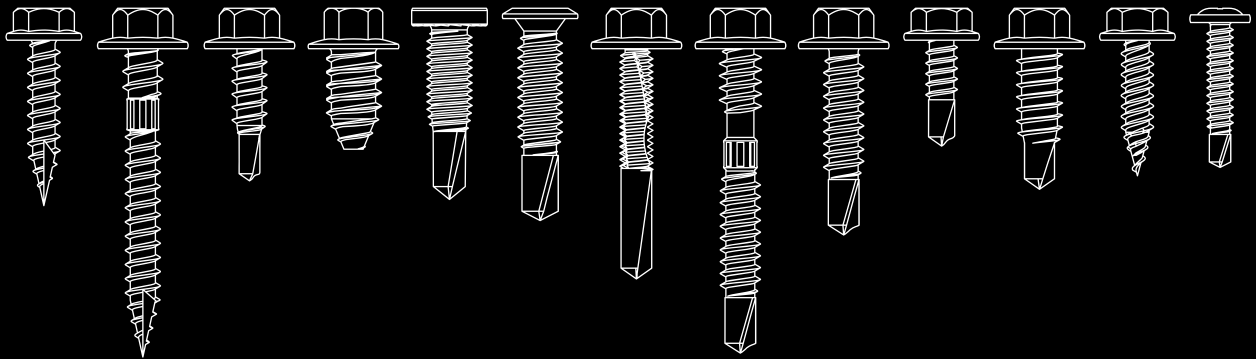




**BDN** FASTENERS

# BUILDING FASTENERS

Self-Drilling Screws Catalogue



100% Made in Taiwan





**BDN** FASTENERS

**BDN** FASTENERS

## Milestones

**2009** Broaden Worldwide Co., Ltd. Established in 2009 by five partners.

**2014** Created the BDN Fasteners® brand.

**2015** Set-up Branch in Thailand.

**2017** Started Manufacturing In-House, focusing on Heading, Pinch Pointing and Threading.

**2018** Set-up authorized dealership in India.

**2019** Moved to current location.

**2020~2021** Steady growth despite COVID-19.

**2022** Set-up authorized dealership in Vietnam. Added Collated Screw Assembly Line.

**2024** Became a FM Approved Supplier. Started In-house Pinch-Pointing Die Manufacturing.

**2025** Received BIS (Bureau of Indian Standards) Certification. Purchased and moved to new 2000 sqm Facility in Thailand.

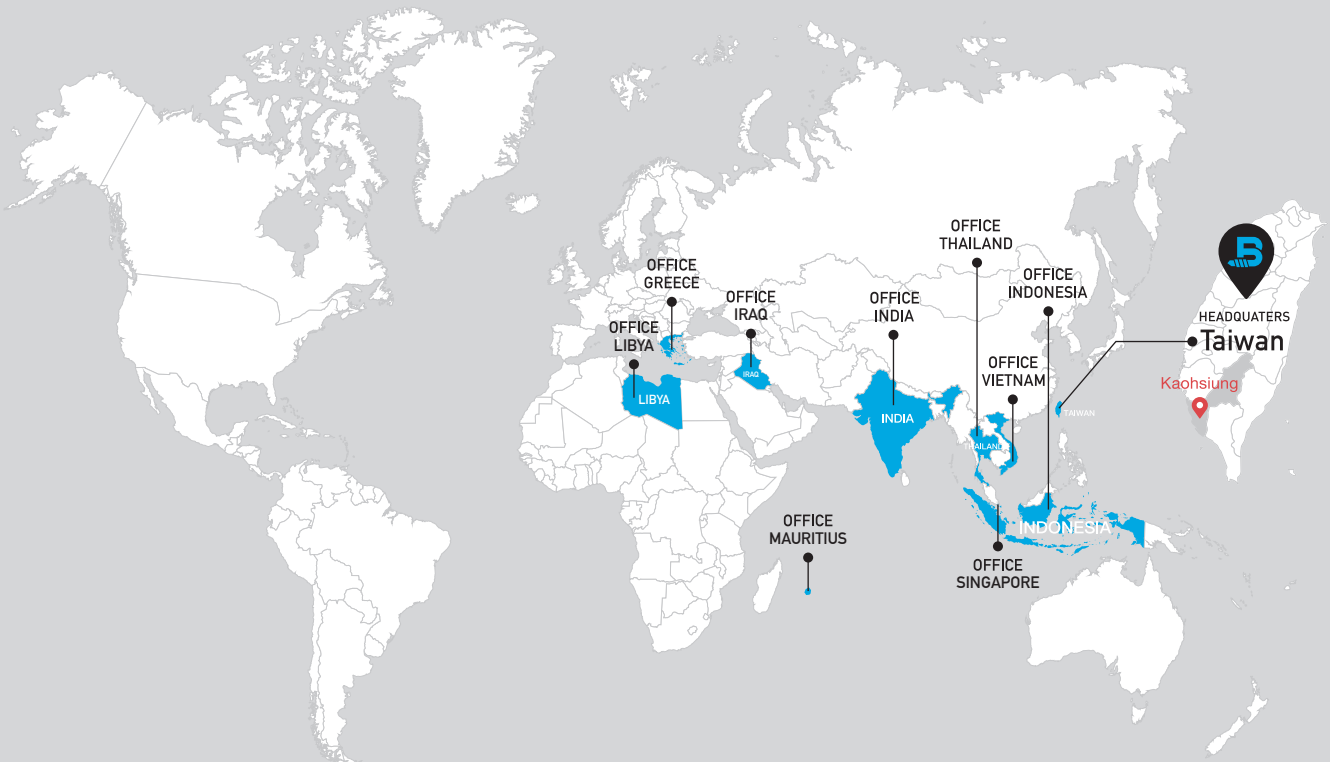


ISO 9001:2015











APPROVED

IS18471:2025






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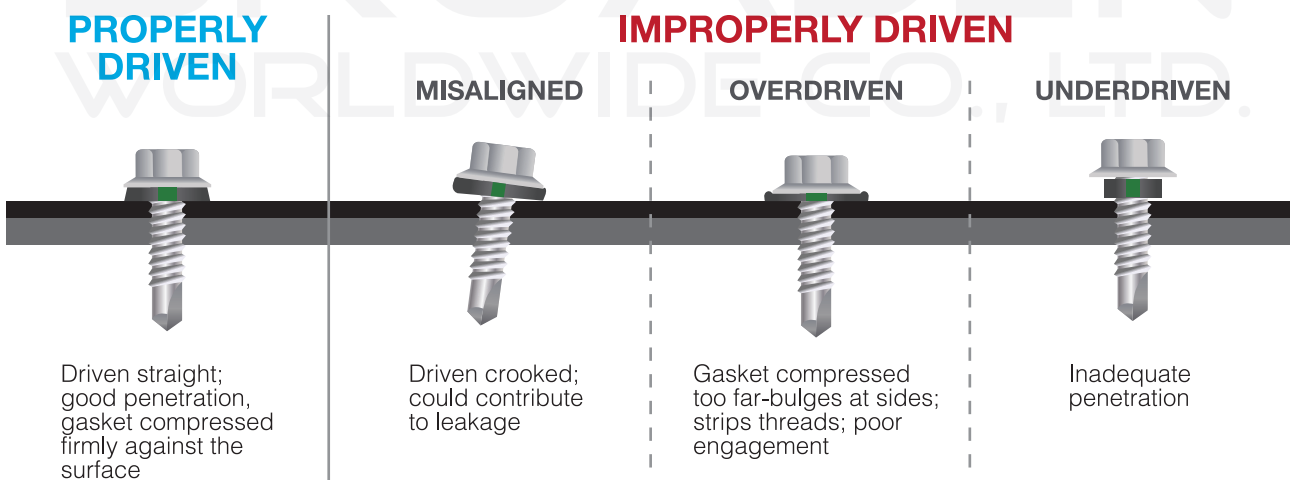
## Product Guides and Tips

### Recommended Drill Speeds

Recommended Drill Speeds	
Screw Type	RPM
Metal SDS	2500 rpm
Metal SDS - 5 Series	1800 rpm
Timber - Type 17	1500 rpm
Needle Point - Steel	2500 rpm
Needle Point - Timber	1000 rpm
Chipboard	1000 rpm

It is recommended that an appropriate drill driver with depth gauge and clutch setting be used.

### Screw Installation




















## Product Guides and Tips

### Screw Description

























Self-Tapping Screw Gauge (g)	Size (mm)
#6	M3.5
#8	M4.2
#10	M4.8
#12	M5.5
#13	M6.0
#14	M6.3

### Part Number Description

SD	H		C		G	12	55	C3	N
SCREW GROUP	HEAD STYLE	DRILLING POINT	THREAD PITCH	PRODUCT	THREAD TYPE	GAUGE	LENGTH	CORROSION RESISTANCE CLASS	SEALING WASHER
<b>SD</b>  Self-Drilling	<b>H</b>  Hex Head	<b>5</b>  Hex Head	<b>C</b>  Coarse Thread	<b>P</b>  Polyxpan	<b>G</b>  Scratchank	<b>06</b>	<b>VARIOUS</b>	<b>C3</b>  SST 1000hrs 7 Cycles	<b>N</b>  Eco-BDN Green EPDM Washer
<b>T17</b>  Type 17	<b>W</b>  Wafew Head	-	<b>F</b>  Fine Thread	-	<b>XG</b>  Double Scratchank	<b>08</b>		<b>C4</b>  SST 2000hrs 15 Cycles	<b>B</b>  Bonded Washer
<b>NP</b>  Needle Point	<b>BT</b>  Button Head	-	-	-	-	<b>10</b>		-	<b>D</b>  BAZ Washer
						<b>12</b>			
						<b>14</b>			



















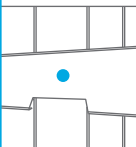
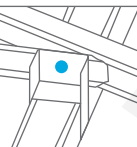
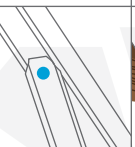
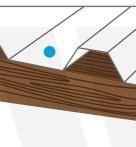
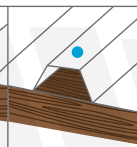


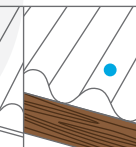
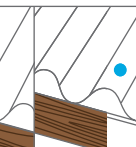









# Product Overview

Coating Type: Zinc + Organic Coating (Ruspert)  
 SGS Certification: SST 1000 hrs + Kesternich 7 cycles

Type									
Product									
Application	Metal		Thick Steel	Metal		Stitching		Concealed	
Max. drilling capacity [mm]	4.0mm thick (For #10 gauge)	6.0mm thick (For #12 gauge)	12.5mm thick	6.0mm thick	6.0mm thick	1+1mm thick	1+1mm thick	4.0mm thick	2.5mm thick
Gauge TPI x Length [mm]	10-16 x 16 10-16 x 19 10-16 x 25	12-14 x 20 12-14 x 25 12-14 x 30 12-14 x 35	12-24 x 32 12-24 x 38 12-24 x 50	12-14 x 50 12-14 x 55 12-14 x 65 12-14 x 75 12-14 x 85 12-14 x 110 12-14 x 130	12-14 x 45 12-14 x 55 12-14 x 65 12-14 x 75 12-14 x 90	15-15 x 20	10-16 x 19	10-24 x 16 10-24 x 22	8-18 x 45 8-18 x 65
Product webpage QR code									

# Product Overview

Coating Type: Zinc + Organic Coating (Ruspert)  
 SGS Certification: SST 1000 hrs + Kesternich 7 cycles

									Type
									Product
Truss			Timber		Polycarbonate Skylight				Application
									
4.0mm thick	1.5+1.5mm thick	0.75mm to 1.6mm thick Pre-punched hole	Min 20mm Timber penetration	Min 25mm Timber penetration	5.5mm thick	4.5mm thick	Min 25mm Timber penetration	3mm thick	Max. drilling capacity [mm]
M6.0-1.00 x 22	12-14 x 20	M8.0-2.12 x 16	10-12 x 20	12-11 x 50 12-11 x 65 12-11 x 75	12-14 x 40 (Valleys) 12-14 x 55 12-14 x 65 12-14 x 72 (Crests)	12-14 x 60	12-11 x 50	12-11 x 50	Gauge TPI x Length [mm]
									Product webpage QR code



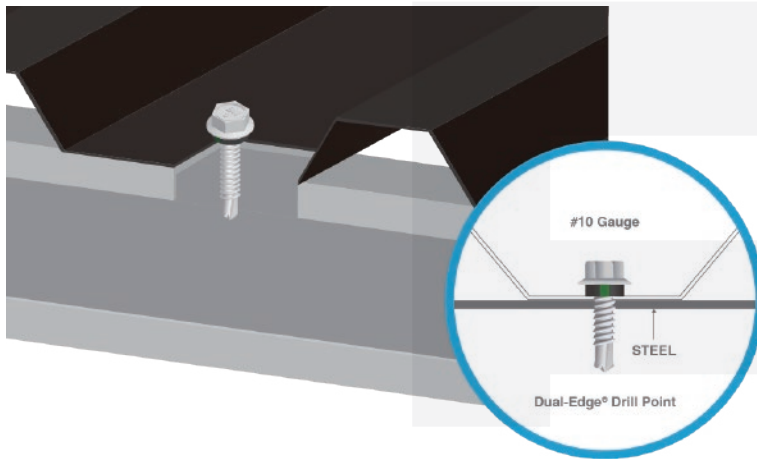
BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

## BN3 METAL-Tite™ Dual-Edge® Self-Drilling Screws

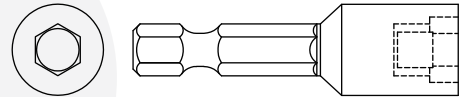
### Fixing Cladding to Metal

METAL-Tite™



#### ADAPTER TO USE

Magnetic Hex Socket (5/16")



#### STEEL PENETRATION

Max. 4.0mm thick (For #10 gauge)

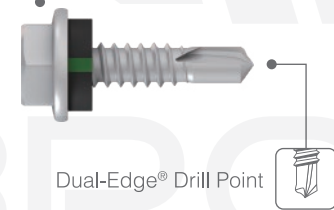
Max. 6.0mm thick (For #12 gauge)

#### PRODUCT FEATURES

Hex Washer Flange

Dual-Edge® Drill Point

Hex Washer Flange



Dual-Edge® Drill Point

#### WASHER

Eco-BDN® Green Washer



**Eco-BDN**  
Green Washer

SST 1000 hrs + Kesternich 7 cycles

#### PART NUMBER

##### #10 Gauge

BN3-SDHC1016C3N	10-16 x 16mm
BN3-SDHC1019C3N	10-16 x 19mm
BN3-SDHC1025C3N	10-16 x 25mm

##### #12 Gauge

BN3-SDHC1220C3N	12-14 x 20mm
BN3-SDHC1225C3N	12-14 x 25mm
BN3-SDHC1230C3N	12-14 x 30mm
BN3-SDHC1235C3N	12-14 x 35mm



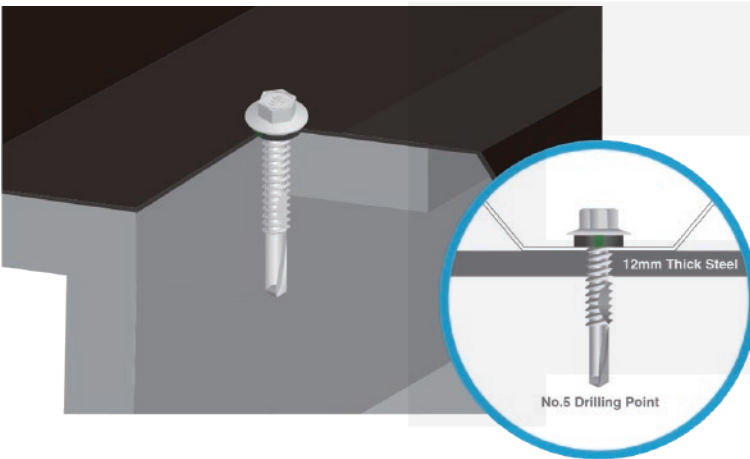


**BDN FASTENERS**

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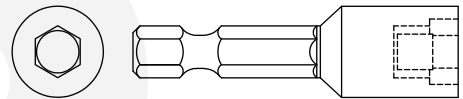
# BN3 METAL-Tite™ Heavy Duty Self-Drilling Screws

Fixing to Thick Steel - No. 5 Drill Point



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

Max. 12.5mm thick

### PRODUCT FEATURES

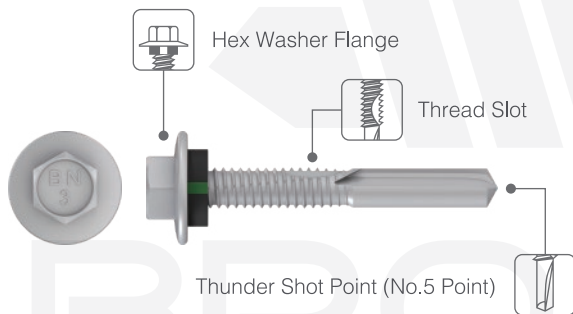
- Hex Washer Flange
- Thread slot
- No.5 Drilling Point

### WASHER

Eco-BDN® Green Washer



**Eco-BDN**  
Green Washer



**SST 1000 hrs + Kesternich 7 cycles**

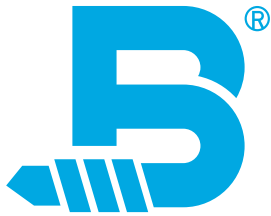
### PART NUMBER

#### #12 Gauge

BN3-SD5F1232C3N	12-24 x 32mm
BN3-SD5F1238C3N	12-24 x 38mm
BN3-SD5F1250C3N	12-24 x 50mm



**METAL-Tite™**



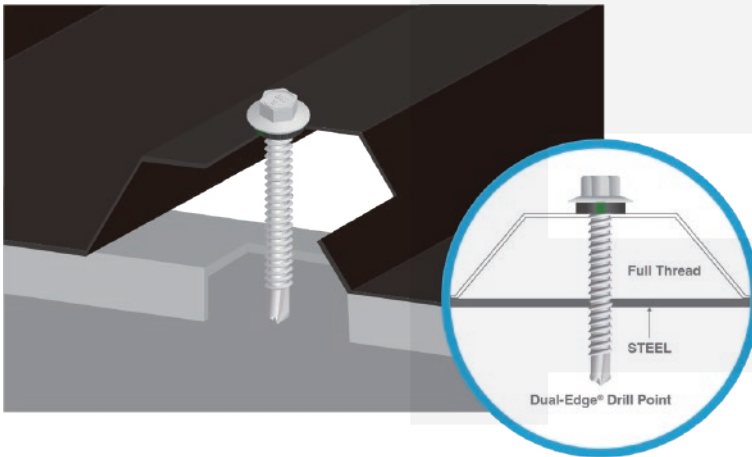
**BDN FASTENERS**

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# BN3 METAL-Tite™ Dual-Edge® Self-Drilling Screws

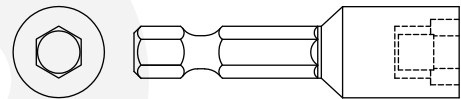
Fixing Roof Sheeting to Metal - Full Thread

METAL-Tite™



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

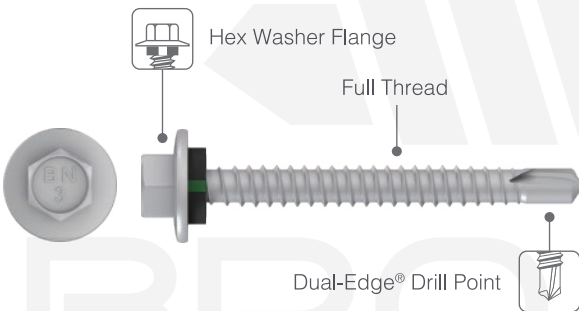
Max. 6.0mm thick (For #12 gauge)

### PRODUCT FEATURES

- Hex Washer Flange
- Full Thread
- Dual-Edge® Drill Point

### WASHER

Eco-BDN® Green Washer



**SST 1000 hrs + Kesternich 7 cycles**

### PART NUMBER

#### #12 Gauge

BN3-SDHC1245C3N	12-14 x 45mm	BN3-SDHC1275C3N	12-14 x 75mm
BN3-SDHC1255C3N	12-14 x 55mm	BN3-SDHC1290C3N	12-14 x 90mm
BN3-SDHC1265C3N	12-14 x 65mm		





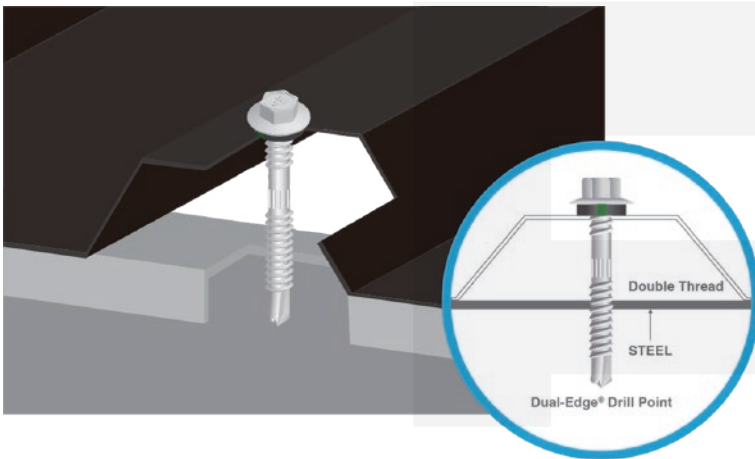
BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

# BN3 METAL-Tite™ Dual-Edge® Self-Drilling Screws

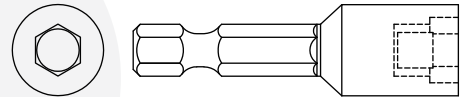
## Fixing Roof Sheeting to Metal - Double Thread

METAL-Tite™



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

Max. 6.0mm thick (For #12 gauge)

### PRODUCT FEATURES

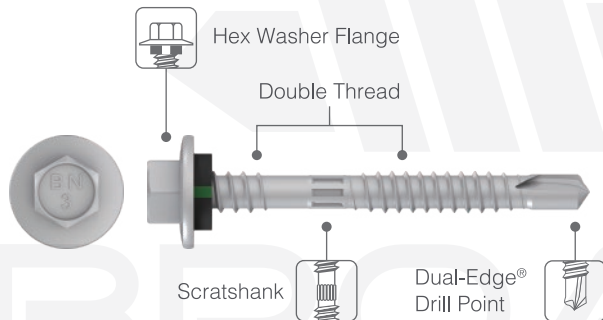
- Hex Washer Flange
- Dual-Edge® Drill Point
- Double Thread
- Scratchank

### WASHER

Eco-BDN® Green Washer



Eco-BDN Green Washer



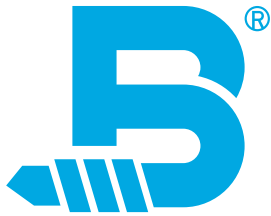
SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

#### #12 Gauge

BN3-SDHCG1250C3N	12-14 x 50mm	BN3-SDHCG1285C3N	12-14 x 85mm
BN3-SDHCG1255C3N	12-14 x 55mm	BN3-SDHCG12110C3N	12-14 x 110mm
BN3-SDHCG1265C3N	12-14 x 65mm	BN3-SDHCG12130C3N	12-14 x 130mm
BN3-SDHCG1275C3N	12-14 x 75mm		





BDN FASTENERS

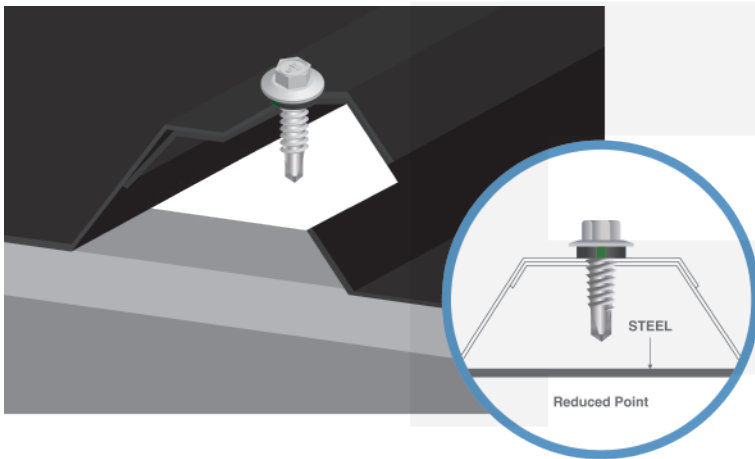
BDN FASTENERS

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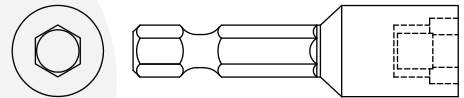
# BN3 METAL-Tite™ Stitching Fasteners

Stitching Fasteners - Reduced Point



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

Max. drilling capacity 1+1mm thick

### PRODUCT FEATURES

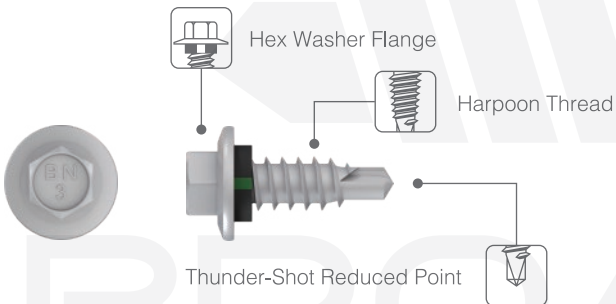
- Hex Washer Flange
- Thunder-Shot Reduced Point
- Harpoon Thread

### WASHER

Eco-BDN® Green Washer



Eco-BDN  
Green Washer



SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

#10 Gauge

BN3-SDHC1520C3N 15-15 x 20mm





BDN FASTENERS

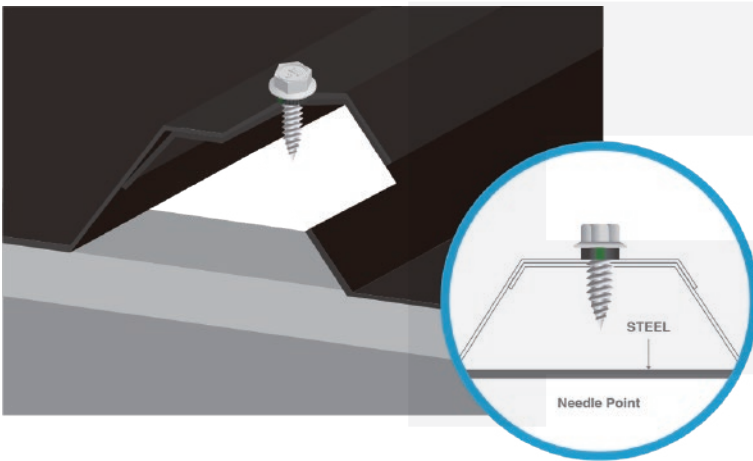
BDN FASTENERS

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# BN3 METAL-Tite™ Stitching Fasteners

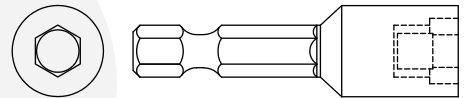
METAL-Tite™

## Stitching Fasteners - Needle Point



### ADAPTER TO USE

Magnetic Hex Socket (5/16")

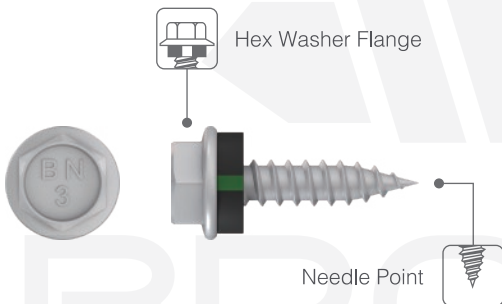


### STEEL PENETRATION

Max. drilling capacity 1+1mm thick

### PRODUCT FEATURES

- Hex Washer Flange
- Needle Point



### WASHER

Eco-BDN® Green Washer



Eco-BDN Green Washer

SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

#10 Gauge

BN3-SDHST1019C3N 10-16 x 19mm





BDN FASTENERS

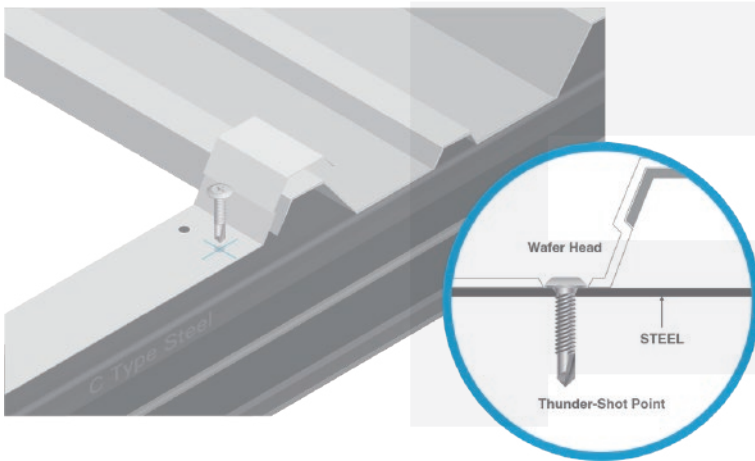
BDN FASTENERS

METAL-Tite™

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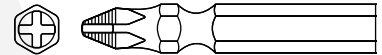
# BN3 METAL-Tite™ Concealed Fixing Fasteners

Fixing steel sheets into steel substrates



### ADAPTER TO USE

Philips Bit (PH2+)

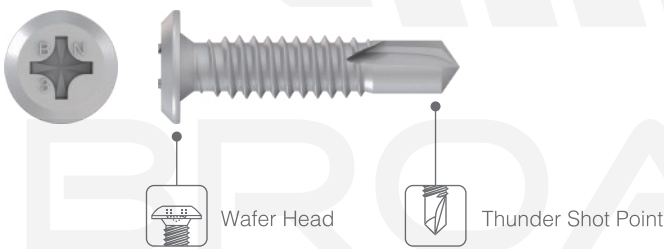


### STEEL PENETRATION

Max. 4.0mm thick

### PRODUCT FEATURES

- Wafer Head
- Philips Drive
- Thunder-Shot Point



BROADEN  
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

#### #10 Gauge

BN3-SDWF1016C3 10-24 x 16mm

BN3-SDWF1022C3 10-24 x 22mm



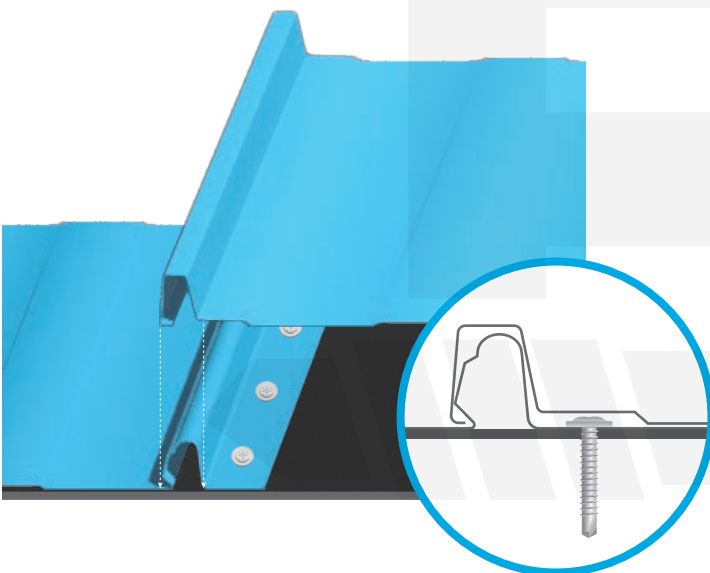


**BDN** FASTENERS

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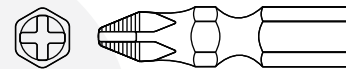
## BN3 Clip-Fix Button Head Self-Drilling Screws

BDN Clip-Fix button head self-drilling screws is suited for concealed and pierce fixing snap-lock type cladding system panels to thin gauge steel battens. Clip-Fix's low-profile button head are concealed and will not interfere when panels are snapped into position, providing a clean finish.



### ADAPTER TO USE

Philips Bit (PH2+)

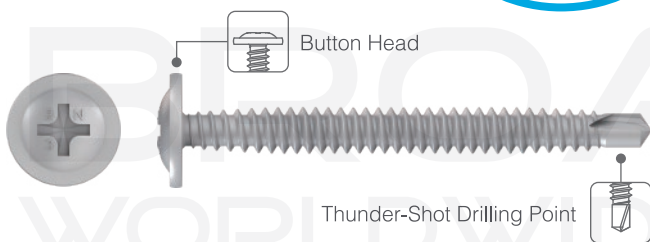


### STEEL PENETRATION

Max. 2.5mm thick

### PRODUCT FEATURES

- Low profile Button head
- Philips Drive
- Thunder-Shot Drilling Point
- Suited for clip fixing to batten supports



**SST 1000 hrs + Kesternich 7 cycles**

### PART NUMBER

#### #8 Gauge

BN3-SDBT0845C3 8-18 x 45mm

BN3-SDBT0865C3 8-18 x 65mm





BDN FASTENERS

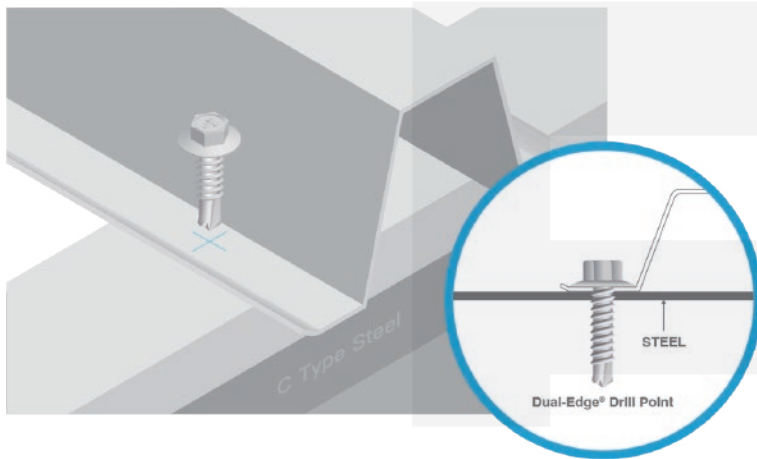
BDN FASTENERS

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## BN3 METAL-Tite™ Truss to Plate Connection Fasteners

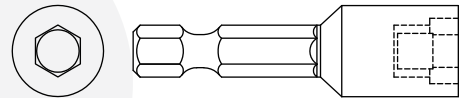
Truss to Plate Connecting Fasteners

METAL-Tite™



### ADAPTER TO USE

Magnetic Hex Socket (5/16")

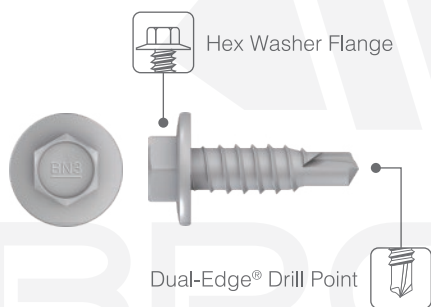


### STEEL PENETRATION

Max. drilling capacity 1.5+1.5mm thick

### PRODUCT FEATURES

Dual-Edge® Drill Point  
High pull-out strength



SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

#12 Gauge

BN3-SDHCF1220C3 12-14 x 20mm





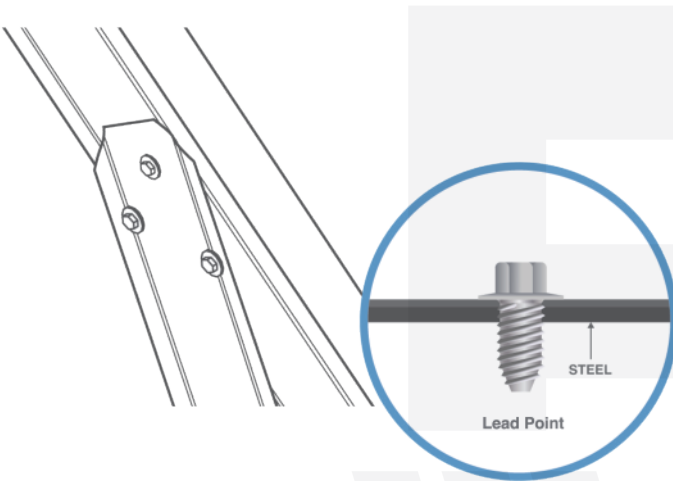
**BDN** FASTENERS

**BDN** FASTENERS

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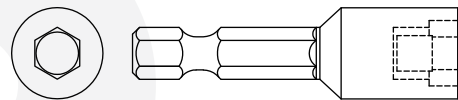
## BN3 TRUSS-Tite™ Framing Fasteners

Fixing Steel Roof and Floor Trusses



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

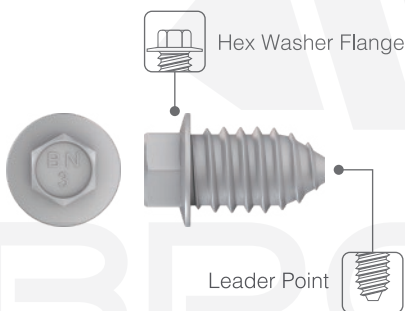
From 0.75mm to 1.6mm thick

### PRODUCT FEATURES

Easy application

Trilobular Thread for Superior Grip and Pull-out Strength

Lead Point to perfectly center the screw and initiate the thread-rolling process.



BROADEN  
WORLDWIDE CO., LTD.

**SST 1000 hrs + Kesternich 7 cycles**

### PART NUMBER

BN3-SDHTSF0816C3 M8.0-2.12 x 16mm



TRUSS-Tite™



BDN FASTENERS

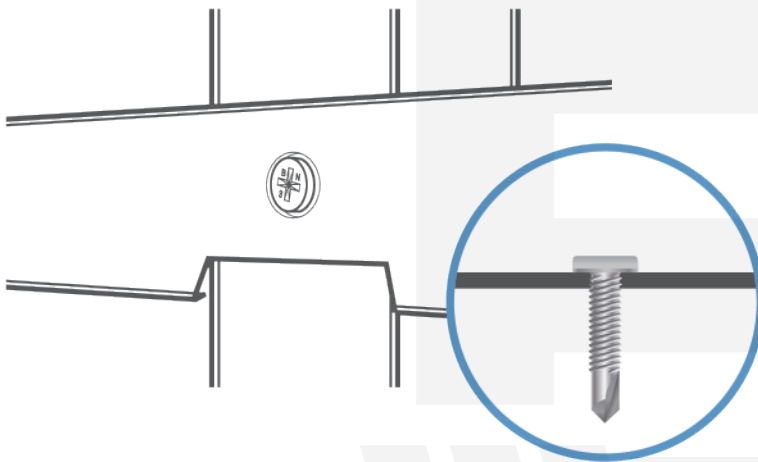
BDN FASTENERS

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## BN3 FRAME-Tite™ Framing Fasteners

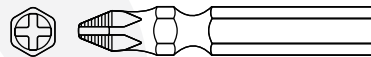
Fixing to steel wall frames

FRAME-Tite™



### ADAPTER TO USE

Philips Bit (PH3+)



### STEEL PENETRATION

Max. 4.0mm thick

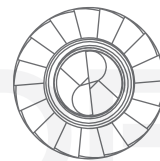
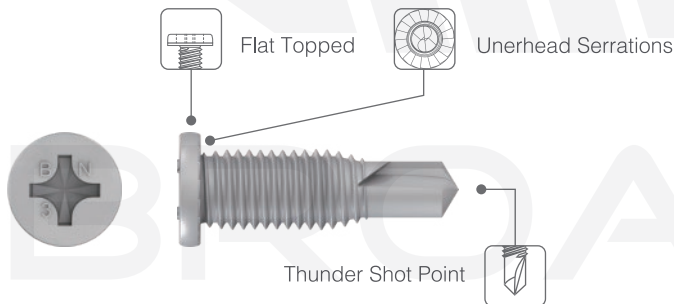
### PRODUCT FEATURES

Smooth flat top head for discreet fixing

Superior holding strength

Easy application

Underhead Serrations



**Underhead Serrations** to provides superior grip and locking action to prevent loosening.

SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

BN3-SDFHSF0622C3 M6.0-1.00 x 22mm





BDN FASTENERS

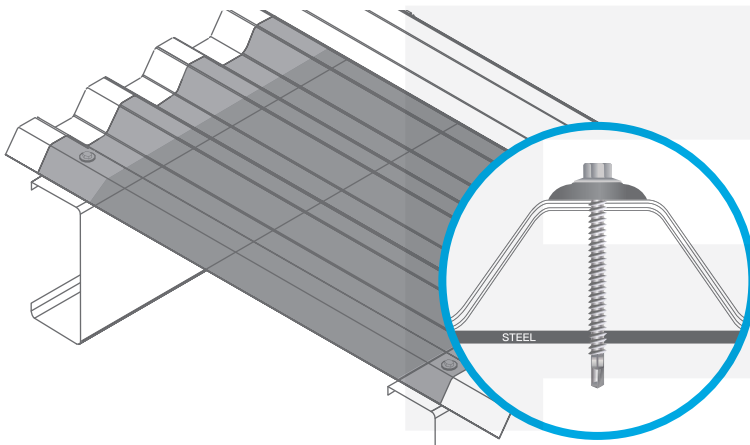
BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

# POLYXPAND™ Plastic Skylight Fasteners

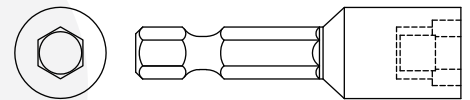
Fixing Polycarbonate Sheeting to Metal

POLYXPAND™



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

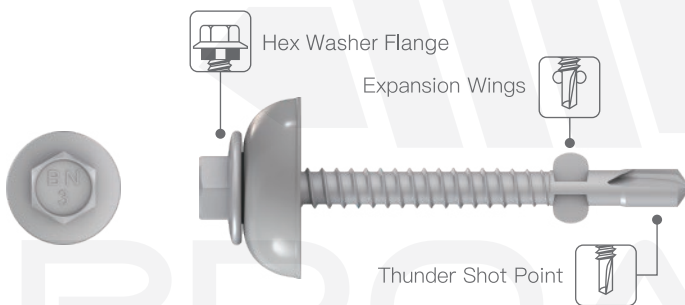
Max 5.5mm Thick

### PRODUCT FEATURES

- Hex Washer Flange
- Expansion Wings
- Thunder-Shot Point

### WASHER

Ø 25mm Dome Grey EPDM

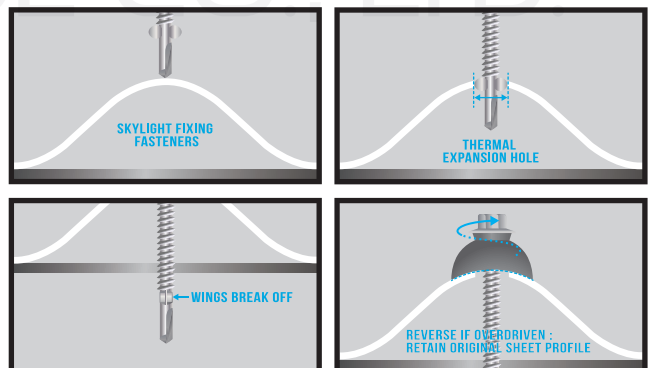


SST 1000 hrs + Kesternich 7 cycles

### PART NUMBER

#### #12 Gauge

BN3-SDHCP1240C3D	12-14 x 40mm
BN3-SDHCP1255C3D	12-14 x 55mm
BN3-SDHCP1265C3D	12-14 x 65mm
BN3-SDHCP1272C3D	12-14 x 72mm





BDN FASTENERS

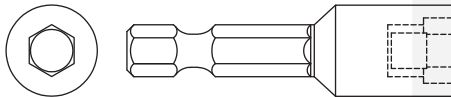
AS3566 Australian Standard • 100% Made in Taiwan

# POLY-FAST™ Metal Polycarbonate Roof Fasteners

## Fixing Polycarbonate Skylight to Steel

### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### STEEL PENETRATION

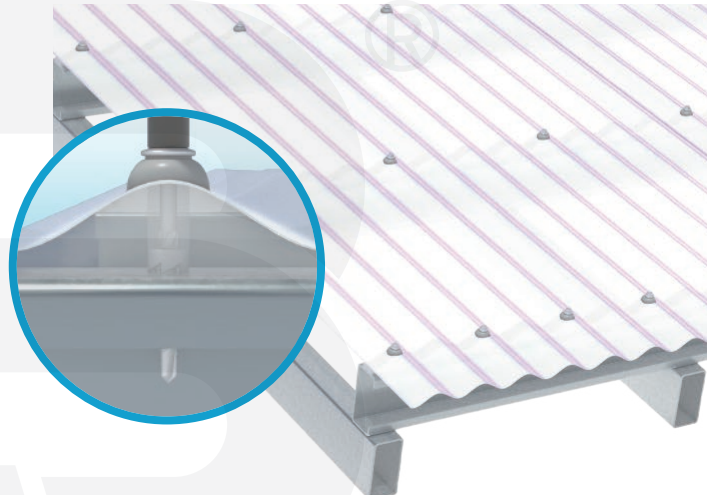
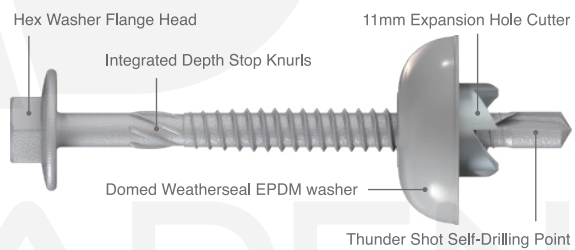
Max 4.5mm thick

### PRODUCT FEATURES

- Hex Washer Flange Head
- Integrated Depth Stop Knurls
- 11mm Expansion Hole Cutter
- Thunder Shot Self-Drilling Point

### WASHER

Domed, Weatherseal, Anti-static EPDM Washer



### PART NUMBER

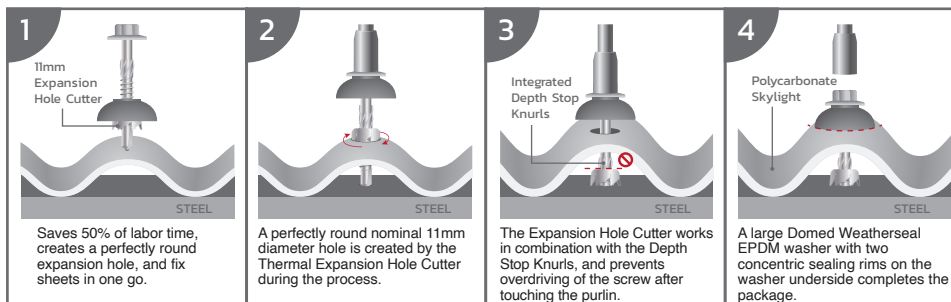
#12 Gauge

BN4-SDXPS1260C4 12-14 x 60mm

### Corrosion Resistance

Class 4 Mechanical Zinc-Tin Plating

### Installation Procedure



POLY-FAST™



BDN FASTENERS

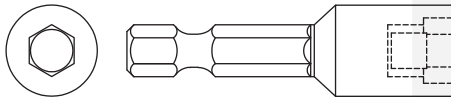
AS3566 Australian Standard • 100% Made in Taiwan

# POLY-FAST™ Timber Polycarbonate Roof Fasteners

## Fixing Polycarbonate Skylight to Timber

### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### TIMBER PENETRATION

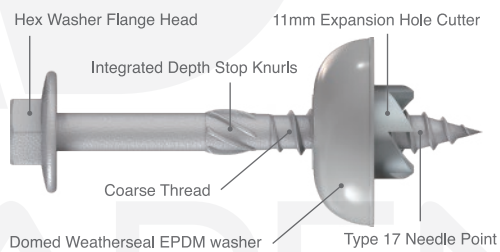
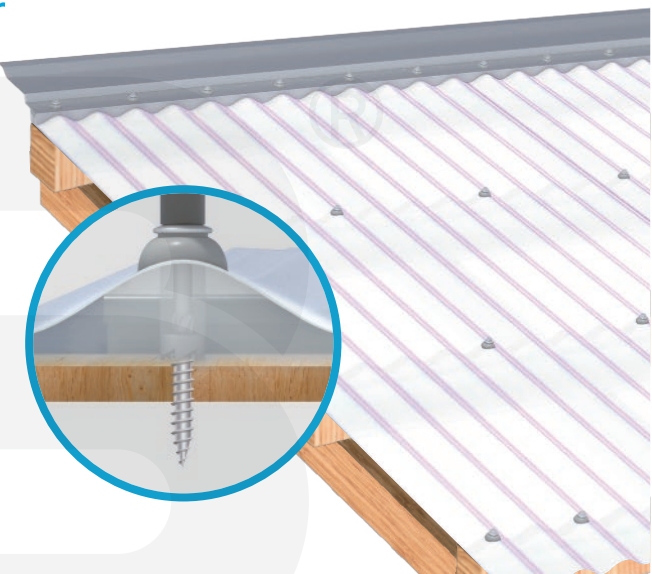
Min 25mm penetration

### PRODUCT FEATURES

- Hex Washer Flange Head
- Integrated Depth Stop Knurls
- 11mm Expansion Hole Cutter
- Type 17 Needle Point

### WASHER

Domed, Weatherseal, Anti-static EPDM Washer



### PART NUMBER

#12 Gauge

BN4-T17HXPS1250C4 12-11 x 50mm

### Corrosion Resistance

Class 4 Mechanical Zinc-Tin Plating

### Installation Procedure

<p><b>1</b></p> <p>11mm Expansion Hole Cutter</p> <p>TIMBER</p> <p>Saves 50% of labor time, creates a perfectly round expansion hole, and fix sheets in one go.</p>	<p><b>2</b></p> <p>TIMBER</p> <p>A perfectly round nominal 11mm diameter hole is created by the Thermal Expansion Hole Cutter during the process.</p>	<p><b>3</b></p> <p>Integrated Depth Stop Knurls</p> <p>TIMBER</p> <p>The Expansion Hole Cutter works together with the Depth Stop Knurls, which prevents overdrive and sits perfectly flush against the Timber surface.</p>	<p><b>4</b></p> <p>Polycarbonate Skylight</p> <p>TIMBER</p> <p>A large Domed Weatherseal EPDM washer with two concentric sealing rims on the washer underside completes the package.</p>
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POLY-FAST™



BDN FASTENERS

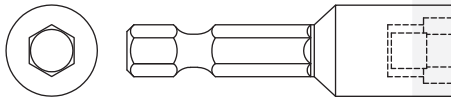
AS3566 Australian Standard • 100% Made in Taiwan

# POLY-FAST™ Duo Polycarbonate Roof Fasteners

Dual purpose, Fixing Polycarbonate Skylight to Metal and Timber

## ADAPTER TO USE

Magnetic Hex Socket (5/16")



## STEEL PENETRATION

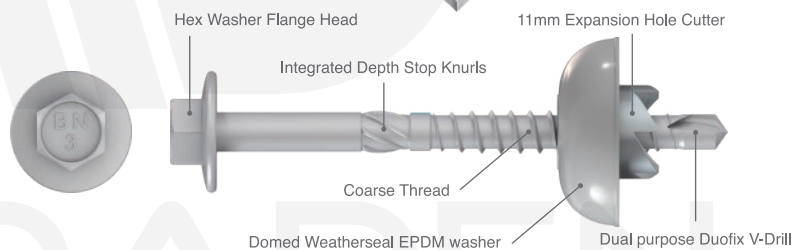
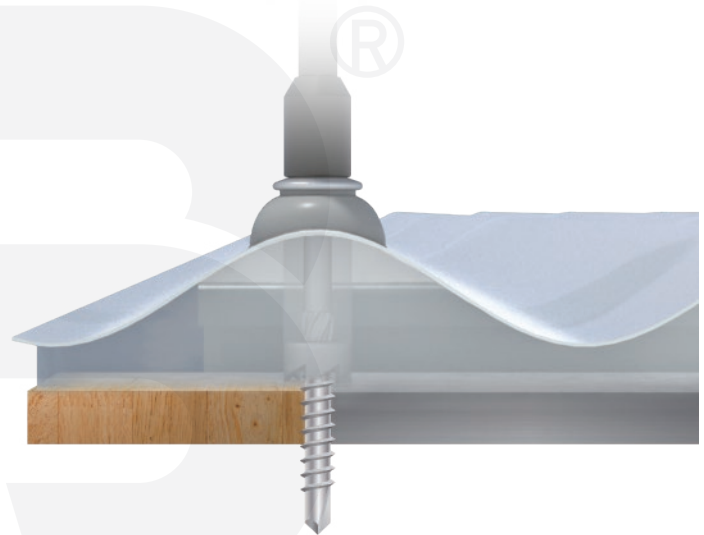
Max. 3.0mm thick

## PRODUCT FEATURES

- Hex Washer Flange Head
- Integrated Depth Stop Knurls
- 11mm Expansion Hole Cutter
- Dual purpose Duofix V-Drill

## WASHER

Domed, Weatherseal, Anti-static EPDM Washer



## PART NUMBER

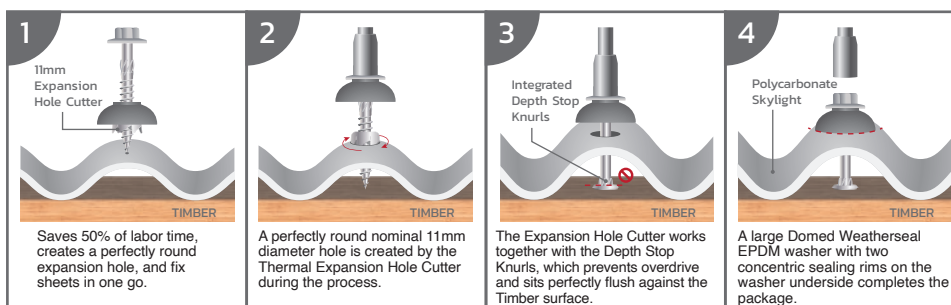
#12 Gauge

BN3-S17HXPS1250C3 12-11 x 50mm

## Corrosion Resistance

Class 3 Ruspert Coating

## Installation Procedure



POLY-FAST™



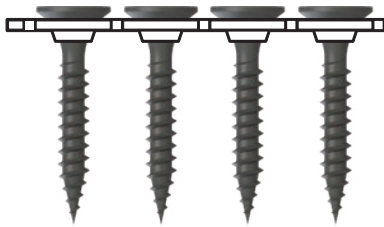
BDN FASTENERS

BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

## Collated Drywall Screws

### Collated Bulge Head Screws for Thin Steel



#### Fine Thread

##### Dimension

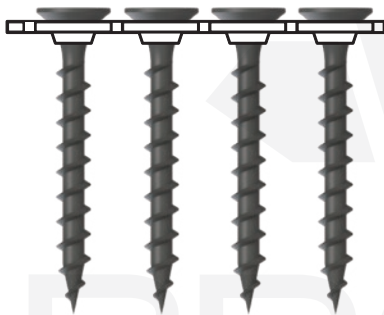
M3.5 x 25mm #6-18 x 1"

M3.5 x 32mm #6-18 x 1-1/4"

M3.5 x 41mm #6-18 x 1-5/8"



### Collated Bulge Head Screws for Timber



#### Coarse Thread

##### Dimension

M3.5 x 25mm #6-9 x 1"

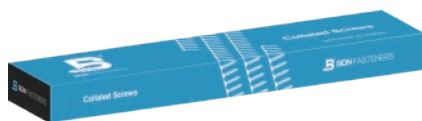
M3.5 x 32mm #6-9 x 1-1/4"

M3.5 x 41mm #6-9 x 1-5/8"



#### Standard Packaging:

50pcs/strip, 1000pcs/box  
and 10000pcs/ctn



#### Inner Box

Size: 560 x 120 x 50mm

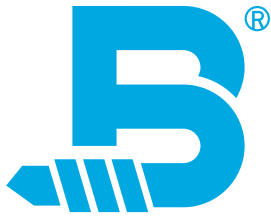


#### Outer Box

Size: 573 x 255 x 283mm



Collated Drywall



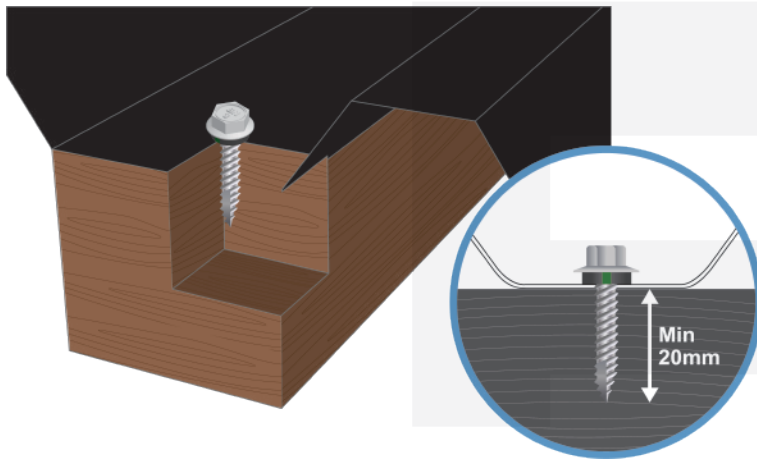
**BDN** FASTENERS

**TIMBER-Tite™**

AS3566 Australian Standard • 100% Made in Taiwan

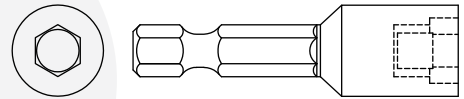
## **BN3 TIMBER-Tite™ Type 17 Self-Tapping Screws**

Fixing roof sheeting to timber - Valley Fixing Fasteners



### **ADAPTER TO USE**

Magnetic Hex Socket (5/16")

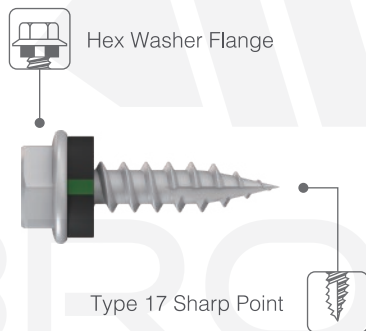


### **TIMBER PENETRATION**

Min. 20mm penetration

### **PRODUCT FEATURES**

Hex Washer Flange  
Type 17 Sharp Point



### **WASHER**

Eco-BDN® Green Washer



**Eco-BDN**  
Green Washer

**SST 1000 hrs + Kesternich 7 cycles**

### **PART NUMBER**

**#10 Gauge**

BN3-T17H1020C3N 10-12 x 20mm





BDN FASTENERS

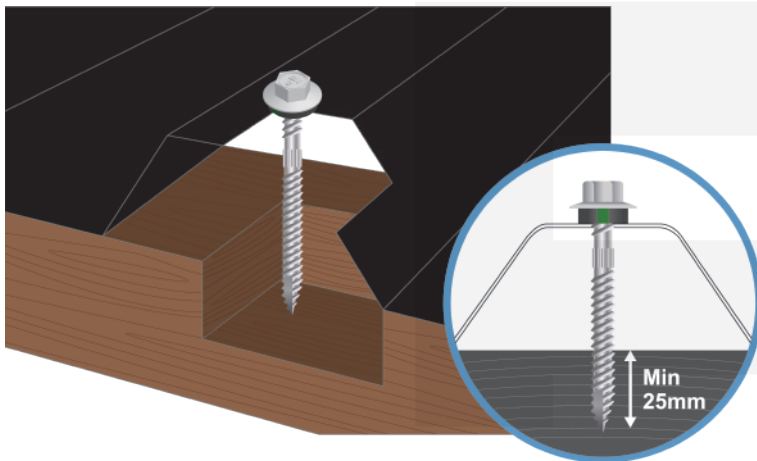
BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

# BN3 TIMBER-Tite™ Type 17 Self-Tapping Screws

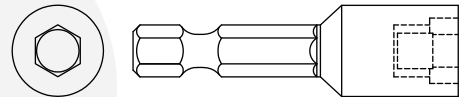
Fixing roof sheeting to timber - Crest Fixing Fasteners

TIMBER-Tite™



### ADAPTER TO USE

Magnetic Hex Socket (5/16")



### TIMBER PENETRATION

Min. 25mm penetration

### PRODUCT FEATURES

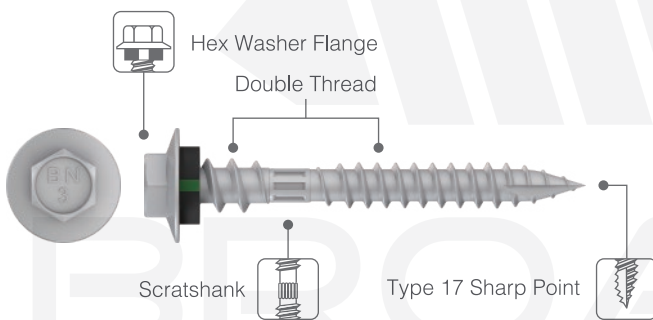
- Hex Washer Flange
- Type 17 Sharp Point
- Double Thread
- Scratchank

### WASHER

Eco-BDN® Green Washer



Eco-BDN  
Green Washer



SST 1000 hrs + Kesternich 7 cycles

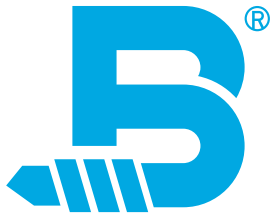
### PART NUMBER

#### #12 Gauge

BN3-T17HCG1250C3N	12-11 x 50mm
BN3-T17HCG1265C3N	12-11 x 65mm
BN3-T17HCG1275C3N	12-11 x 75mm



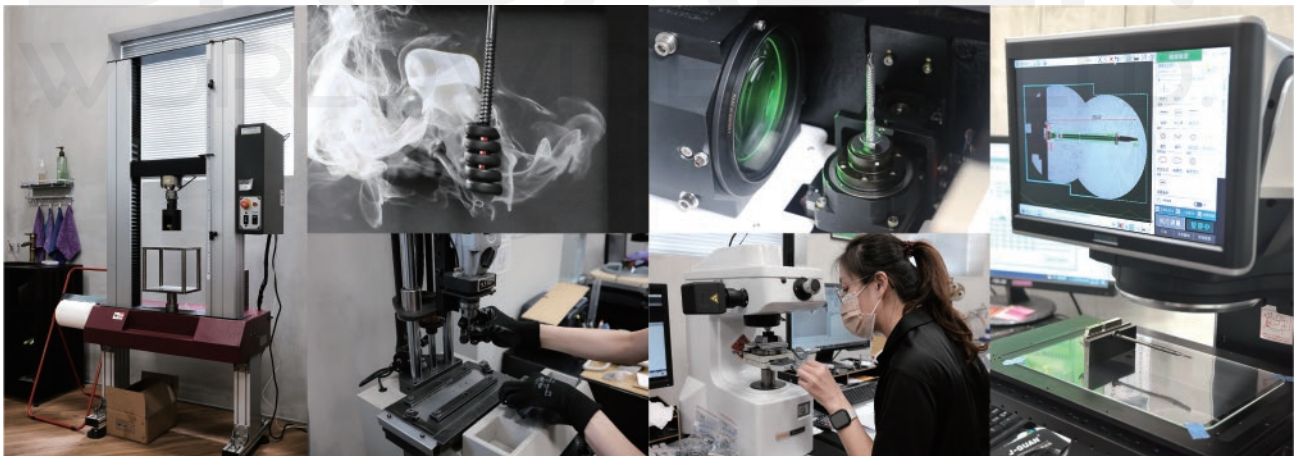




**BDN** FASTENERS

## QUALITY CONTROL IN PROCESS

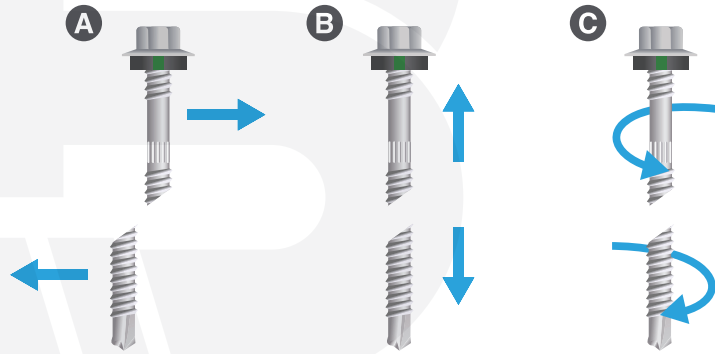
- 1. PRE-PRODUCTION INSPECTION**  
Drawing Check  
Specific Conditions Check
- 2. HEADING / THREADING / PINCH POINTING**  
Machinery Condition Check  
Molds and Dies Inspection and Setup  
Batch tests and measurements during and after production
- 3. HEAT TREATMENT**  
Strictly controlled process  
Fully equipped with well maintained case depth and hardness testers  
Test Reports are provided by subcontractors for each batch.
- 4. SURFACE TREATMENT**  
Well equipped with salt-spray and corrosion test machinery  
Test Reports are provided by subcontractors for each batch.  
Sent to 3rd Party Accredited Labs by request.
- 5. SURFACE TREATMENT**  
Well equipped with salt-spray and corrosion test machinery  
Test Reports are provided by subcontractors for each batch.  
Sent to 3rd Party Accredited Labs by request.
- 6. FINAL INSPECTION**  
Packaging, Labels, Quantity, and Pallet Conditions are all checked again prior to sending to port or loading into the container.
- 7. PRE-SHIPMENT SAMPLES SENT UPON REQUEST**  
Pre-shipment samples along with a detailed in-house test report are sent to customers for verification, and the remaining samples archived for a minimum of 6 months for future reference.



## Mechanical Properties

Screw Gauge / TPI	<b>A</b> Single Shear Strength (N)	<b>B</b> Axial Tensile Strength (N)	<b>C</b> Torsional Strength (Nm)
10-16 x L	6,800	11,900	6.9
10-24 x L	6,200	11,400	7.4
12-14 x L	8,800	15,300	10.9
12-11 x L (T17S)	8,400	13,900	9.4

- A** **Single Shear Strength (N)**  
The shear load required to break the screw
- B** **Axial Tensile Strength (N)**  
The tensile load required to break the screw
- C** **Torsional Strength (Nm)**  
The torque required to break the screw



## Pullout Values

### BDN FASTENERS into Steel

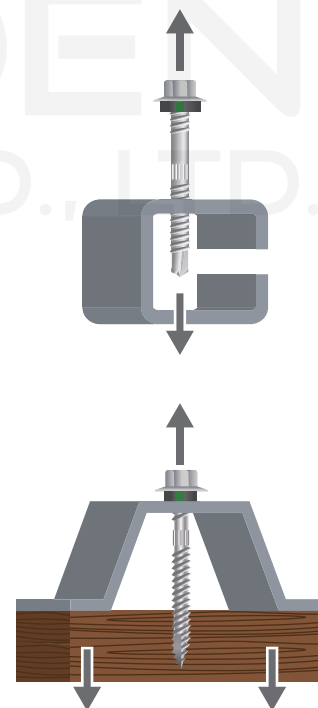
Screw Gauge / TPI	Steel Thickness				
	0.75mm Batten	1.20mm Stud	1.5mm Purlin	1.9mm Purlin	2.4mm Purlin
10-16 x L	1,860	2,320	4,200	5,500	7,820
10-24 x L	-	2,320	4,280	5,820	7,680
12-14 x L Screw Length longer than 20mm	-	1,980	3,040	5,160	6,960
12-14 x L Screw Length 20mm or Shorter	-	2,200	4,080	5,420	7,360

(Unit:Newtons)

### BDN FASTENERS into Timber, Lightweight Battens & Steel

Screw Gauge / TPI	0.55mm Steel Batten	0.75mm Steel Batten	F7 Pine Timber	F17 Hardwood
10-12 x L (T17S)	1,320	2,220	5,700	6,000
12-11 x L (T17S)	1,510	2,400	3,900	6,460

(Unit:Newtons)



# TECHNICAL DATA SHEET

## BDN Fasteners® BN3 Series #12-14 x L

**Head Marking:** BN3 Monogram

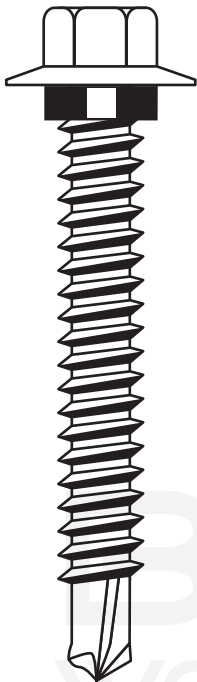
**Item:** BN3 #12-14 x L

**Fastener Specifications:** Hex Washer Flange, DUAL-EDGE® Drill Point

**Dimensional Standards:** BDN FASTENERS — AS 3566.1, Modified

**Material Specifications:** Low Carbon Steel, Grade C1022

**Surface Treatment:** RUSPERT® BN3 1000hrs



### ULTIMATE PULL OUT LOAD

Method: Pull-out tests are done using an Universal Material Testing Machine (YM-H4501) at a speed rate of 5 mm/min until failure.

Test Plate	Plate Thickness (mm)	Max Pull Out Load (N)	Failure Analysis
Mild Steel Min. Tensile Strength 450 MPa	1.6	2498.25	Failure occurred at plate
	2.0	3433.55	
	2.5	5402.24	
	3.0	7225.05	
	3.5	8092.94	Failure occurred at both plate and fastener threads
	4.5	13587.11	
	6.0	16752.21	

### ULTIMATE SHEAR STRENGTH

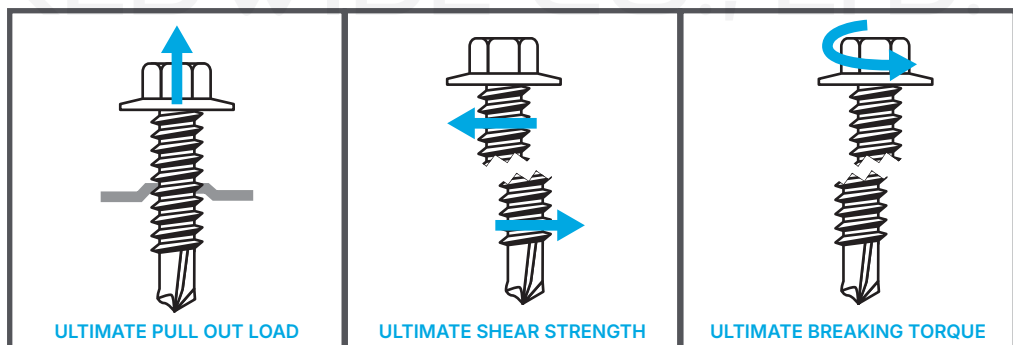
Method: Shear tests are done using an Universal Material Testing Machine (YM-H4501) at a speed rate of 10 mm/min until failure.

Nom. Inner Thread Diameter (mm)	X-Sectional Area (mm <sup>2</sup> )	Max Applied Load (N)	Analysis
3.99 – 4.05	12.50 – 12.88	11000 – 11100	Tested until Break

### ULTIMATE BREAKING TORQUE

Method: Torsional tests are done using a eclatorQ Torque Wrench with a range from 0 to 600 lbf/inch.

Failure Torque (Nm)	Analysis
Min. 10.9	Tested until Break



### RECOMMENDED APPLICATION GUIDE

**Machine Specifications:** Torque : 17 - 29 Nm Speed : 1800 - 2500 RPM

**Material Parameters:** Zinc-coated steel Type G300-Z275, Type G350-Z275, or Type G450-Z350 in accordance with AS 1397.

## Packaging Types

### Different Packaging Types

Standard Outer Box  
Size: 270x390x200mm



Standard Inner Box  
i6: 125x250x90(H)mm



Standard Inner Box  
i8: 125x180x90(H)mm



Standard Inner Box  
i12: 125x115x90(H)mm



Standard Inner Box  
i16: 90x125x90(H)mm



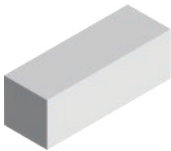
Standard Inner Box  
i24: 90x80x90(H)mm



Standard Inner Box  
i36: 80x60x90(H)mm



Specialty (A) Outer Box  
Size: 560x195x135mm



Specialty (A) Inner Box  
i5: 105x180x120mm



Specialty (A) Inner Box  
i10: 105x90x120mm



Specialty (B) Outer Box  
Size: 317x155x168mm



Specialty (B) Inner Box  
i3: 102x147x150mm



Collated Screws Outer Box  
Size: 573x248x280mm



Collated Screws Inner Box  
Size: 570x120x60mm



Hang Hole Zip Lock Pack Outer Box  
Size: 550x195x160mm



Hang Hole Zip Lock Pack  
Size: 180x240mm+45mm



Bulk Carton (A)  
Size: 320x180x170mm



Bulk Carton (B)  
Size: 270x215x162mm



Plastic Tub  
Size: 210x175x125mm



Standard PE Bag  
Large: 210x230mm



Standard PE Bag  
Small: 160x160mm



## Packaging Guide

Brand new packaging, upsized logos, spiced up head markings and more! Updated color scheme means you'll never have trouble spotting trusty BDN Fasteners® anymore!

### Color Printed Box

Standard Color Printed Outer Box  
O3 Size: 270 x 390 x 200mm

Standard Color Printed Inner Box  
i8 Size: 125 x 180 x 90mm



### Kraft Packaging Box

Standard Kraft Paper Outer Box  
O3 Size: 270 x 390 x 200mm



Standard Kraft Paper Inner Box  
i6 Size: 125 x 250 x 90mm



### Product Label

BDN Fasteners® come with large, easy to read product labels. Each product has its own unique label showing the product category, packaged quantities, size, part no., color, and description.

To re-order, use the Part No., Product Description, and Color Code as indicated on the right. This information can be easily obtained from any of our existing packaging.

<b>B</b> BDN FASTENERS	
1200 pcs/ctn	 
<b>BN3</b>	<b>PART NUMBER</b> SDHCG1248C3N
Series No.	<b>SIZE</b> 12-14 x 48mm
	<b>DESCRIPTION</b> HEX FLANGE HEAD SELF-DRILLING SCREW

# Surface Coating Corrosion Warranty

The below table is an indication of the warranty period based on the corrosivity of your location and is to be used as a guide only. To determine the appropriate ISO 9223 category for your environment, please contact your local representative. Environmental conditions and category is complex and can be influenced by a wide range of factors. Note that in certain instances, corrosion zones can extend out further to what is stated above.






ENVIRONMENTAL CONDITIONS	ATMOSPHERIC CORROSIVITY CATEGORIES (ISO 9223)	WARRANTY PERIOD Class 3 Coating	WARRANTY PERIOD Class 4 Coating
 <b>LIGHT INDUSTRIAL URBAN</b> Most areas beyond 50km from the sea, but can be as close as 1 km from seas that are relatively sheltered and quiet.	<b>C2</b> LOW	<b>25</b> YEARS	<b>30</b> YEARS
 <b>INDUSTRIAL</b> Between 2km and 10km from an industrial plant, sewage treatment or airport.	<b>C2</b> LOW	<b>20</b> YEARS	<b>25</b> YEARS
 <b>MODERATE URBAN INDUSTRIAL</b> Urban and industrial areas with low pollution, varies significantly with factors such as winds, topography and vegetation	<b>C3</b> MEDIUM	<b>15</b> YEARS	<b>20</b> YEARS
 <b>SEVERE INDUSTRIAL</b> Within 2km of an industrial plant, aggressive industrial area, sewage treatment or airport.	<b>C4</b> HIGH	<b>10</b> YEARS	<b>15</b> YEARS
 <b>MILD &amp; MODERATE MARINE</b> Coastal areas within 50km from the sea, sheltered with low salinity, varies significantly with factors such as winds and topography.	<b>C3</b> MEDIUM	<b>15</b> YEARS	<b>20</b> YEARS
 <b>SEVERE MARINE</b> Between 400m and 1km from the ocean or within 150m from a salt water inlet or creek.	<b>C4</b> HIGH	<b>6</b> YEARS	<b>12</b> YEARS
 <b>VERY SEVERE MARINE</b> Up to 400m from the ocean, but outside the ocean spray zone.	<b>C5</b> EXTREME	<b>NOT RECOMMENDED</b>	<b>NOT RECOMMENDED</b>

BDN Fasteners® has aligned the warranty period for its products to be consistent with the warranty period of major roofing material suppliers. AS3566.2 Outdoor Exposure testing results indicate the lifespan of our products to extend beyond the warranty period.

# TECHNICAL SPECIFICATION

Report date: Dec. 05, 2022 tested by SGS and Nov. 04, 2022 tested by PIDC

Product range: ECO-BDN GREEN EPDM WASHER

	<b>Fastener Gauge: #10</b>		
	Outside Diameter (mm) 8.20-8.80	Inside Diameter (mm) 4.10-4.45	Thickness (mm) 2.20-2.80
	<b>Fastener Gauge: #12</b>		
	Outside Diameter (mm) 10.20-10.80	Inside Diameter (mm) 4.65-5.00	Thickness (mm) 2.40-3.00
	<b>Fastener Gauge: #14</b>		
	Outside Diameter (mm) 10.20-10.80	Inside Diameter (mm) 5.35-5.65	Thickness (mm) 2.40-3.00

 **Eco-BDN  
Green Washer**



BDN FASTENERS, guarantee that the goods from the above "Product range" complies with the Australia & International Standards details below.

ASTM Method	Test Description	Specification	Result
D2240	Shore 'A' Hardness	80 +/- 5	82
D412	Tensile Strength (Mpa)	4.0 min	7.79
	Elongation (%)	150 min	410
D624	Tear Strength (kN/m)	20 min	33
D395	Compression set (%)	-	27
D573	Heat Resistance 70hrs @100°C	-	-
	Tensile Strength Change (%)	+/-10	+11
	Elongation Change (%)	+/-25	-22
	Hardness Change (Type A/1 sec)	+/-25	+4
D1171	Resistance to Ozone (100hrs@40°C)	-	100ppm No cracks
D2137	Low Temperature Brittleness (3min@-50°C)	-	Non-brittle
D257	Surface Resistivity (Ω)	-	Non-conductive
	Volume Resistivity(Ω-cm)	-	Non-conductive



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## Warranty Terms and Conditions

1. BDN Fasteners® warrants its Poly-Fast™ Polycarbonate fixings AS3566 Class 4 fixings with EPDM sealing washers (“the fixings”) against the loss of structural integrity due to the effects of corrosion or metallurgical defects on the following terms (“the BDN Fasteners® Building Products Corrosion Warranty”).
2. This warranty does not cover:
  - a. the threaded or shank areas of the screw (only the head is covered);
  - b. the aesthetic performance of the coatings (inclusive of paint blistering)
  - c. chemical or moisture from within the building or the build-up of unwashed corrosive salts or moisture under the cladding material
  - d. extreme pollution by chloride - typical of marine splash and spray zones
  - e. contact with soil, ash, fertilizer, moisture retaining substances, lead, copper or other metals or chemical agents;
  - f. salt water carried and deposited by cyclonic winds; physical damage to the coating (including accidental or intentional)
3. The warranty is not transferable from the original owner of the structure on which the fixings are used.
4. Determination of the environmental conditions and categories is based on the standards set in ISO 9223. Determination of these conditions is very complex and influenced by a range of environmental factors. Therefore, the determination of the ISO 9223 category applicable to the environment in which BDN Fasteners® Building Products fixings are to be used and the length of the BDN Fasteners® Building Products Corrosion Warranty must be done in consultation with BDN Fasteners® Building Products. The decision of BDN Fasteners® Building Products acting reasonably will be final in respect of the appropriate ISO 9223 category.
5. If BDN Fasteners® Building Products determines that a warranty claim has been made out, it will provide the same or equivalent fixings sufficient to replace the defective fixings.
6. The liability of BDN Fasteners® Building Products to you does not include or extend to direct, indirect, consequential or incidental damage including, without limitation, to any of the following:
  - a. Labor costs associated with the repair or removal of defective fixings or installation of replacement fixings.
  - b. Damage to property, injury to persons, loss of any income or any other indirect loss that is caused by or has arisen in any way by the defective fixings.



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## Warranty Terms and Conditions

7. This warranty is conditional upon:
  - a. Fixings being installed in accordance with BDN Fasteners® Building Products Recommendations and any applicable standards and building codes.
  - b. Fixings on all walls, cladding and other sheltered areas that are not exposed to frequent rain, being washed down by the owner with fresh water at least every 2 months.
  - c. The fixings being recommended by the cladding manufacturer as suitable for use with its cladding material and being maintained as recommended by the cladding manufacturer.
  - d. The fixings, as supplied, not at any time coming into contact or being coated with an incompatible material including any post paint treatments or systems.
8. This warranty does not cover you for any loss or damage, wholly or partly due to an event beyond the reasonable control of BDN Fasteners® Building Products including, without limitation, acts of God.
  - a. In order to make a claim under this warranty, you must:
    - Notify BDN Fasteners® Building Products in writing of the claim by email to: [info@bdnfasteners.com](mailto:info@bdnfasteners.com) no later than 30 days after the end of the warranty period;
  - b. Provide BDN Fasteners® Building Products with the following:
    - i. Proof of purchase of the fixings in respect of which the claim is made;
    - ii. Installers/Installation details including name, phone number, date of installation and site address
    - iii. Details of the fixings and the quantity used on the original installation
    - iv. Photos from the site CLEARLY showing: the building and roof/cladding containing the fixings; in close-up detail, the corrosion detail of the fixings as installed in the roof or cladding;
    - v. Details of the roof structure including cladding and batten material;
    - vi. Proof of wash down for situations where cladding is not a roof or is sheltered from washing by rain;
    - vii. FIVE samples of the corroded fixings; and
    - viii. Access for a representative of BDN Fasteners® Building Products to inspect at a mutually agreed time.
  - c. Bear all expense involved in making the claim which costs will not be recompensed by BDN Fasteners® Building Products



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**HEADQUARTERS – TAIWAN**

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