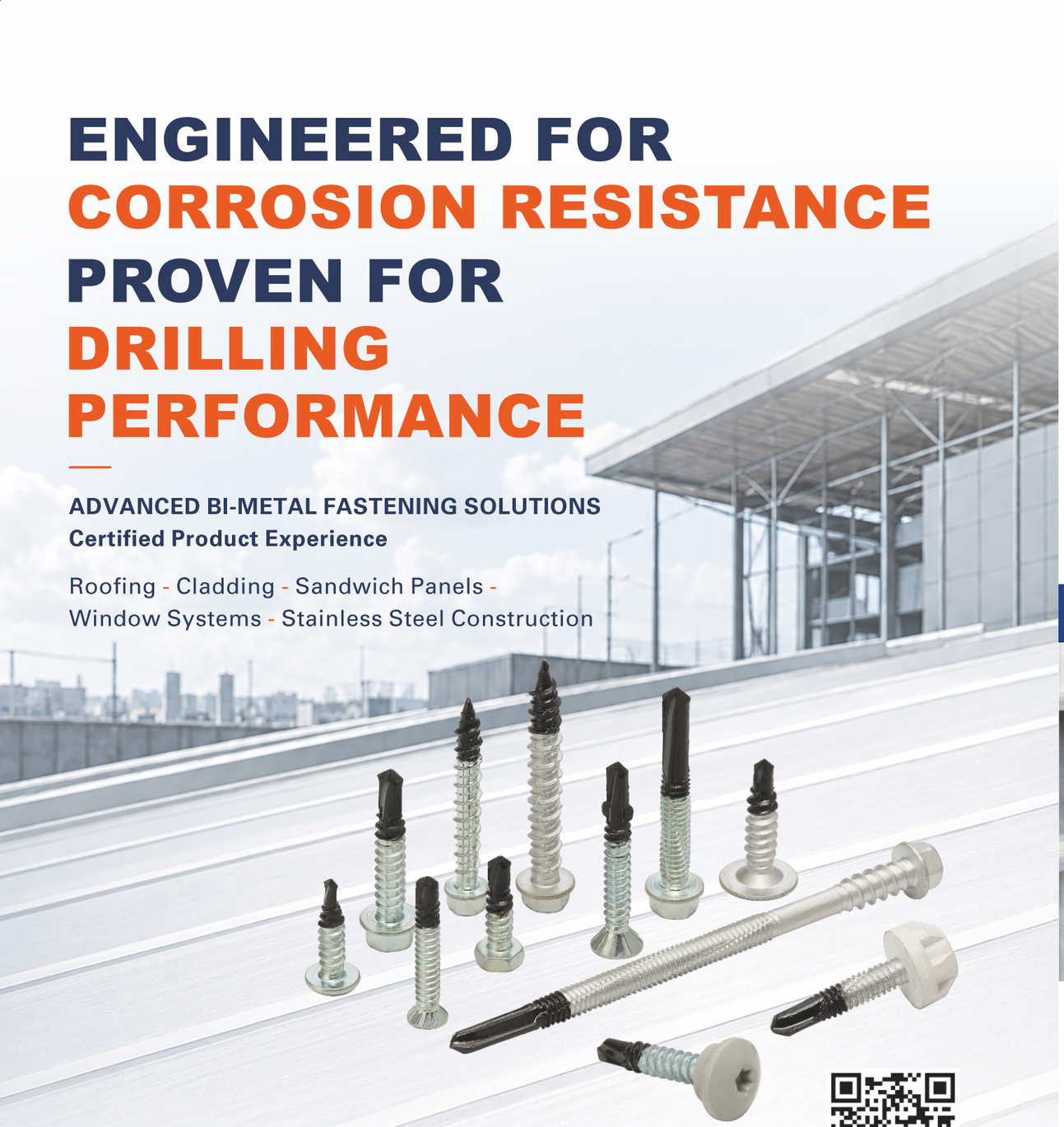
ENGINEERED FOR CORROSION RESISTANCE PROVEN FOR DRILLING PERFORMANCE

ADVANCED BI-METAL FASTENING SOLUTIONS
Certified Product Experience

Roofing - Cladding - Sandwich Panels -
Window Systems - Stainless Steel Construction



VISIT OUR WEBSITE

SHEH KAI

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https://www.shehkai.com

2026/07/24

ENGINEERED - CORROSION-RESISTANT - TRUSTED

BI-METAL FASTENING SOLUTIONS

For Roofing, Cladding, Sandwich Panels and Solar Mounting Systems



BOARD-TO-STEEL FASTENING	WINDOW & FACADE / STEEL CONSTRUCTION	ROOFING & CLADDING	SANDWICH PANEL FACADE



Bi-Metal Wing Tek Screw
For fastening boards to steel structures

Window Screw
For window applications

Self-Drilling Screw
For metal roofing & cladding applications

Sandwich Panel Screw
For sandwich panels & insulate facades

A2 & A4 Stainless Steel

Stainless Steel + Carbon Steel Drill Point

Drilling Capacity Up To 12 mm Steel

OEM & Private Label Available

Imperial Sizes

SHEH KAI

shehkai.com

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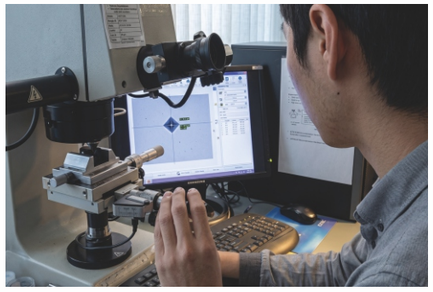
— SUPPORTING CAPABILITIES

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Supporting Products for OEM & Custom Programs

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Controlled Manufacturing and Quality Assurance

18 Custom Fastening Solutions
OEM / ODM Support for Your Market

19 Why Choose Sheh Kai
Global Supply, Technical Support and Long-Term Partnership







About Sheh Kai

YOUR TRUSTED BI-METAL FASTENING PARTNER

Founded in Taiwan, Sheh Kai Precision has been specializing in fastening solutions for more than 30 years.

As a pioneer in Bi-Metal fastening technology, we combine advanced manufacturing, material expertise, and international certifications to provide reliable fastening solutions for global construction markets.

Our products are widely used in roofing, cladding, sandwich panels, façade systems, industrial buildings, and infrastructure projects throughout Europe, North America, Australia, and Asia.

Through continuous innovation and strict quality control, Sheh Kai has become a trusted supplier to leading distributors, importers, and fastening brands worldwide.

ISO 9001
Certified quality management system

ISO 14001
Environmental management certification

ISO 14064-1
Greenhouse gas management & carbon transparency

30+

30+ Years

Made in Taiwan

OEM / ODM

WHY BI-METAL?

THE BEST OF BOTH MATERIALS



Traditional carbon steel screws provide drilling strength but are vulnerable to corrosion.

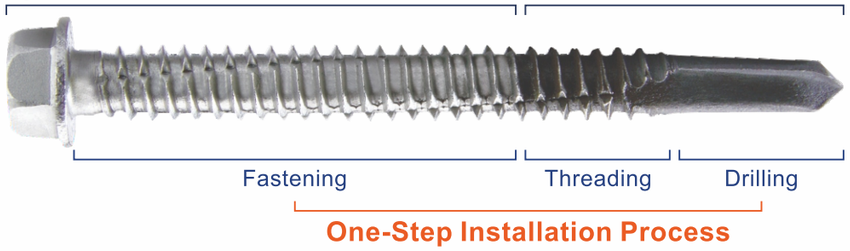
Conventional stainless steel screws offer corrosion resistance but often lack sufficient drilling capability.

Sheh Kai Bi-Metal fasteners combine an austenitic stainless steel body with a selectively hardened carbon steel drill point, delivering both corrosion resistance and drilling performance in a single fastening solution.

Long-Term Durability for Outdoor Applications

A2 / A4 Austenitic Stainless Steel
Corrosion resistance for outdoor and high-corrosion environments.

Hardened Carbon Steel Drill Point
Provides stable drilling performance into steel substructures.



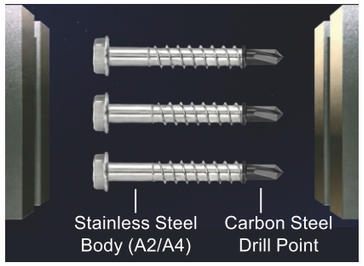
TECHNOLOGY COMPARISON

Drilling Efficiency + Corrosion Resistance

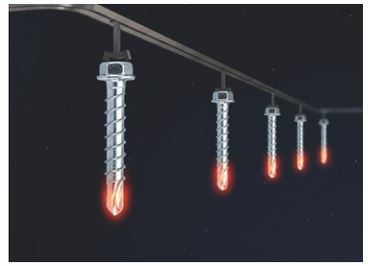
Performance	Carbon Steel	Stainless Steel	Bi-Metal
Drilling Speed	Excellent	Poor	**Excellent**
Corrosion Resistance	Low	Excellent	**Excellent**
Structural Strength	High	Medium	**High**

BI-METAL TECHNOLOGY

FROM WELDING TO DRILLING PERFORMANCE



Bi-Metal Welding



Heat Treatment

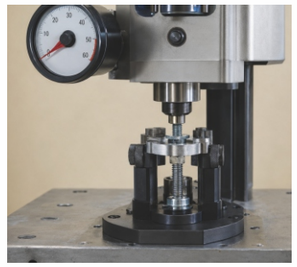


Finished Drill Point

PERFORMANCE VERIFICATION



Drilling Performance Test



Torque / Pull-Out Test



Salt Spray Test



Dimensional Inspection

TECHNOLOGY VALUE

Stable Drilling Performance
Hardened drill point for fast, stable steel penetration.

Reliable Bi-Metal Joint Quality
Controlled welding for a strong bi-metal bond.

Corrosion Resistance
A2 / A4 stainless steel body for outdoor durability.

Controlled Heat Treatment
Optimized hardness for consistent drilling.

Quality Control
Inspection and testing for stable quality.

Roofing & Cladding Applications
Engineered for roofing, cladding, and metal buildings.

APPLICATION SOLUTIONS

DESIGNED FOR DIVERSE BUILDING APPLICATIONS



Roofing & Cladding Systems
Reliable fastening solutions for metal roofing and wall cladding applications.



Sandwich Panel Systems
Secure fastening solutions for insulated roof and wall panels.



Window & Façade Systems
Professional fastening solutions for aluminum windows and curtain walls.



Metal-to-Metal Fastening
For stainless steel sheets, metal profiles, and light-gauge steel applications.

TYPICAL PROJECT SEGMENTS

Industrial Buildings | Commercial Buildings | Cold Storage Facilities | Façade Projects | Outdoor Construction | Coastal Applications

CORROSION RESISTANCE & COATING OPTIONS

ENGINEERED FOR LONG-TERM DURABILITY IN EXTERIOR AND CORROSIVE ENVIRONMENTS



Coastal Environment
Salt air and chloride exposure.



Industrial Environment
Industrial pollutants and harsh atmosphere.



High Humidity Environment
Moisture, condensation and rain exposure.

MATERIAL ADVANTAGE



A2 / A4 Stainless Steel Body
Provides corrosion resistance for exterior roofing, cladding, and metal building applications.



Hardened Carbon Steel Drill Point
Delivers reliable drilling performance into steel substructures.



EPDM Sealing Washer
Supports weather sealing for roofing and cladding applications.

COATING SELECTION GUIDE

Coating Option	Salt Spray Reference (ASTM B117)	Kesternich Test (DIN 50018)	AS 3566 Corrosion Class*	Suggested Application
Zinc Plated	24-72 hrs (2μ– 8μ)	-	Class 1	Indoor, dry, and general construction applications.
Ruspert Coating	500-1000 hrs	5-15 cycles	Class 2-3	Outdoor, roofing, cladding, and moderate corrosive environments.
Tufcote / Ruspert	1500-2000 hrs	25 cycles	Class 4	Severe outdoor, coastal, and marine-related environments.

Coating availability and corrosion performance may vary by product type, coating specification, size, and customer requirement. For detailed coating performance and test reports, please contact Sheh Kai.

BI-METAL SELF-DRILLING SCREWS



FOR ROOFING, CLADDING & METAL SHEETING APPLICATIONS

Bi-Metal Self-Drilling Screws are designed for fastening metal roofing, cladding and metal sheeting applications.

FEATURES

- A2 / A4 Stainless steel body
- Hardened carbon steel drill point
- A2 / A4 Stainless steel sealing washer
- Drilling Capacity up to 12 mm Steel

ADVANTAGES

- No Pre-Drilling Required
- Excellent Corrosion Resistance
- Reduced Installation Time
- Reliable Drilling Performance
- One Step Installation

APPLICATIONS

- Metal Roofing
- Wall Cladding
- Steel Structures
- Industrial Buildings







SPECIFICATIONS

Diameter	Length		Point Size	Max Drilling Capacity (inch)	Drive Speed (R.P.M)
	min	max			
#8	5/8”	1-3/4”	#1	0.039+0.039	1800-2500
#10	3/4”	7-1/8”	#1	0.039+0.039	1800-2500
#12	7/8”	12”	#1	0.039+0.039	1800-2500
1/4”	7/8”	12”	#1	0.039+0.039	1800-2500
#8	5/8”	1-3/4”	#2	0.118	1800-2500
#10	3/4”	7-1/8”	#2	0.118	1800-2500
#12	7/8”	12”	#2	0.157	1800-2500
1/4”	7/8”	12”	#2	0.118	1800-2500
#8	5/8”	1-3/4”	#3	0.118	1800-2500
#10	3/4”	7-1/8”	#3	0.157	1800-2500
#12	1”	12”	#3	0.236	1800-2500
1/4”	1”	12”	#3	0.236	1000-1800
#12	1-1/2”	12”	#5	0.472	1000-1800
1/4”	1-1/2”	12”	#5	0.472	1000-1800

BI-METAL SANDWICH PANEL SCREWS



FOR INSULATED PANEL INSTALLATION

Designed specifically for fastening insulated sandwich panels to steel and timber substructures.

FEATURES

- A2 / A4 Stainless steel body
- Hardened carbon steel drill point
- A2 / A4 Stainless steel sealing washer
- Drilling Capacity up to 12 mm Steel

ADVANTAGES

- Reliable Panel Fixing
- Improved Weather Tightness
- Long-Term Outdoor Durability
- Suitable for Sandwich Panel Systems

APPLICATIONS

- Roof Sandwich Panels
- Wall Sandwich Panels
- Cold Storage Buildings
- Industrial Facilities





SPECIFICATIONS

Diameter	Length		Point Size	Max Drilling Capacity (inch)	Drive Speed (R.P.M)
	min	max			
#12/#10	2”	12”	#1	0.039+0.039	1800-2500
1/4”/#12	2”	12”	#1	0.039+0.039	1800-2500
#12/#10	2”	12”	#2	0.118	1800-2500
1/4”/#12	2”	12”	#2	0.157	1800-2500
#12/#10	2”	12”	#3	0.236	1800-2500
1/4”/#12	2”	12”	#3	0.236	1800-2500
1/4”/#12	2-1/2”	12”	#5	0.472	1000-1800

HEAVY-DUTY BI-METAL SELF-DRILLING SCREWS



FOR THICK STEEL PLATE APPLICATIONS

Proven drilling performance for steel plate up to 18 mm.
25 mm steel plate solution under development.

Sheh Kai Heavy-Duty Bi-Metal Self-Drilling Screws are developed for fastening into thick steel plates and heavy-gauge steel substructures.

The current product is designed for drilling into steel plate up to 18 mm. Sheh Kai is also developing an advanced version for steel plate applications up to 25 mm.

FEATURES

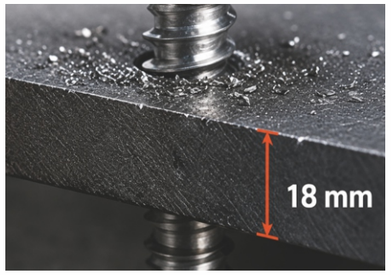
- **A2 / A4 Stainless Steel Body**
- **Special Hardened Carbon Steel Drill Point**
- **Heavy-Duty Drilling Design**
- **One-Step Drilling & Fastening**
- **18 mm Steel Plate Capability**
- **25 mm Steel Plate Under Development**

ADVANTAGES

- **Designed for thick steel plate applications up to 18 mm.**
- **Reduced Installation Time**
- **Excellent Corrosion Resistance**
- **Reliable Heavy-Duty Installation**
- **Strong Fastening Performance**

APPLICATIONS

- **Thick Steel Plate Fastening**
- **Heavy Steel Structure Installation**
- **Equipment & Bracket Support Systems**
- **Solar Mounting Steel Supports**
- **Industrial Steel Construction**







SPECIFICATIONS

Product Type	Heavy-Duty Bi-Metal Self-Drilling Screw	**Development Target**	Up to 25 mm Steel Plate (Under Development)
Material Construction	A2/A4 Stainless Steel Body + Hardened Carbon Steel Drill Point		
Current Drilling Capability	Up to 18 mm Steel Plate	**Application**	Thick Steel Plate and Heavy-Gauge Steel Fastening

BI-METAL WING TEK SCREWS



FOR WOOD-TO-STEEL FASTENING

Designed for fastening timber components to steel substructures.

FEATURES

- **Wing Design Prevents Premature Thread Engagement**
- **Hardened Drill Point**
- **Stainless Steel Corrosion Resistance**

ADVANTAGES

- **Accurate Installation**
- **Reduced Wood Splitting**
- **Improved Fastening Performance**

APPLICATIONS

- **Timber Cladding**
- **Timber Substructures**
- **Architectural Projects**





SPECIFICATIONS

Diameter	Length		Point Size	Max Drilling Capacity (inch)	Drive Speed (R.P.M)
	min	max			
#8	1”	1-5/8”	#3	0.118	1800-2500
#10	1”	3”	#3	0.157	1800-2500
#12	1-1/4”	8”	#3	0.236	1800-2500
#12	2-1/8”	5”	#5	0.236-0.472	1000-1800
1/4”	2-1/8”	12”	#5	0.236-0.472	1000-1800

BI-METAL WINDOW FRAME SCREWS



FOR STEEL WINDOW FRAME & METAL PROFILE FASTENING

Professional fastening solutions for window frame applications with steel sheets, metal profiles, and reinforced frame components.

FEATURES

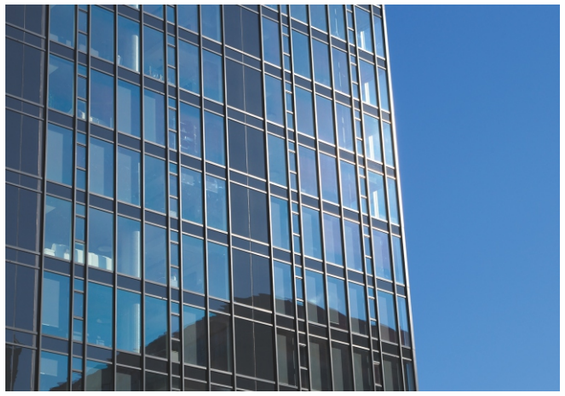
- A2 / A4 Stainless steel body
- Hardened carbon steel drill point
- Precision Threads

ADVANTAGES

- Clean Installation
- Secure Window Fixing
- Reduced Installation Time
- Corrosion Resistance

APPLICATIONS

- Steel Window Frames
- Window Frame Steel Plates
- Metal Frame Profiles
- Reinforced Window Frame Sections
- Door & Window Metal Components





SPECIFICATIONS

Head Type	Diameter	Length		Point Size	Max Drilling Capacity (inch)	Drive Speed (R.P.M)
		min	max			
Flat Head	#8	3/4”	1-3/4”	#3	0.118	1800-2500
	#9	3/4”	1-3/4”	#3	0.118	1800-2500
Pan Head	#8	5/8”	1-1/8”	#3	0.118	1800-2500
	#9	5/8”	1-1/8”	#3	0.118	1800-2500

BI-METAL SCREWS FOR STAINLESS STEEL



Specialized fastening solutions for stainless steel sheets and structures.

FEATURES

- Enhanced Drill Point Design
- A2/A4 Stainless Steel Body
- High Corrosion Resistance

ADVANTAGES

- Suitable for Stainless Steel Structures
- Reduced Installation Time
- Excellent Outdoor Durability

APPLICATIONS

- Stainless Steel Cladding
- Coastal Construction
- Industrial Facilities







SPECIFICATIONS

Hex Washer Head / Pan Head / Wafer Head / Truss Head / Flat Head

Diameter	Length		Point Size	Max Drilling Capacity on S.S. Plate (inch)	Max Drive Speed (R.P.M)	Max Drilling Capacity on Steel Plate (inch)	Max Drive Speed (R.P.M)
	min	max					
#8	5/8”	4”	#3	0.078	1800	0.118	2500
#10	3/4”	4”	#3	0.078	1800	0.157	2500
#12	3/4”	4”	#3	0.078	1800	0.236	2500
1/4”	1”	4”	#3	0.078	1800	0.236	2500

BI-METAL
SIDE LAP SCREWS

FOR METAL ROOFING SIDE LAP CONNECTIONS

Designed for secure fastening of overlapping roof panels.



FEATURES

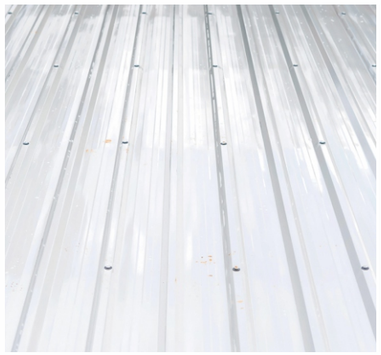
- A2 / A4 Stainless steel body
- Hardened carbon steel drill point
- A2 / A4 Stainless steel sealing washer
- Self-Piercing Design

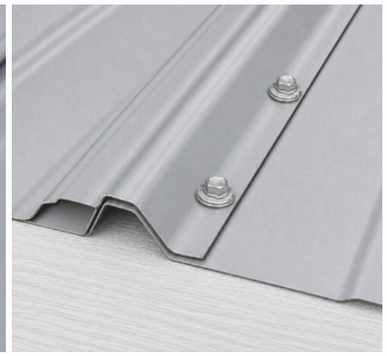
ADVANTAGES

- Pre-Drilling Unnecessary
- Fast Installation
- Improved Weather Resistance
- Secure Panel Connection
- Long Service Life

APPLICATIONS

- Standing Seam Roofing
- Metal Roofing Systems
- Industrial Roof Projects



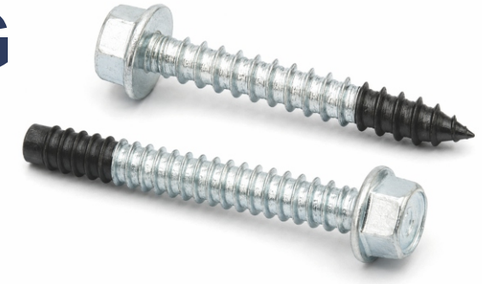


SPECIFICATIONS

Diameter	Length		Max Drilling Capacity (inch)	Max Drive Speed (R.P.M)
	min	max		
#10	3/4”	2”	0.039+0.039	2500
#12	3/4”	2”	0.039+0.039	2500
1/4”	7/8”	2”	0.039+0.039	2500

Note: NO.1 DRILL POINT SELF-DRILLING SCREW OPTION
No.1 drill point Bi-Metal Self-Drilling Screws are also available for 0.039”+0.039” thin steel sheet fastening.

BI-METAL
SELF-TAPPING SCREWS



FOR METAL FASTENING APPLICATIONS

Designed for fastening into metal substrates where corrosion resistance, stable tapping performance, and long-term durability are required.

FEATURES

- A2 / A4 Stainless Steel Body
- Hardened Carbon Steel Point
- Sharp & Blunt Point Options

ADVANTAGES

- Fast Installation
- Reliable Tapping Performance
- Long-Term Corrosion Resistance

APPLICATIONS

- Metal Roofing Components
- Metal Profiles & Brackets
- Wall Cladding Systems
- Industrial Building Applications
- Sheet Metal Fastening
- Outdoor Construction




SPECIFICATIONS

Diameter	Length		Max Tapping Capacity (inch)	Point Type	Drive Speed (R.P.M)
	min	max			
1/4”	3/4”	12”	0.039+0.078	Sharp	Max. 800
1/4”	3/4”	12”	0.393	Blunt	Max. 600

BI-METAL STAINLESS CONCRETE SCREW



For Corrosion-Resistant Concrete Fastening

FEATURES

- A2 & A4 Stainless Steel Body
- Hardened Carbon Steel Cutting Tip
- Bi-Metal Technology
- Hex Washer Head and Flat Head Options
- No Expansion Force
- Removable Design

ADVANTAGES

- Excellent Corrosion Resistance
- Reliable Concrete Cutting Performance
- Long Service Life
- Reduced Maintenance Cost
- Clean and Efficient Installation
- Suitable for Outdoor and Harsh Environments

APPLICATIONS

- Outdoor Brackets & Fixtures
- Solar Mounting Supports
- Façade & Cladding Support Systems
- Coastal Construction
- Industrial Facilities
- General Corrosion-Resistant Concrete Fastening





SPECIFICATIONS

Hex Washer Head

Size	Socket	Drill Bit Dia. (inch)
1/4" x 1-1/4"	5/16" HEX	3/16"
1/4" x 1-3/4"	5/16" HEX	3/16"
1/4" x 2-1/4"	5/16" HEX	3/16"
1/4" x 2-3/4"	5/16" HEX	3/16"
1/4" x 3-1/4"	5/16" HEX	3/16"
1/4" x 4"	5/16" HEX	3/16"

Flat Head Phillips

Size	Drive	Drill Bit Dia. (inch)
1/4" x 1-1/4"	#3 Phillips	3/16"
1/4" x 1-3/4"	#3 Phillips	3/16"
1/4" x 2-1/4"	#3 Phillips	3/16"
1/4" x 2-3/4"	#3 Phillips	3/16"
1/4" x 3-1/4"	#3 Phillips	3/16"
1/4" x 4"	#3 Phillips	3/16"

ADDITIONAL STAINLESS STEEL FASTENING CAPABILITIES



Supporting Products for OEM & Custom Programs

In addition to our core Bi-Metal fastening solutions, Sheh Kai manufactures a wide range of stainless steel fasteners to support OEM, private label, and customer-specific programs.

Available in A2 and A4 stainless steel, these products can be supplied with customized head styles, dimensions, thread types, finishes, and packaging options.

STAINLESS STEEL PRODUCT OPTIONS

01 Stainless Steel Self-Drilling Screws



For metal-to-metal fastening and general construction applications.

02 Stainless Steel Self-Tapping Screws



For fastening into metal substrates where corrosion resistance is required.

03 Stainless Steel Timber & Decking Screws



For outdoor timber, decking, and wood construction applications.

04 Stainless Steel Concrete Screws



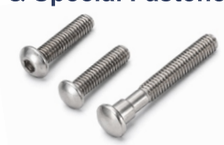
For corrosion-resistant fastening into concrete and masonry applications.

05 Stainless Steel Machine Screws & Thread Forming Screws



For industrial, assembly, and component fastening applications.

06 Stainless Steel Bolts & Special Fasteners



Including carriage bolts, hex lag screws, dowel screws, hanger bolts, automotive assembly fasteners, and custom stainless steel fasteners.

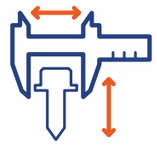
OEM & CUSTOMIZATION SUPPORT



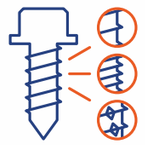
A2 / A4 Stainless Steel Materials



Custom Head Styles



Custom Dimensions



Thread Design Options



Private Label Packaging



OEM / ODM Production Support

QUALITY & MANUFACTURING

Controlled manufacturing processes support consistent product quality, stable drilling performance, and reliable supply.



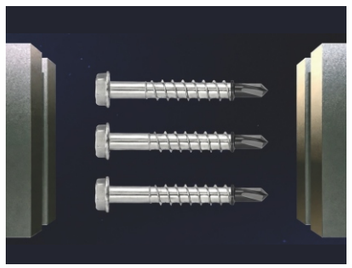
01 Wire Drawing

High quality stainless wire for superior performance.



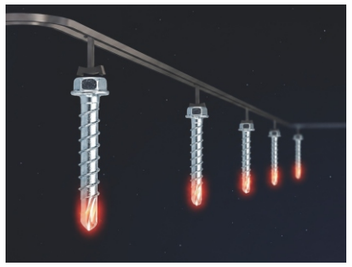
02 Cold Forming

Precision forming for consistent dimensions and strength.



03 Bi-Metal Welding

Advanced welding technology for strong bi-metal bonding.



04 Heat Treatment

Enhanced hardness and durability for reliable performance.



05 Inspection

Strict quality inspections ensure product reliability.

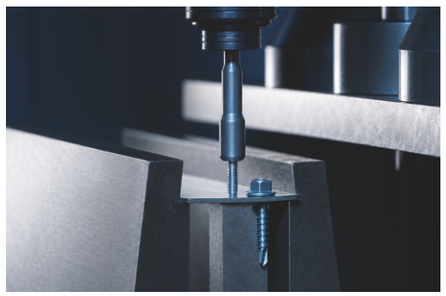


06 Packaging

Secure packaging to protect products during transport.

QUALITY ASSURANCE FOCUS

- Consistent Dimensions
- Reliable Drilling Performance
- Bi-Metal Joint Integrity
- Corrosion Resistance Support
- Batch-to-Batch Consistency



CUSTOM FASTENING SOLUTIONS

OEM / ODM SUPPORT FOR YOUR MARKET

Sheh Kai provides customized fastening solutions to support customer-specific requirements.



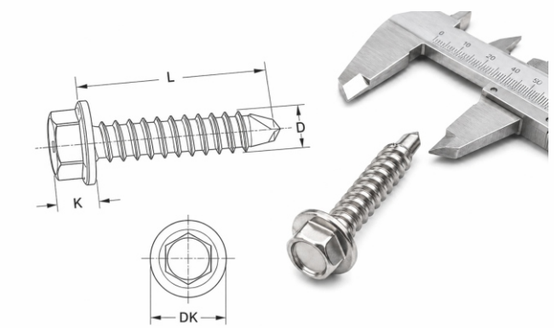
OEM Packaging



Head Marking

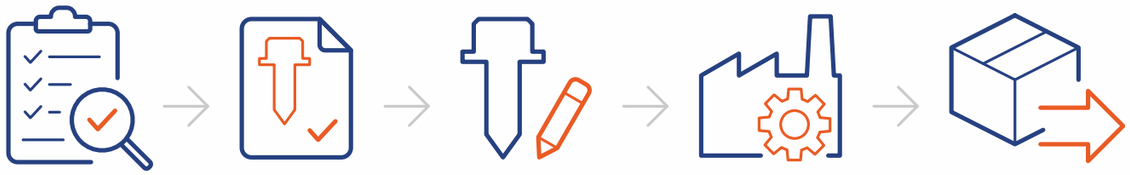


Private Label



Customized Design

OEM PROGRAM SUPPORT



Requirement Review → Drawing Confirmation → Sample Development → Mass Production → Packaging & Shipment

WHY CHOOSE
SHEH KAI



30+

30+ Years of Fastening Expertise

International Approval Experience

Global Distribution Experience

Taiwan Manufacturing Excellence

Professional Technical Support

OEM / ODM Capabilities

Reliable Quality

Long-Term Partnership