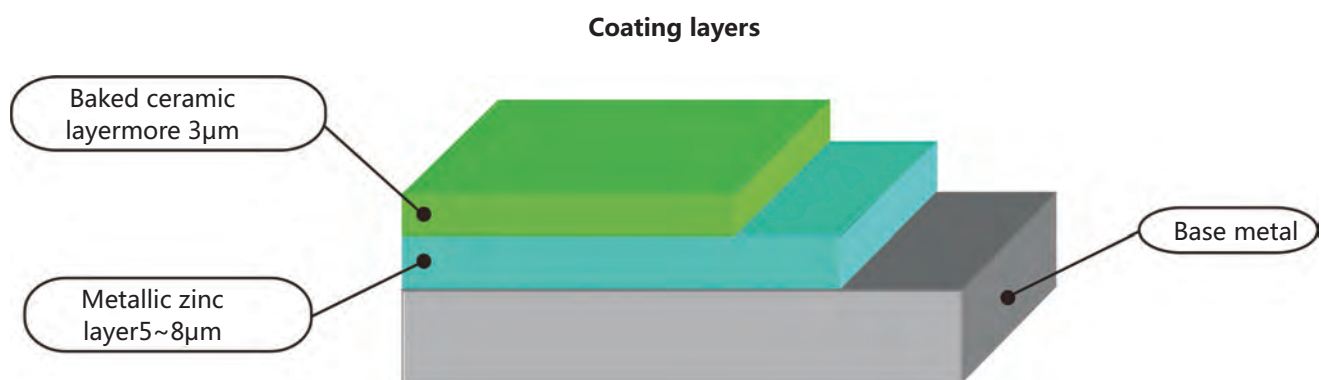
In fact, health hazard was reported because hexavalent chromium was absorbed into land through acid rain and contaminated groundwater. This became a social problem to be solved urgently.

In 2003, European Union nations issued RoHS directive and WEEE directive, which both restrict specified toxic substances. As a result, hexavalent chromium was gradually replaced with trivalent chromium in car and light electric appliance industries in Europe and movement towards the elimination of hexavalent chromium has been accelerating globally.

XiAOJUN® screw has as explained in this catalogue by now, the austenitic stainless shank and it contributes to economical use with resources and cost saving due to the fastening longevity, which should be a drill screw, what we call, quite gentle against environment.

Concept of **XiAOJUN®** Super Ruspert Plus

Sacrificial protection by zinc in zinc electroplating layer, non-chromium, and a barrier effect by upper baking layer forms the coating with high corrosion resistance.



Ruspert

Ruspert is a combination of the Zinc Nickel alloy plating and non-chrome coating system which realize its superior anti-corrosion performance. With the Ruspert specialty of tough and elaborated film structure, the coating has been reborn as an environmental friendly waterborne system.

Features

01 Waterborne system

Using water as a solvent.
Substantially reduce VOC emissions.

02 Chromium-free

Free from the hazardous chromium compound completely.

03 Electrolytic corrosion resistance

Reducing dissimilar metal contact corrosion apparently between the products and aluminum board or plated steel board.

04 Color variation

The basic color is silver and please contact us for color variety request.

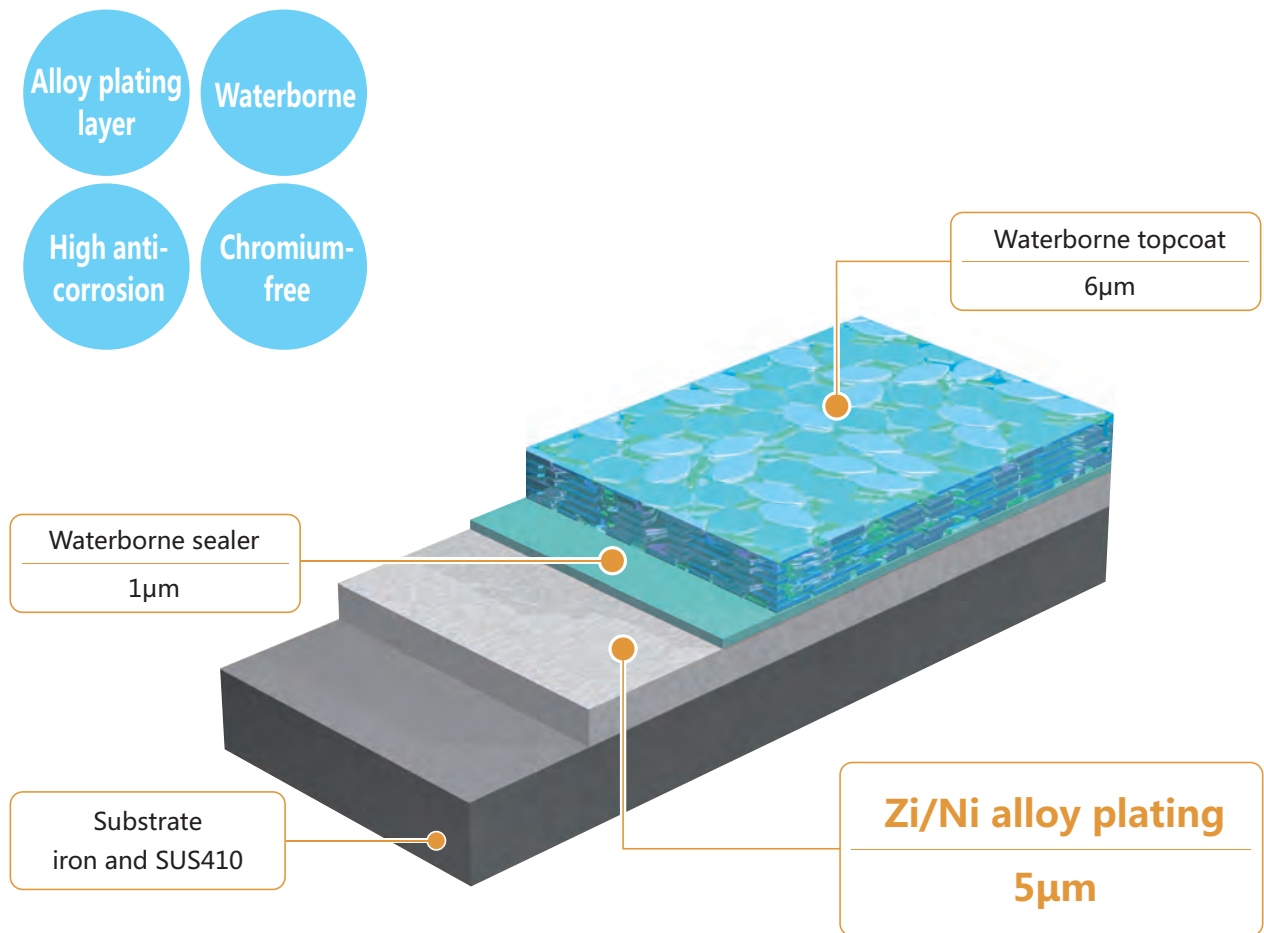
05 Stability of anti-corrosion performance

Zn/Ni alloy plating and waterborne top coat combined by the waterborne sealer which can improve and ensure the stability of the whole anti-corrosion performance.

06 Superior corrosion resistance performance

Salt spray test (JIS Z 2371)
2000 Hours No red rust occurred
Combined cycle test (JASO M 609-91)
200cycles No red rust occurred

Coating strucure and the corrosion prevention mechanism



Standard treatment process (Dip-spin method)



* Spray coating (1coating) is available depending on the profile of products.

Ruspert Coating - Super Anti-corrosion

What is Ruspert Coating?

Ruspert metal finish is a high-grade, non-organic, tri-layered ceramic surface coating developed to attain optimum performance in the various pollutive and atmospheric conditions that cause corrosion. It consists of three layers:

- The 1st layer: a metallic zinc layer.
- The 2nd layer: a high-grade anti-corrosion chemical conversion film.
- The 3rd top layer : a baked ceramic top coating.

The unique feature of Ruspert Coating is the tight joining of the baked ceramic top coating and the chemical conversion film thanks to the cross-linking effect. These layers are bonded together with the metallic zinc layer through chemical reactions, and this unique method of combining layers results in a rigid and dense combination of the coating films.

Ruspert Coating treatment does not attribute its anti-corrosion properties to merely a single material, but the synergy of these three layers, which combined have superb rustproof qualities. Compatible with metal coated and painted surfaces, fasteners coated with Ruspert are resistant to acid and alkaline attack, galvanic corrosion and hydrogen embrittlement

Ruspert Coating Processes

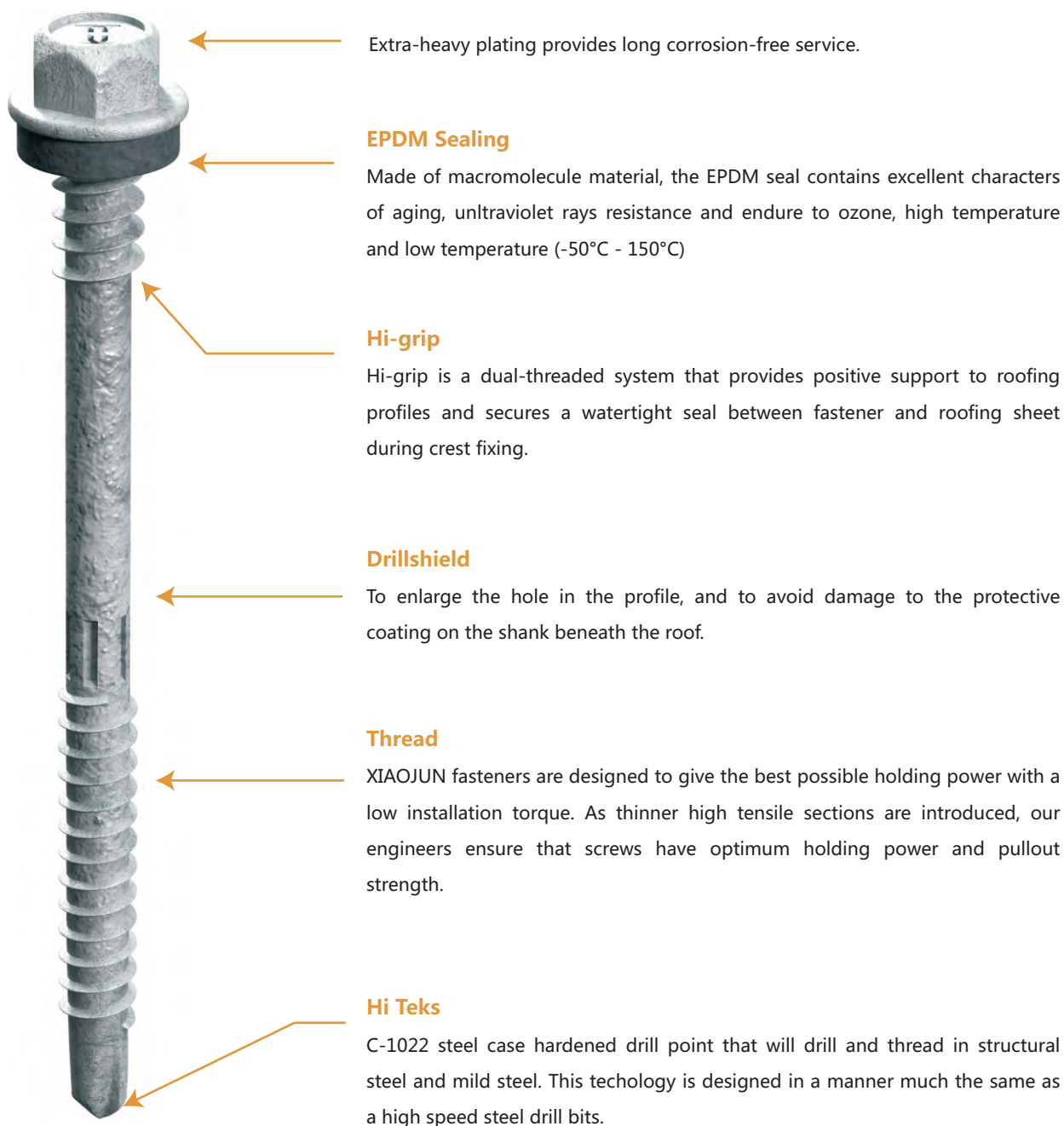
Material : metallic zinc & resin

Coating Type : metallic zinc
(3 layers) dip-coating
baked ceramic top coating

Minimum Average Coating Thickness :

20μ、 30μ、 40μ

Salt-spray Test : 500、 1000、 1500 hrs



Salt-spray Test Result



DIN50018 Testing In Alternating Condensation Atmosphere Containing Sulphur Dioxide

1、 Purpose and range of application

This standard describes the general condition which must be observed for testing samples in condensation atmosphere containing sulphur dioxide, so that comparable results are obtained when the test is carried out in different laboratories.

The test allows defects in corrosion protection systems to be detected quickly. Exposure to these test atmospheres does not allow any direct conclusions to be drawn regarding the life of the tested components under practical duty conditions. This, however, does not exclude the possibility, once ample experience has been gained regarding the long-term behaviours of specific systems in an industrial atmosphere, of being able to establish a relationship between the behaviour in practical service and the behaviour under test conditions, particularly in atmosphere DIN 50 018 – SFW0.25.

It is advisable to test only identical corrosion protection system simultaneously in one and same test facility, since the possibility of interaction between samples representing different system cannot be excluded.

When different corrosion protection systems are tested simultaneously and different materials are present, it should be borne in mind that different effects are often brought about by sulphur dioxide. Direct comparison of the results of tests on different combinations of corrosion protection systems and materials is therefore not readily permissible.

Sample form, sample preparation, test duration, evaluation of the test and assessment of the results are not the subject of this Standard. Details on these points will be found in the relevant Standards or special specifications, or are to be agreed case by case. In particular, the remarks in DIN 50 905 part 1 to part 3 are to be observed when carrying out this test.

2、 Other relevant Standards

- DIN 50 900 Part 1 Corrosion of metals; definitions, general definition.
- DIN 50 900 Part 2 Corrosion of metals; definitions, electrochemical definition.
- DIN 50 900 Part 1 Corrosion of metals; chemical corrosion tests, general.
- DIN 50 900 Part 2 Corrosion of metals; chemical corrosion tests, corrosion values with uniform surface corrosion.
- DIN 50 900 Part 3 Corrosion of metals; chemical corrosion tests, corrosion values with non-uniform corrosion absence of additional mechanical stress.

3、 Definitiontress.

According to DIN 50 900 Patr1 and Part2.

4、 Test condition

At the start of the first test phase in each cycle the test chamber temperature is raised to $\pm 31^{\circ}\text{C}$ over a period of about 1 ½ hours. At the same time condensation forms on the samples. This wetting must persist throughout the further progress of the first test phase. It is during this stage that the test reaches maximum severity through the simultaneous action of sulphur dioxide.

Note: the sulphur dioxide admitted at the start of the first test phase quickly dissolves to a great extent in the water in the bottom of the test chamber. At the start of the test, therefore, the effective sulphur dioxide concentration in the gas space is only about 1/7 of theoretical concentration. This initial concentration does not remain constant during the first phase, but instead drops sharply at first and thereafter more slowly.

The second test phase starts with the disconnection of the heat supply and the opening or ventilating of the test chamber, which must lead to the establishing after about 1 ½ hours of the test conditions according to the Table.

Type of test condition			Theoretical SO2 concentration start of a cycle % by vol.		
			0.067*	0.33*	0.67*
Condensation atmosphere			DIN50 018-SFW0.2S	DIN50 018-SFW1.0S	DIN50 018-SFW2.0S
Cycle	Test phase 1 h		8 including heating		
	Test phase 2 h		16 including cooling (test chamber opened ventilate)		
	Total h		24		
Conditions in test space	Test phase 1	Temperature °C	40±3		
		Relative humidity%	Approx. 100(wetting of test specimens)		
	Test phase 2	Temperature °C	18 to 28		
		Relative humidity%	Max.75		
Water quantity in the test space % by vol.			0.67		
1) For a test facility with a test chamber volume of 300l,the theoretical so2 concentrationcorresponds to an so2 admission per cycle of 0.2l, 1.0l, 2.0l.					
2) For a test facility with a volume of 300l, this concentration corresponds to a quality of2l					

* Usually known abroad under the old designation RRSt 1405.

5、 Test facility

5.1 Test chamber

Testing in a warm humid atmosphere containing sulphur dioxide requires a test chamber with a volume of at least 300L closed all round and sealed and having walls consisting of a corrosion-resistant material which, moreover, must not influence the corrosion. The test chamber must have a bottom trough capable of being heated and of holding the quantity of water prescribed in the Table. The heating of the test chamber takes place only via this water bath.

A suitable temperature measuring and control device must be available in the test chamber. The temperature is measured in the immediate vicinity of the samples. The valves necessary for pressure equalization and the gas inlet must be located above the

water surface. The roof of the test chamber must be so constituted as to prevent condensate from dripping down on to the samples. The shape and size of the test chamber are optional, provided that the requirements of Section 5 and 7 are fulfilled. The illustration shows a test facility with a chamber volume of 300L.

The test chamber is to be set up in a room without corrosive atmosphere, at room temperature and a relative humidity not exceeding 75%, and so installed that it is protected from draughts and solar irradiation.

5.2 Sample holder

The sample holder must consist of a corrosion-resistant material which also must not influence the corrosion of the sample. It must be so constituted that the samples can be arranged to suit the requirements of Section 6.2.

6 Procedures

6.1 Samples

Only samples which do not affect each other should be tested jointly.

6.2 Arrangement of samples

The samples are to be so arranged in the test chamber that the following spacing is maintained:

- Distance from walls at least 100mm
- Distance of underside of samples from surface of water at least 200mm
- Distance between samples at least 20mm

In the absence of any agreements to the contrary, the total surface area of the suspended samples should amount to $0.5\text{m}^2 \pm 0.1\text{m}^2$ per 300L of test chamber volume. Special agreements are to be made in respect of samples the surface area of which cannot be determined.

It is important to ensure that during exposure no condensate can drip on to the samples. Since the same amount of sulphur dioxide is effective in each cycle, the result depends on the size and nature of the total sample surface area loaded. For comparative tests it is therefore indispensable to work each time with the same total sample surface area and samples of like a kind.

It is also important that the material used to mask surface which are not to be exposed should be of a kind which does not react with sulphur dioxide and also does not influence the test result in any other way.

6.3 Filling the bottom trough

The bottom trough should be filled with the quality of distilled or deionized water stated in the Table. Prior to each cycle the water must be renewed and the test chamber cleaned if necessary.

6.4 Gas supply

Before the sulphur dioxide is admitted the test chamber must be closed.

6.4.1 Supplying sulphur dioxide from steel cylinders. For the exact measurement of the amount sulphur dioxide admitted, commercial-type gas meters or containers with fluid displacement (paraffin oil) may be used.

6.4.2 Generation of sulphur dioxide inside the test facility.

It is also permissible to generate sulphur dioxide inside the test facility by suitable means(e.g. NaHSO_3 +dilute sulphuric acid)

6.5 Heating

the heating should be switched on immediately after the admission of sulphur dioxide and the test chamber raised to temperature of 40°C over a period of about 1 1/2 hours. This temperature must be held to within $\pm 3^\circ\text{C}$ at the measuring point.

6.6 Test duration

If the specific test Standards do not lay down any test duration,1,2,5,10 or 20 cycles should be run for preference. The test may be broken off any unacceptable impairment of the appearance or function of the samples occurs or if a given degree of corrosion is reached.

6.7 Test sequence

Each cycle comprises two-test phase corresponding to the Table, i.e. totaling 24 hours. At the end of the first test phase(8 hours)the heating is switched off and the test chamber opened or ventilated.

At the end of the second test phase (18 hours) the bottom trough is emptied, cleaned if necessary, and filled with fresh distilled or deionized water. The test chamber is then closed and sulphur dioxide admitted. With the switching on of the heating a new cycle starts.

6.8 Interrupting the test

Test interruptions are to be made up by prolonging the second test phase and are to be indicated in the report. When specimens are to be exposed to only 1 or 2 cycles, the test facility should have been in operation beforehand for at least 1 cycle.

7. Functional check of the test facility

For monitoring the reproducibility the test results given by a test facility, or those of identical test facilities at different locations, it is necessary to carry out a functional check at appropriate intervals. Test facilities with a test chamber volume of 300L are covered by the provision in Sections 7.1 to 7.8.

7.1 Test material

7.1.1 Five samples each measuring 50mm wide, 100mm long and 0.6 to



1.5mm thick, of the steel grades St 37(bright as rolled) to DIN 17 100 or St 1405° (bright as rolled) to DIN 1623 part 1 ground with a ceramic wheel of hardness J and 46 grit.

7.1.2 Two blank samples each measuring 250mm wide, 400mm long and 1mm thick, of the steel grades St 37(bright as rolled) to DIN 17 100 or St 1405° (bright as rolled) to DIN 1623 Part 1.

7.2 Sample preparation

Before the functional check is started, the test material according to Section 7.1 should be degreased by using white spirit or another suitable solvent applied with a soft lint-free cloth or a brush, and the sample according to Section 7.1.1 then weighed to the nearest 1 mg. If the weighing cannot be performed immediately after degreasing, the sample should be kept in a desiccator until weighed.

7.3 Performance of the functional check

The five samples according to Section 7.1.1 are arranged vertically in the chamber. The blank samples according to Section 7.1.2 are also arranged vertically on either side of five samples according to Section 7.1.1. The exposure of the samples extends over five cycles corresponding to the test conditions SFW 0.25 according to Section 6.

7.4 Removing the corrosion products

On completion of the functional check the corrosion products are removed from the samples by using an approximately 10% solution of hydrochloric acid (230ml of chemically pure HCl ρ = 1.18g/ml and 730ml of distilled or deionized water), to which 0.1% properly alcohol has been added, at room temperature. After the corrosion products have been removed, the samples are thoroughly rinsed in distilled or deionized water, dried and then kept in the desiccator at room temperature from 18 to 28°C until weighed.

7.5 Weighing the samples

The samples are weighed to the nearest 1mg.

7.6 Evaluation of results

The losses of mass determined are converted to g/m². If the mean value found is between 100 and 150 g/m² and if the deviation of the individual values from the mean value does not exceed $\pm 20\%$, the test is in conformity with the Standard.

Further Standards

DIN 1623 Part Flat products of steel; cold rolled strip and sheet of mild unalloyed steels;

Quality specifications.

DIN 17 100 Steels for general structural purposes; quality specification (subsequent edition at present in after form.































Explanations

Painted System

Advantages

- Customized combination w/screw & washer
- RAL, RR or customized colors option
- Complete automatic production system
- Automatic Spray Painting Machine
- High Production Capacity
- Evenly Painted
- Obvious Head Marking
- Large Automatic Oven with Stabilized Temperature
- Customized Paint Colors (RAL and RR)
- High Quality Paint Powder
- SGS Certified
- Well-managed QC Tests

RAL Colors

					
RAL 1000 RGB 205 186 136 CMYK 26 26 52 0	RAL 1001 RGB 208 176 132 CMYK 24 33 51 0	RAL 1002 RGB 210 170 109 CMYK 24 36 62 0	RAL 1003 RGB 249 168 0 CMYK 4 42 93 0	RAL 1004 RGB 228 158 0 CMYK 15 43 96 1	RAL 1005 RGB 203 142 0 CMYK 24 47 100 4
					
RAL 1006 RGB 226 144 0 CMYK 14 51 97 1	RAL 1007 RGB 232 140 0 CMYK 11 54 97 1	RAL 1011 RGB 175 128 79 CMYK 33 50 71 10	RAL 1012 RGB 221 175 39 CMYK 20 33 89 0	RAL 1013 RGB 227 217 198 CMYK 14 15 24 0	RAL 1014 RGB 221 196 154 CMYK 18 24 43 0
					
RAL 1015 RGB 230 210 181 CMYK 13 19 31 0	RAL 1016 RGB 241 221 56 CMYK 15 9 82 0	RAL 1017 RGB 246 169 80 CMYK 5 42 73 0	RAL 1018 RGB 250 202 48 CMYK 8 24 84 0	RAL 1019 RGB 164 143 122 CMYK 41 43 50 4	RAL 1020 RGB 160 143 101 CMYK 42 40 62 7
					
RAL 1021 RGB 246 182 0 CMYK 8 34 93 0	RAL 1023 RGB 247 181 0 CMYK 7 34 93 0	RAL 1024 RGB 186 143 76 CMYK 31 44 75 6	RAL 1026 RGB 255 255 0 CMYK 13 0 84 0	RAL 1027 RGB 167 127 14 CMYK 36 47 100 13	RAL 1028 RGB 255 155 0 CMYK 0 49 93 0
					
RAL 1032 RGB 226 163 0 CMYK 17 40 96 0	RAL 1033 RGB 249 154 28 CMYK 3 49 90 0	RAL 1034 RGB 235 156 82 CMYK 10 47 71 0	RAL 1035 RGB 144 131 112 CMYK 48 44 53 9	RAL 1036 RGB 128 100 63 CMYK 46 53 75 26	RAL 1037 RGB 240 146 0 CMYK 7 52 96 0

※ For more information please visit www.ral-colours.com

Self-Drilling Screws

					
RAL 2000 RGB 218 110 0 CMYK 15 66 100 3	RAL 2001 RGB 186 72 27 CMYK 22 80 98 13	RAL 2002 RGB 191 57 34 CMYK 21 87 94 11	RAL 2003 RGB 246 120 40 CMYK 2 65 87 0	RAL 2004 RGB 226 83 3 CMYK 10 78 100 2	RAL 2005 RGB 255 77 0 CMYK 0 80 96 0
					
RAL 2007 RGB 255 178 0 CMYK 2 38 92 0	RAL 2008 RGB 237 107 33 CMYK 6 69 91 1	RAL 2009 RGB 222 83 7 CMYK 12 78 100 2	RAL 2010 RGB 208 93 40 CMYK 18 73 89 5	RAL 2011 RGB 226 110 14 CMYK 12 67 98 1	RAL 2012 RGB 213 101 77 CMYK 17 71 68 3
					
RAL 2013 RGB 146 62 37 CMYK 30 79 89 30	RAL 3000 RGB 167 41 32 CMYK 25 92 95 22	RAL 3001 RGB 155 36 35 CMYK 27 93 90 28	RAL 3002 RGB 155 35 33 CMYK 27 94 92 28	RAL 3003 RGB 134 26 34 CMYK 30 97 87 38	RAL 3004 RGB 107 28 35 CMYK 36 94 77 52
					
RAL 3005 RGB 89 25 31 CMYK 39 93 75 61	RAL 3007 RGB 62 32 34 CMYK 55 79 65 70	RAL 3009 RGB 109 52 45 CMYK 40 78 73 47	RAL 3011 RGB 121 36 35 CMYK 33 91 83 44	RAL 3012 RGB 198 132 109 CMYK 26 55 54 3	RAL 3013 RGB 151 46 37 CMYK 28 89 88 29
					
RAL 3014 RGB 203 115 117 CMYK 24 65 45 2	RAL 3015 RGB 216 160 166 CMYK 19 45 26 0	RAL 3016 RGB 166 61 47 CMYK 27 83 82 21	RAL 3017 RGB 203 85 93 CMYK 22 77 53 4	RAL 3018 RGB 199 63 74 CMYK 21 85 63 7	RAL 3020 RGB 187 30 16 CMYK 21 96 100 13
					
RAL 3022 RGB 207 105 85 CMYK 20 68 63 4	RAL 3024 RGB 255 45 33 CMYK 0 89 87 0	RAL 3026 RGB 255 42 27 CMYK 0 90 90 0	RAL 3027 RGB 171 39 60 CMYK 27 93 68 18	RAL 3028 RGB 204 44 36 CMYK 17 91 92 7	RAL 3031 RGB 166 52 55 CMYK 27 88 73 21
					
RAL 3032 RGB 112 29 35 CMYK 34 94 79 49	RAL 3033 RGB 165 58 45 CMYK 27 84 83 22	RAL 4001 RGB 129 97 131 CMYK 57 66 28 6	RAL 4002 RGB 141 60 75 CMYK 38 82 53 26	RAL 4003 RGB 196 97 140 CMYK 29 73 22 0	RAL 4004 RGB 101 30 56 CMYK 46 93 51 48
					
RAL 4005 RGB 118 104 154 CMYK 64 64 16 1	RAL 4006 RGB 144 51 115 CMYK 52 91 23 7	RAL 4007 RGB 71 36 60 CMYK 65 87 44 52	RAL 4008 RGB 132 76 130 CMYK 58 79 21 4	RAL 4009 RGB 157 134 146 CMYK 45 49 32 2	RAL 4010 RGB 188 64 119 CMYK 32 86 28 2
					
RAL 4011 RGB 110 99 135 CMYK 65 63 26 6	RAL 4012 RGB 107 107 127 CMYK 64 56 35 10	RAL 5000 RGB 49 79 111 CMYK 84 66 34 20	RAL 5001 RGB 15 76 100 CMYK 90 63 40 27	RAL 5002 RGB 0 56 123 CMYK 99 89 19 8	RAL 5003 RGB 31 56 85 CMYK 90 76 39 36
					
RAL 5004 RGB 25 30 40 CMYK 84 76 54 71	RAL 5005 RGB 0 83 135 CMYK 93 69 22 8	RAL 5007 RGB 55 107 140 CMYK 81 53 29 8	RAL 5008 RGB 43 58 68 CMYK 81 65 51 48	RAL 5009 RGB 34 95 120 CMYK 86 55 36 16	RAL 5010 RGB 0 79 124 CMYK 93 69 27 12

※ For more information please visit www.ral-colours.com

					
RAL 5011 RGB 26 43 60 CMYK 89 75 48 55	RAL 5012 RGB 0 137 182 CMYK 82 38 18 0	RAL 5013 RGB 25 49 83 CMYK 93 82 37 37	RAL 5014 RGB 99 125 150 CMYK 68 47 29 4	RAL 5015 RGB 0 124 176 CMYK 85 47 15 0	RAL 5017 RGB 0 91 140 CMYK 91 63 23 6
					
RAL 5018 RGB 5 139 140 CMYK 82 30 45 4	RAL 5019 RGB 0 94 131 CMYK 90 59 30 11	RAL 5020 RGB 0 65 75 CMYK 91 60 51 43	RAL 5021 RGB 0 117 119 CMYK 85 39 49 13	RAL 5022 RGB 34 45 90 CMYK 94 90 31 29	RAL 5023 RGB 66 105 140 CMYK 79 56 28 7
					
RAL 5024 RGB 96 147 172 CMYK 67 36 25 1	RAL 5025 RGB 33 105 124 CMYK 84 49 39 14	RAL 5026 RGB 15 48 82 CMYK 96 82 37 37	RAL 6000 RGB 60 116 96 CMYK 77 38 62 17	RAL 6001 RGB 54 103 53 CMYK 78 38 89 27	RAL 6002 RGB 50 89 40 CMYK 78 42 95 37
					
RAL 6003 RGB 80 83 60 CMYK 64 51 72 39	RAL 6004 RGB 2 68 66 CMYK 89 53 60 47	RAL 6005 RGB 17 66 50 CMYK 86 49 75 53	RAL 6006 RGB 60 57 46 CMYK 66 60 70 57	RAL 6007 RGB 44 50 34 CMYK 72 58 79 65	RAL 6008 RGB 55 52 42 CMYK 67 62 71 61
					
RAL 6009 RGB 39 53 42 CMYK 77 57 72 62	RAL 6010 RGB 77 111 57 CMYK 72 37 86 23	RAL 6011 RGB 108 124 89 CMYK 61 39 67 15	RAL 6012 RGB 48 61 58 CMYK 76 59 61 52	RAL 6013 RGB 125 118 90 CMYK 53 45 62 17	RAL 6014 RGB 71 65 53 CMYK 64 59 68 51
					
RAL 6015 RGB 61 61 54 CMYK 68 60 64 53	RAL 6016 RGB 0 105 76 CMYK 87 36 73 24	RAL 6017 RGB 88 127 64 CMYK 70 33 85 14	RAL 6018 RGB 97 153 59 CMYK 69 21 91 3	RAL 6019 RGB 185 206 172 CMYK 35 11 38 0	RAL 6020 RGB 55 66 47 CMYK 71 53 76 53
					
RAL 6021 RGB 138 153 119 CMYK 53 31 56 4	RAL 6022 RGB 58 51 39 CMYK 64 62 73 62	RAL 6024 RGB 0 131 81 CMYK 84 27 79 9	RAL 6025 RGB 94 110 59 CMYK 64 41 83 24	RAL 6026 RGB 0 95 78 CMYK 87 41 67 30	RAL 6027 RGB 126 186 181 CMYK 56 13 32 0
					
RAL 6028 RGB 49 84 66 CMYK 78 47 69 39	RAL 6029 RGB 0 111 61 CMYK 87 33 87 20	RAL 6032 RGB 35 127 82 CMYK 82 29 76 12	RAL 6033 RGB 70 135 127 CMYK 74 33 49 7	RAL 6034 RGB 122 172 172 CMYK 59 22 33 0	RAL 6035 RGB 25 77 37 CMYK 85 44 95 46
					
RAL 6036 RGB 4 87 75 CMYK 87 44 65 35	RAL 6037 RGB 0 139 41 CMYK 85 21 100 5	RAL 6038 RGB 0 181 26 CMYK 78 0 100 0	RAL 7000 RGB 122 136 142 CMYK 58 42 37 4	RAL 7001 RGB 140 150 157 CMYK 52 38 32 1	RAL 7002 RGB 129 120 99 CMYK 52 46 57 14
					
RAL 7003 RGB 122 118 105 CMYK 55 47 53 14	RAL 7004 RGB 155 155 155 CMYK 46 37 34 0	RAL 7005 RGB 108 110 107 CMYK 60 49 49 16	RAL 7006 RGB 118 106 94 CMYK 54 51 55 20	RAL 7008 RGB 116 94 61 CMYK 50 53 75 31	RAL 7009 RGB 93 96 88 CMYK 63 51 56 26

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Self-Drilling Screws

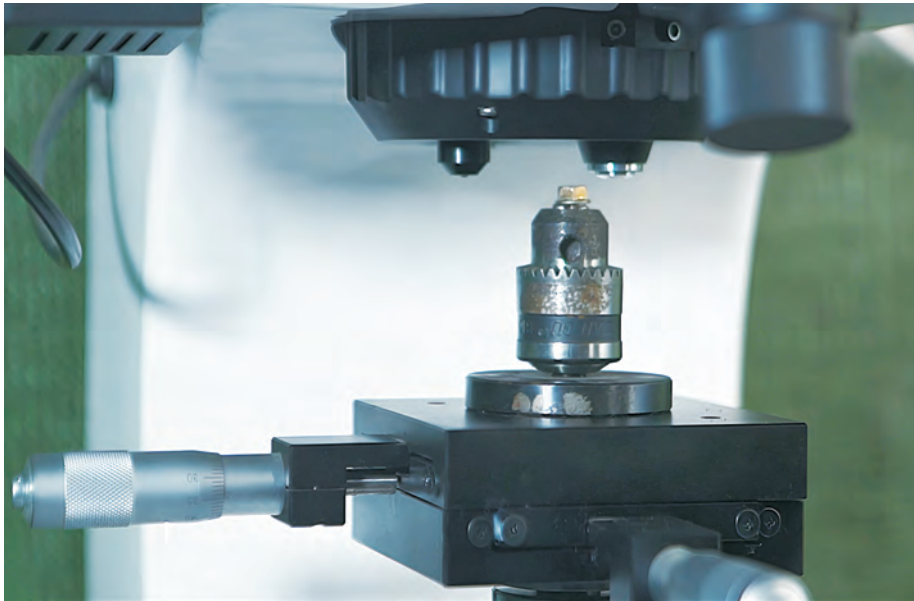
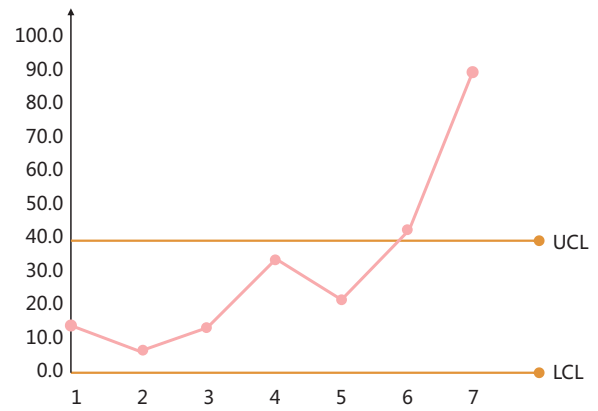
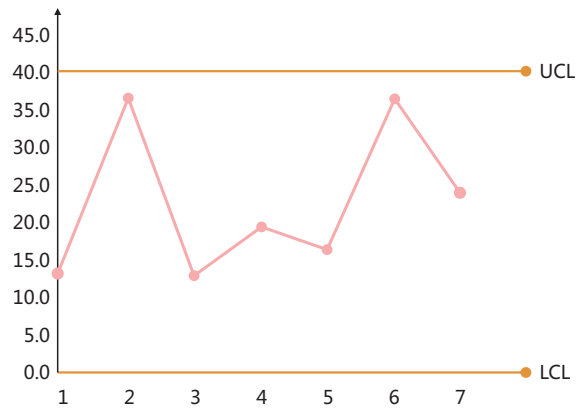
					
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RAL 7037 RGB 122 123 122 CMYK 56 46 44 9	RAL 7038 RGB 176 176 169 CMYK 37 28 31 0	RAL 7039 RGB 107 102 94 CMYK 58 51 54 22	RAL 7040 RGB 152 158 161 CMYK 47 35 31 0	RAL 7042 RGB 142 146 145 CMYK 51 39 38 2	RAL 7043 RGB 79 82 80 CMYK 67 56 55 34
					
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RAL 8001 RGB 157 98 43 CMYK 33 61 89 21	RAL 8002 RGB 121 77 62 CMYK 44 66 67 35	RAL 8003 RGB 126 75 38 CMYK 39 66 88 37	RAL 8004 RGB 141 73 49 CMYK 34 72 79 30	RAL 8007 RGB 112 69 42 CMYK 43 67 82 43	RAL 8008 RGB 114 74 37 CMYK 43 64 89 41
					
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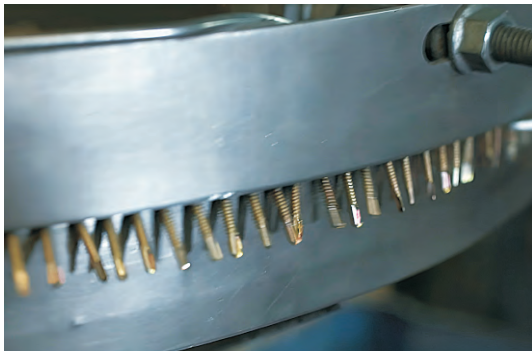


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