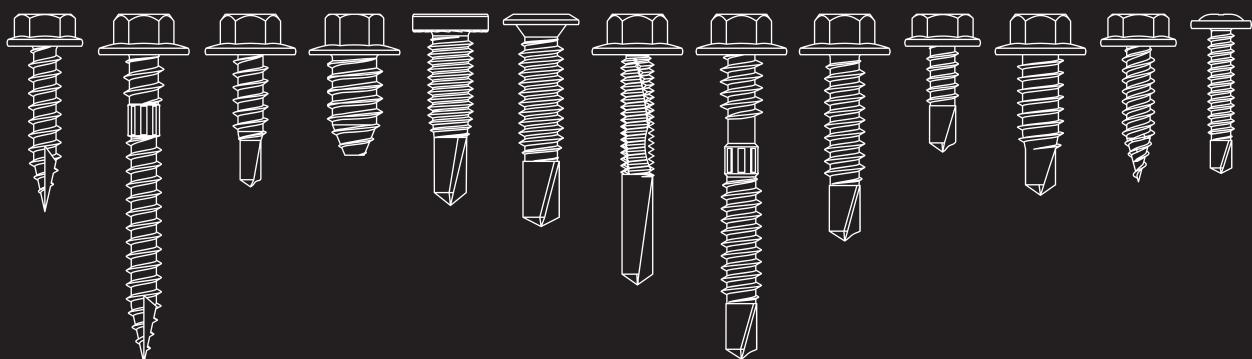


BDN FASTENERS

BUILDING FASTENERS

Self-Drilling Screws Catalogue



100% Made in Taiwan



ISO 9001:2015



FM
APPROVED



IS 18471:2025

CM/L-4100260065



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.

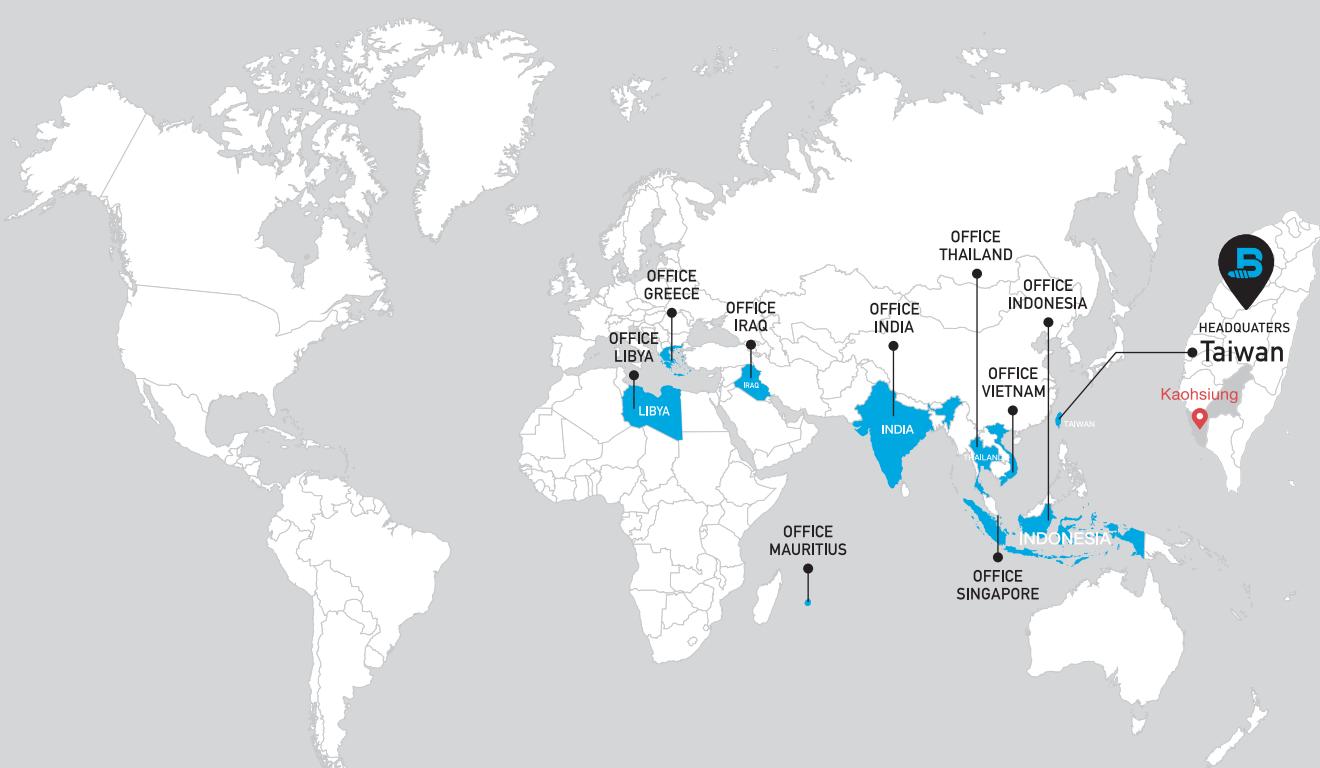
2019 Moved to current location.

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.



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POLYXPAND™

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TIMBER-Tite™ Type 17 Self-Tapping Screws

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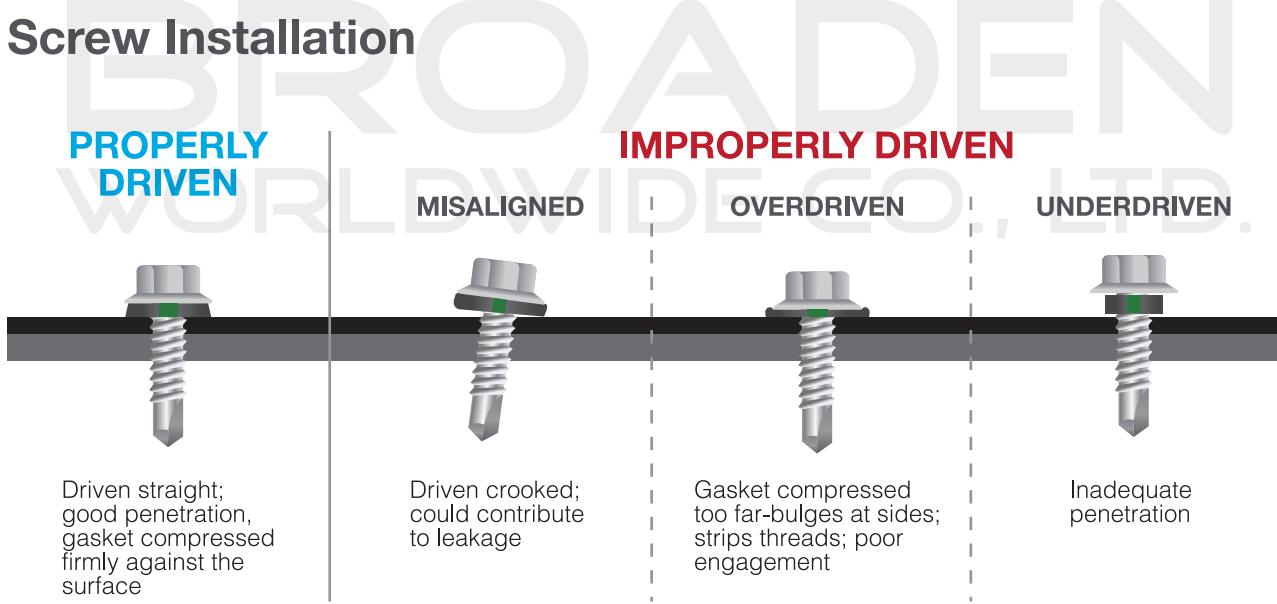
Product Guides and Tips

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

BDN FASTENERS

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

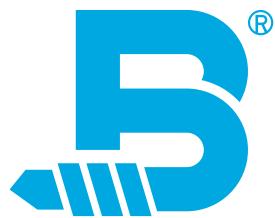
Part Number Description

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
SD	H	5	C	P	G	06		C3	N
									
Self-Drilling	Hex Head	Hex Head	Coarse Thread	Polyxpand	Scratch Shank	08			
		-		-		10	VARIOUS		
T17	W	-	F	-	XG	12		SST 1000hrs 15 Cycles	Bonded Washer
NP	BT	-	-	-	-	14			
Needle Point	Button Head	-	-	-	-				

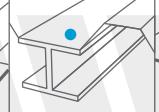
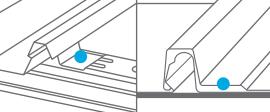
Product Overview

Coating Type: Zinc + Organic Coating (Ruspert)

SGS Certification: SST 1000 hrs + Kesternich 7 cycles



BDN FASTENERS

Type									
Product									
Application									
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



BDN FASTENERS

									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

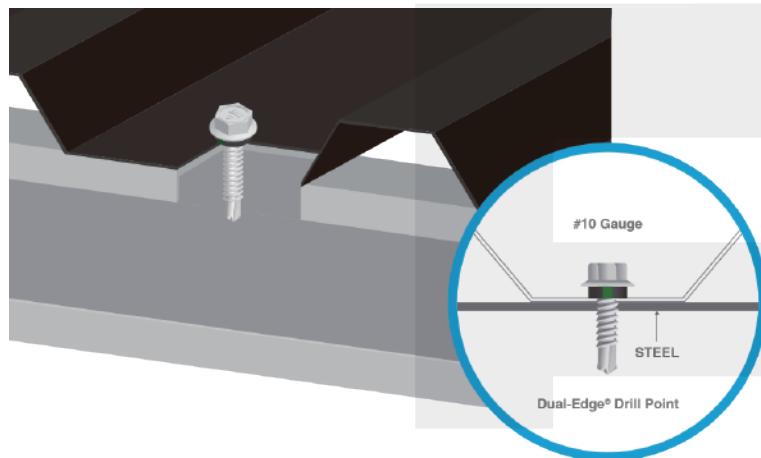


BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

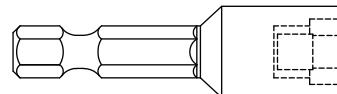
BN3 METAL-Tite™ Dual-Edge® Self-Drilling Screws

Fixing Cladding to Metal



ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

Max. 4.0mm thick (For #10 gauge)

Max. 6.0mm thick (For #12 gauge)

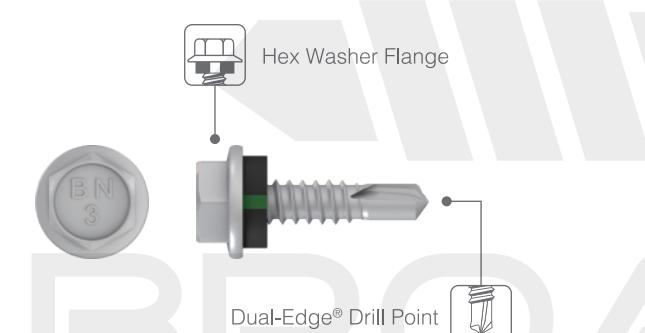
PRODUCT FEATURES

Hex Washer Flange

Dual-Edge® Drill Point

WASHER

Eco-BDN® Green Washer



SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#10 Gauge

BN3-SDHC1016C3N	10-16 x 16mm
BN3-SDHC1020C3N	10-16 x 20mm
BN3-SDHC1016C3N	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





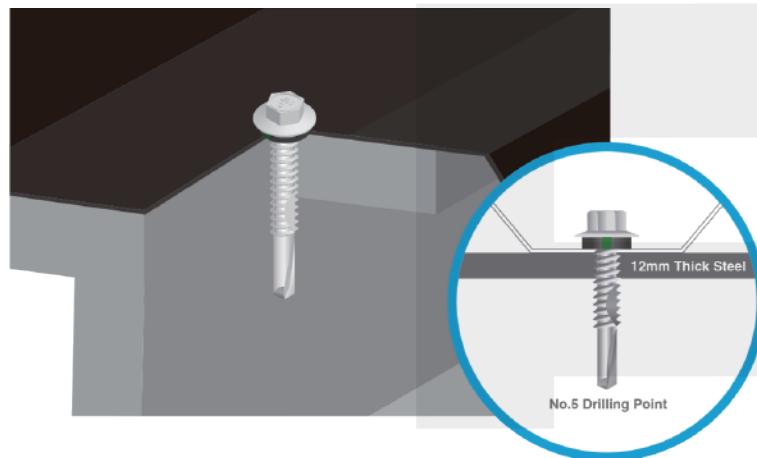
BDN FASTENERS

 BDN FASTENERS

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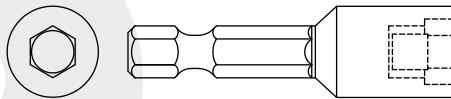
BN3 METAL-Tite™ Heavy Duty Self-Drilling Screws

Fixing to Thick Steel - No. 5 Drill Point



ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

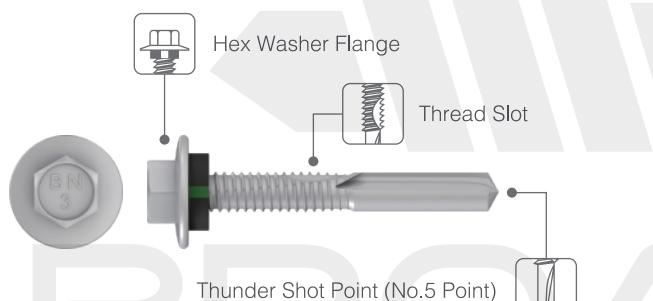
Max. 12.5mm thick

PRODUCT FEATURES

Hex Washer Flange

Thread slot

No.5 Drilling Point



WASHER

Eco-BDN® Green Washer



BROADEN
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#12 Gauge

BN3-SD5F1232C3 12-24 x 32mm

BN3-SD5F1238C3 12-24 x 38mm

BN3-SD5F1250C3 12-24 x 50mm

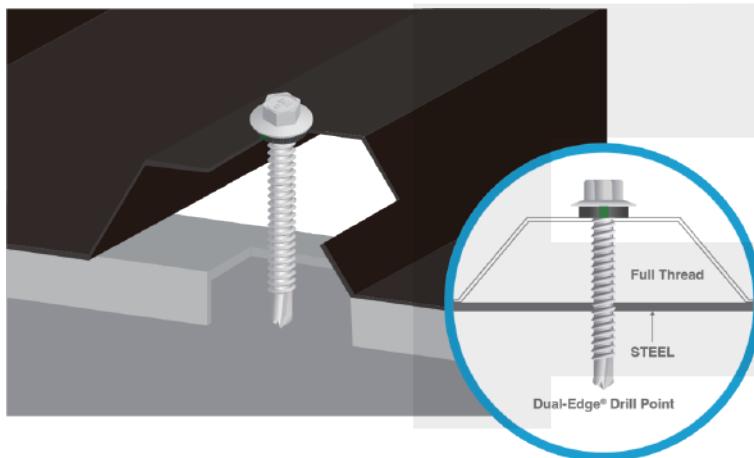




AS3566 Australian Standard • 100% Made in Taiwan

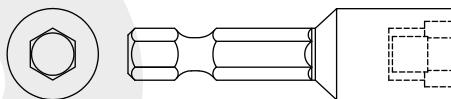
BN3 METAL-Tite™ Dual-Edge® Self-Drilling Screws

Fixing Roof Sheeting to Metal - Full Thread



ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

Max. 6.0mm thick (For #12 gauge)

PRODUCT FEATURES

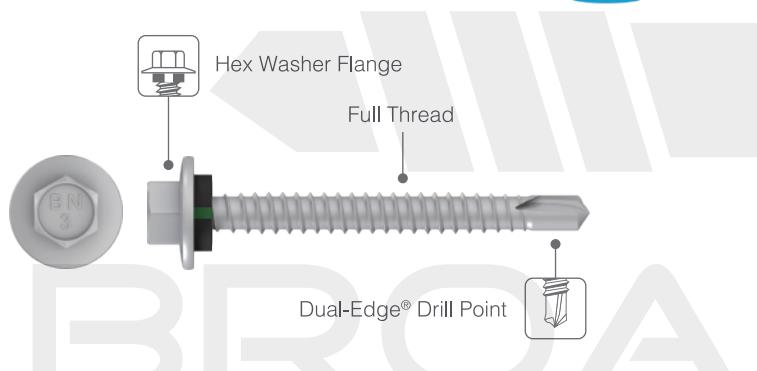
Hex Washer Flange

Full Thread

Dual-Edge® Drill Point

WASHER

Eco-BDN® Green Washer



BROADEN
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

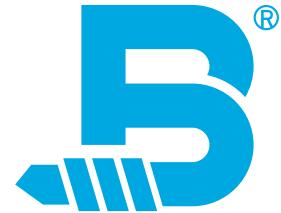
PART NUMBER

#12 Gauge

BN3-SDHC1245C3	12-14 x 45mm
BN3-SDHC1255C3	12-14 x 55mm
BN3-SDHC1265C3	12-14 x 65mm

BN3-SDHC1275C3	12-14 x 75mm
BN3-SDHC1290C3	12-14 x 90mm





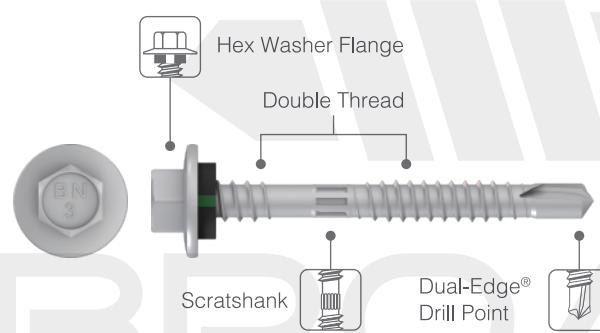
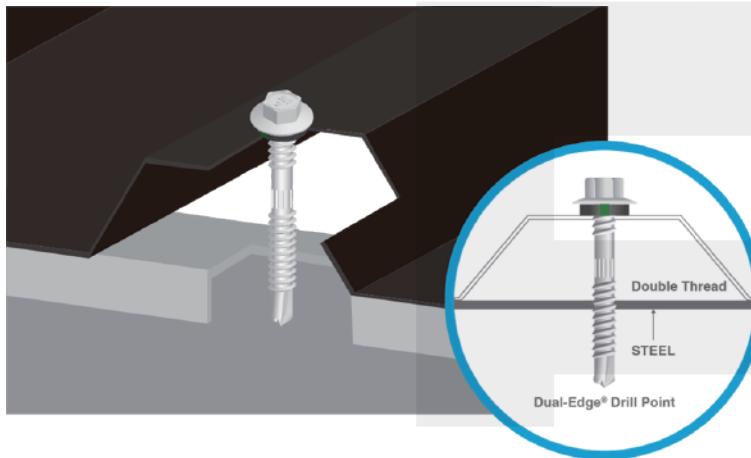
BDN FASTENERS

BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

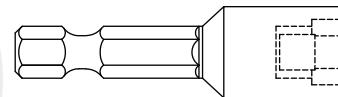
BN3 METAL-Tite™ Dual-Edge® Self-Drilling Screws

Fixing Roof Sheeting to Metal - Double Thread



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
Scratshank

WASHER

Eco-BDN® Green Washer



**Eco-BDN
Green Washer**

SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#12 Gauge

BN3-SDHCG1250C3	12-14 x 50mm
BN3-SDHCG1255C3	12-14 x 55mm
BN3-SDHCG1265C3	12-14 x 65mm
BN3-SDHCG1275C3	12-14 x 75mm

BN3-SDHCG1285C3	12-14 x 85mm
BN3-SDHCG12110C3	12-14 x 110mm
BN3-SDHCG12130C3	12-14 x 130mm





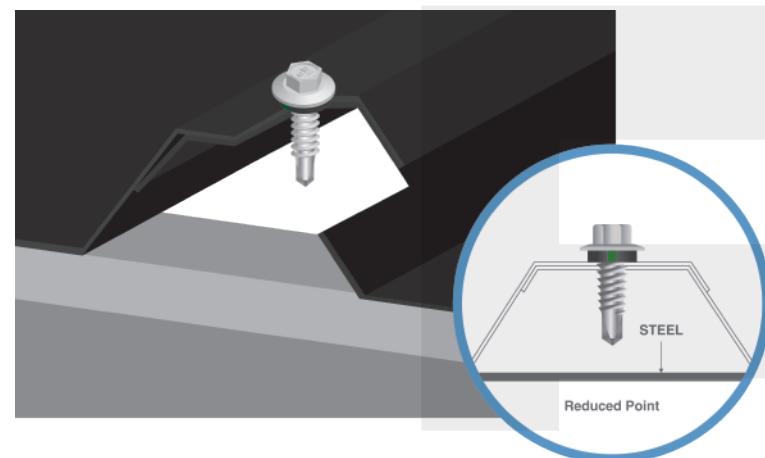
BDN FASTENERS

 BDN FASTENERS

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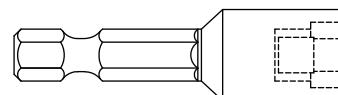
BN3 METAL-Tite™ Stitching Fasteners

Stitching Fasteners - Reduced Point



ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

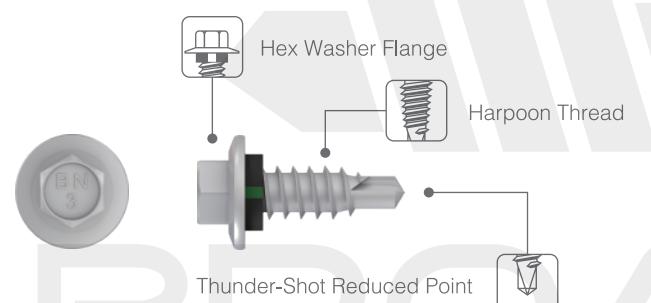
Max. drilling capacity 1+1mm thick

PRODUCT FEATURES

Hex Washer Flange
Thunder-Shot Reduced Point
Harpoon Thread

WASHER

Eco-BDN® Green Washer



BROADEN
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#10 Gauge

BN3-SDHC1520C3 15-15 x 20mm





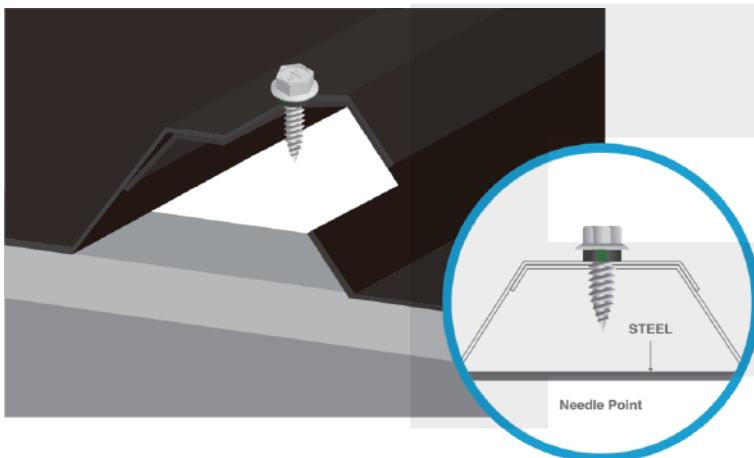
BDN FASTENERS

 BDN FASTENERS

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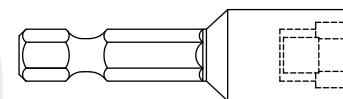
BN3 METAL-Tite™ Stitching Fasteners

Stitching Fasteners - Needle Point



ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

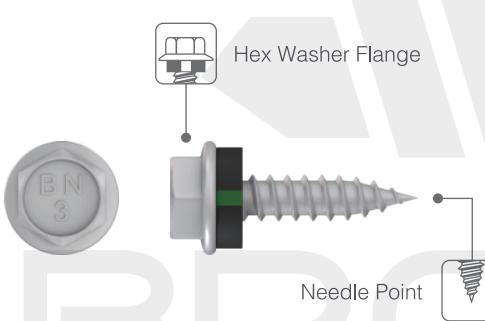
Max. drilling capacity 1+1mm thick

PRODUCT FEATURES

Hex Washer Flange
Needle Point

WASHER

Eco-BDN® Green Washer



BROADEN
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#10 Gauge

BN3-SDHST1019C3 10-16 x 19mm



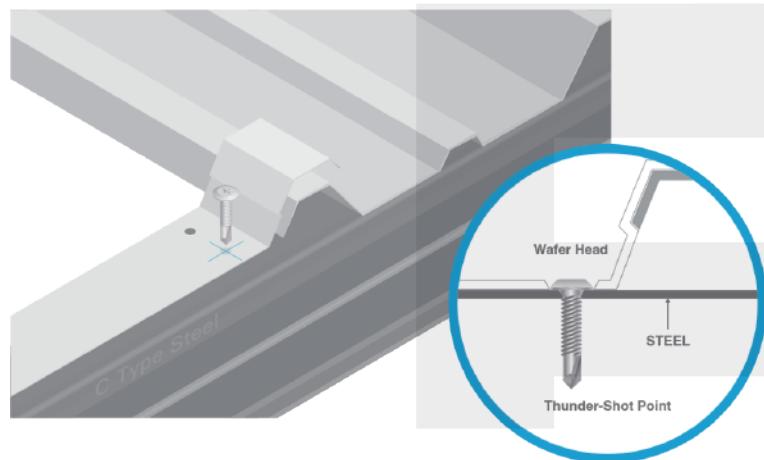


METAL-Tite™

AS3566 Australian Standard • 100% Made in Taiwan

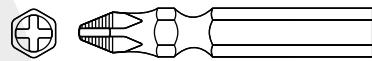
BN3 METAL-Tite™ Concealed Fixing Fasteners

Fixing steel sheets into steel substrates



ADAPTER TO USE

Philips Bit (PH2+)

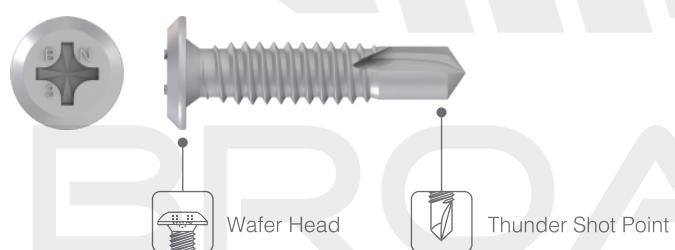


STEEL PENETRATION

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





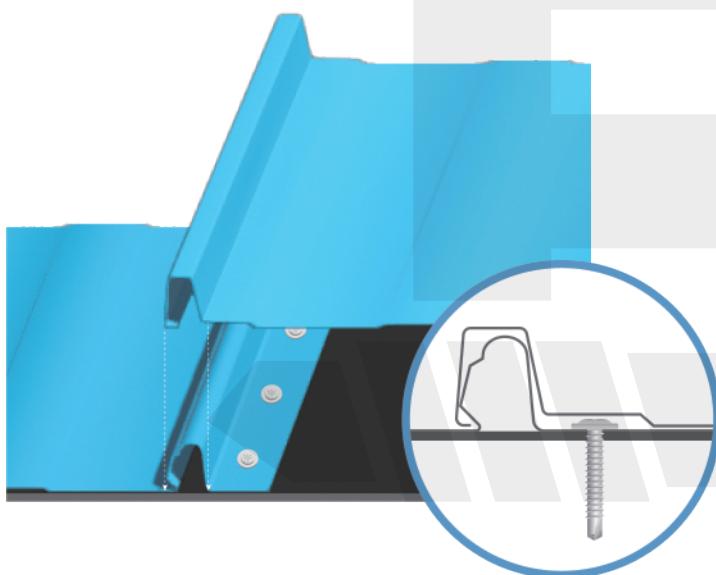
BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

BN3 Clip-Fix Button Head Self-Drilling Screws

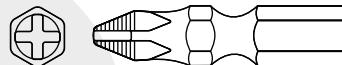
BDN Clip-Fix button head self-drilling screws is suited for concealed and pierce fixing snap-lock type cladding system panels to thin gauge steel battens. Clip-Fix's low-profile button head are concealed and will not interfere when panels are snapped into position, providing a clean finish.

METAL-Tite™



ADAPTER TO USE

Philips Bit (PH2+)



STEEL PENETRATION

Max. 2.5mm thick

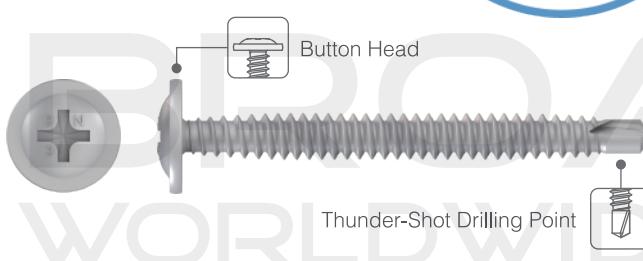
PRODUCT FEATURES

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





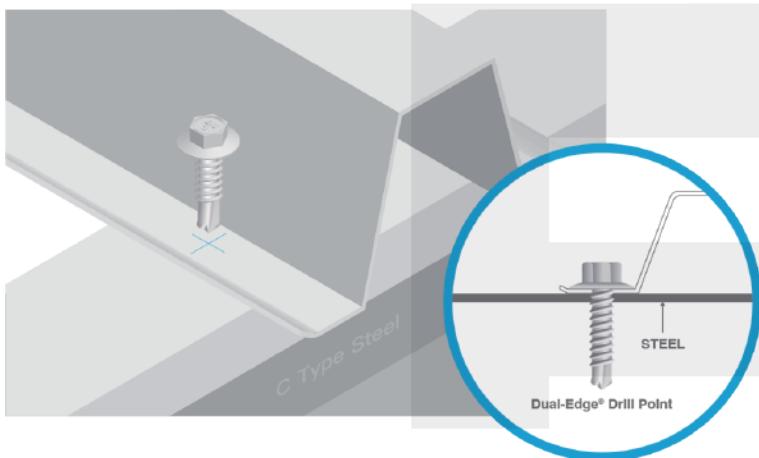
BDN[®] FASTENERS

BDN FASTENERS

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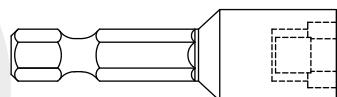
BN3 METAL-Tite™ Truss to Plate Connection Fasteners

Truss to Plate Connecting Fasteners



ADAPTER TO USE

Magnetic Hex Socket (5/16")



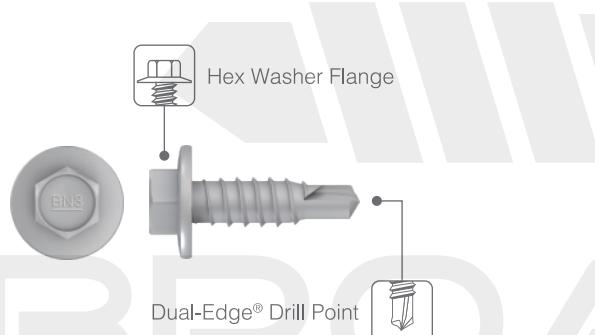
STEEL PENETRATION

Max. drilling capacity 1.5+1.5mm thick

PRODUCT FEATURES

Dual-Edge® Drill Point

High pull-out strength



BROADEN
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#12 Gauge

BN3-SDHCF1220C3 12-14 x 20mm





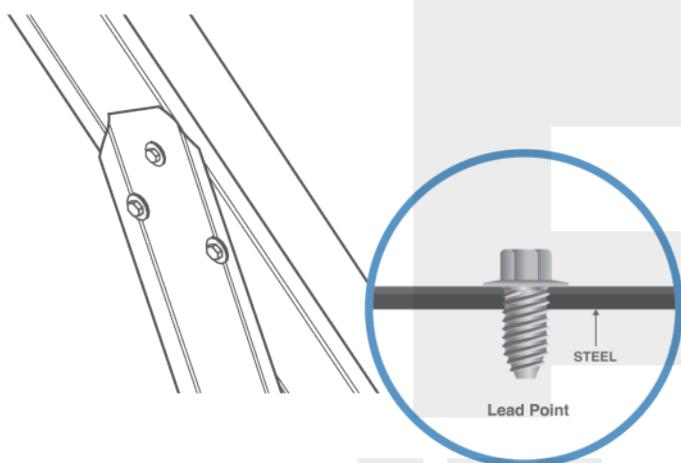
BDN FASTENERS

 BDN FASTENERS

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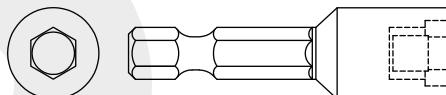
BN3 TRUSS-Tite™ Framing Fasteners

Fixing Steel Roof and Floor Trusses



ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

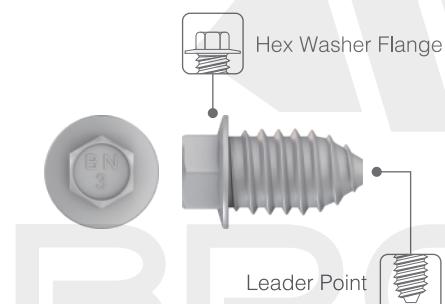
From 0.75mm to 1.6mm thick

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





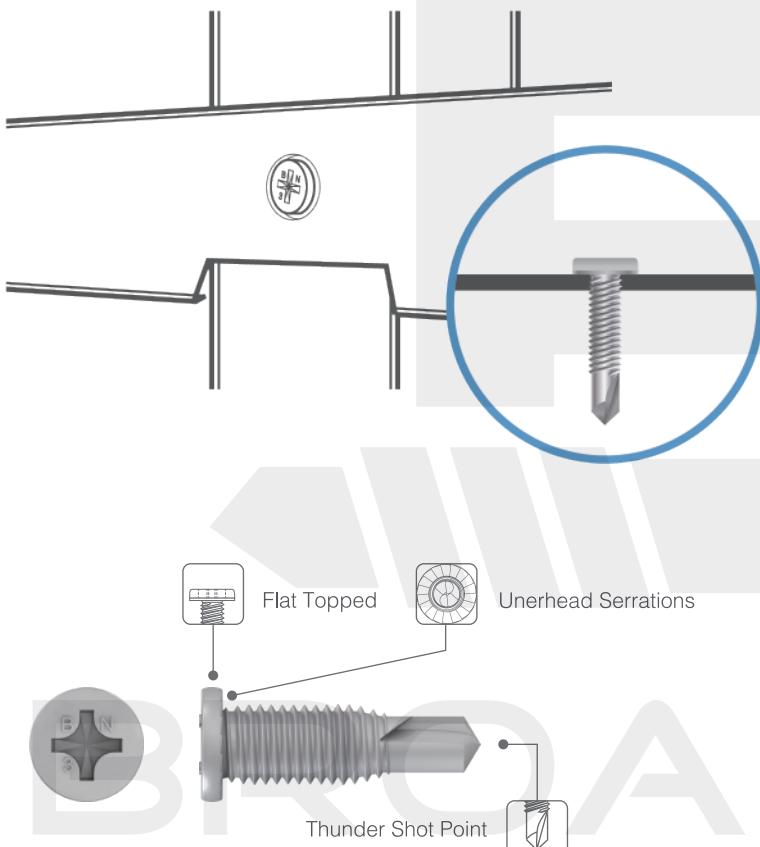
 **BDN** FASTENERS

BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

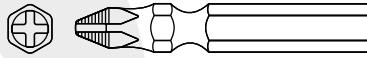
BN3 FRAME-Tite™ Framing Fasteners

Fixing to steel wall frames



ADAPTER TO USE

Philips Bit (PH3+)



STEEL PENETRATION

Max. 4.0mm thick

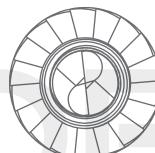
PRODUCT FEATURES

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



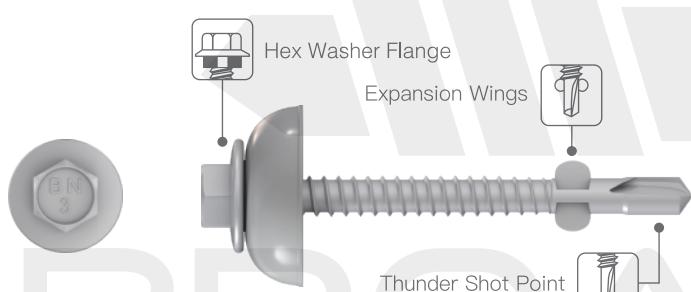
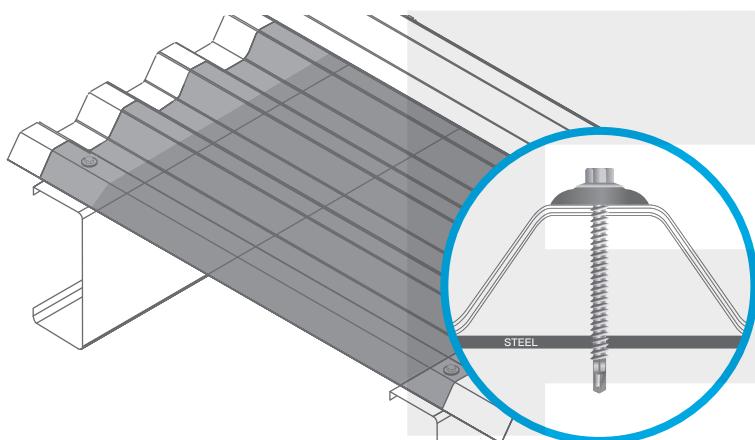


BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

POLYXPAND™ Plastic Skylight Fasteners

Fixing Polycarbonate Sheeting to Metal



SST 1000 hrs + Kesternich 7 cycles

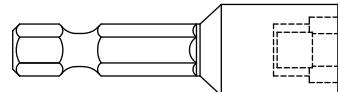
PART NUMBER

#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

ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

Max 5.5mm Thick

PRODUCT FEATURES

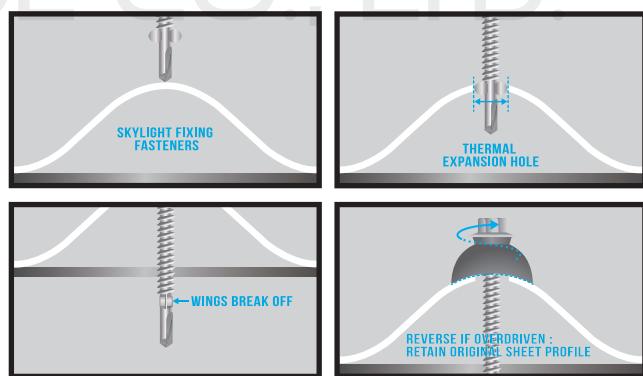
Hex Washer Flange

Expansion Wings

Thunder-Shot Point

WASHER

Ø 25mm Dome Grey EPDM





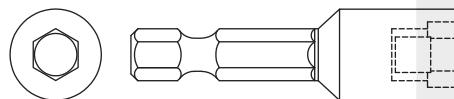
AS3566 Australian Standard • 100% Made in Taiwan

POLY-FAST™ Metal Polycarbonate Roof Fasteners

Fixing Polycarbonate Skylight to Steel

ADAPTER TO USE

Magnetic Hex Socket (5/16")



STEEL PENETRATION

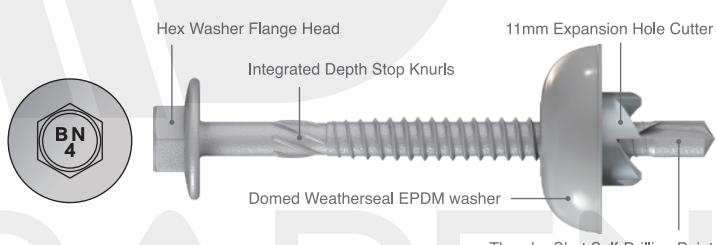
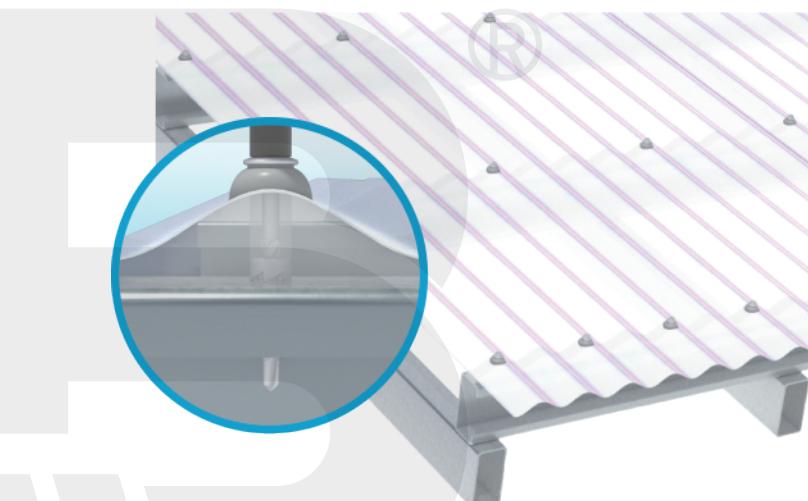
Max 4.5mm thick

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

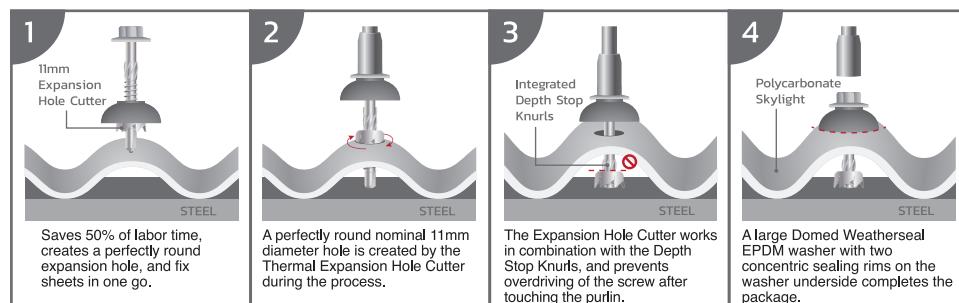
#12 Gauge

BN4-SDXPS1260C4 12-14 x 60mm

Corrosion Resistance

Class 4 Mechanical Zinc-Tin Plating

Installation Procedure





BDN FASTENERS

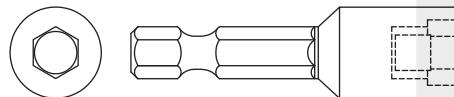
AS3566 Australian Standard • 100% Made in Taiwan

POLY-FAST™ Timber Polycarbonate Roof Fasteners

Fixing Polycarbonate Skylight to Timber

ADAPTER TO USE

Magnetic Hex Socket (5/16")



TIMBER PENETRATION

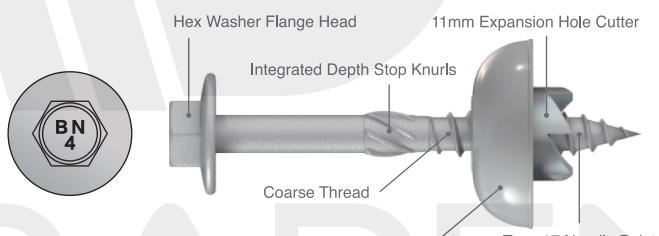
Min 25mm penetration

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

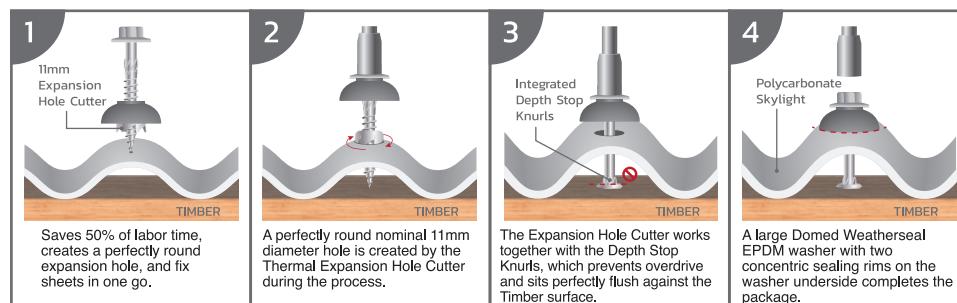
#12 Gauge

BN4-T17HXPS1250C4 12-11 x 50mm

Corrosion Resistance

Class 4 Mechanical Zinc-Tin Plating

Installation Procedure





BDN FASTENERS

POLY-FAST™

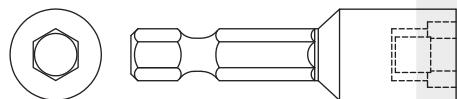
AS3566 Australian Standard • 100% Made in Taiwan

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

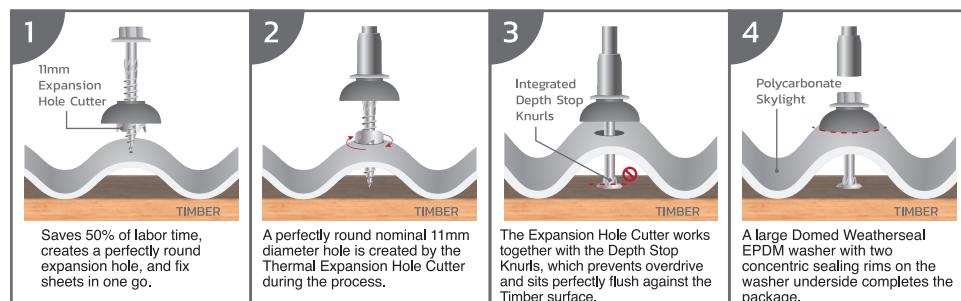


PART NUMBER

#12 Gauge

BN3-S17HXPS1250C3 12-11 x 50mm

Installation Procedure





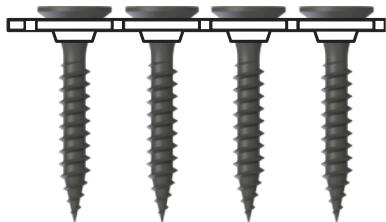
BDN FASTENERS

 BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

Collated Drywall Screws

Collated Bulge Head Screws for Thin Steel



Fine Thread

Dimension

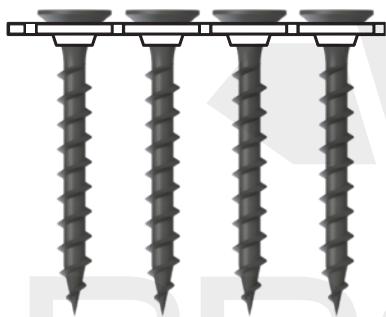
M3.5 x 25mm #6-18 x 1"

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





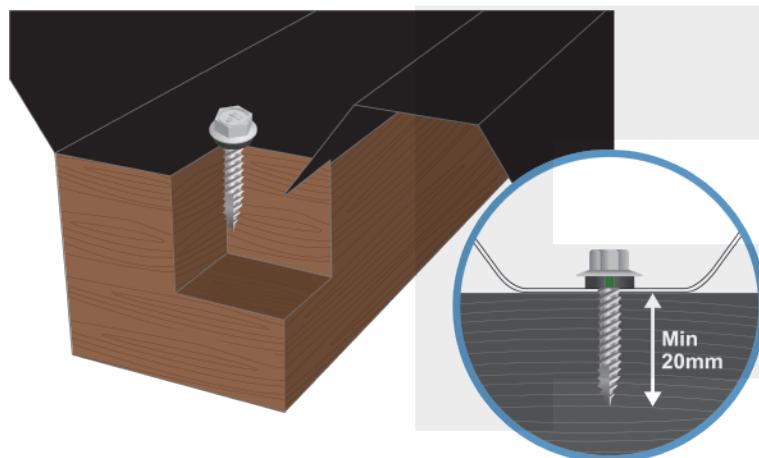
BDN FASTENERS

 **BDN** FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

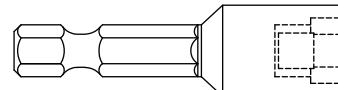
BN3 TIMBER-Tite™ Type 17 Self-Tapping Screws

Fixing roof sheeting to timber - Valley Fixing Fasteners



ADAPTER TO USE

Magnetic Hex Socket (5/16")



TIMBER PENETRATION

Min. 20mm penetration

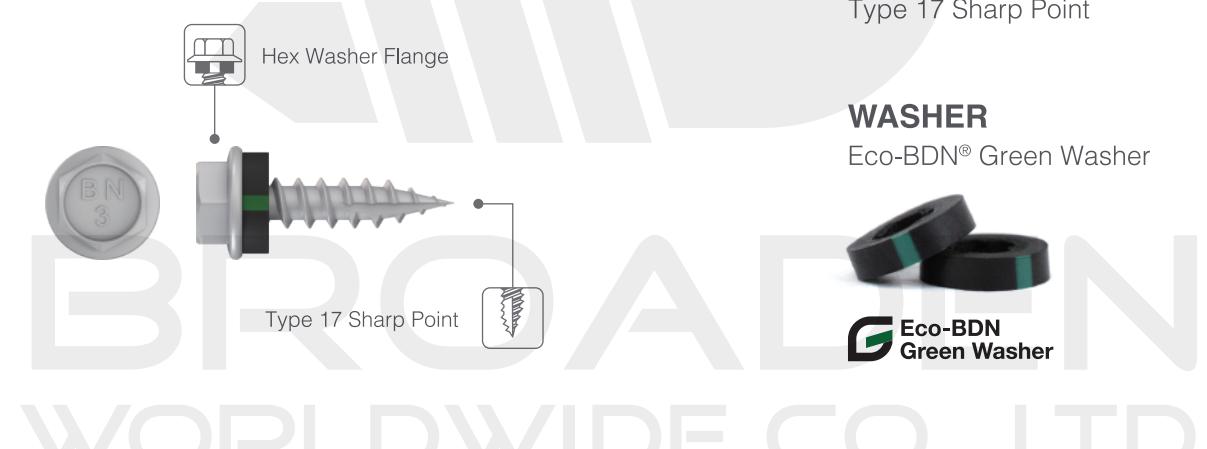
PRODUCT FEATURES

Hex Washer Flange

Type 17 Sharp Point

WASHER

Eco-BDN® Green Washer



SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

#10 Gauge

BN3-T17H1020C3N 10-12 x 20mm



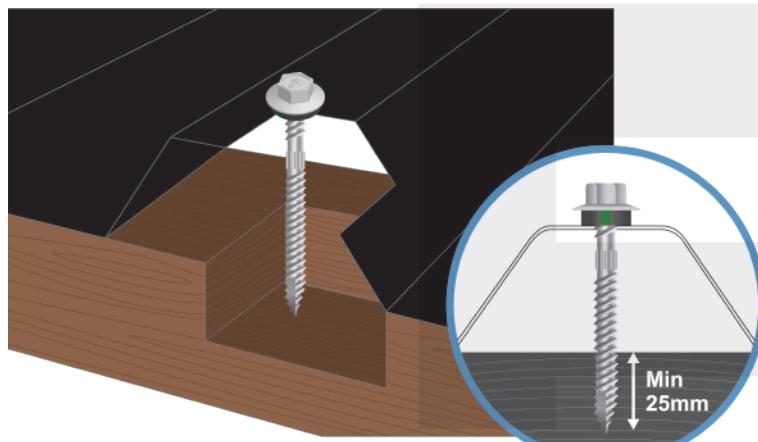


BDN FASTENERS

AS3566 Australian Standard • 100% Made in Taiwan

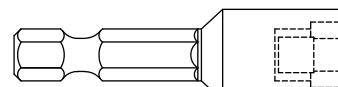
BN3 TIMBER-Tite™ Type 17 Self-Tapping Screws

Fixing roof sheeting to timber - Crest Fixing Fasteners



ADAPTER TO USE

Magnetic Hex Socket (5/16")



TIMBER-Tite™

TIMBER PENETRATION

Min. 25mm penetration

PRODUCT FEATURES

Hex Washer Flange

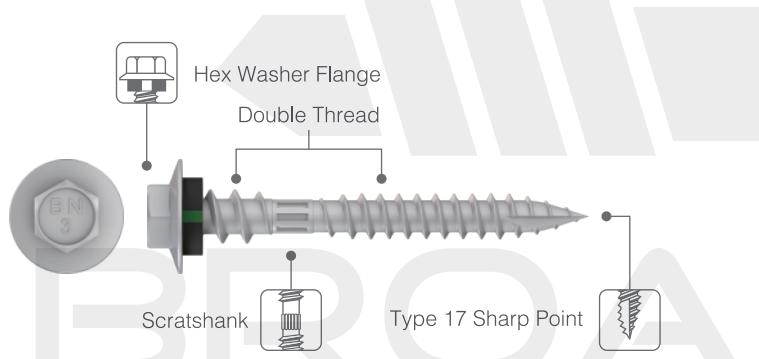
Type 17 Sharp Point

Double Thread

Scratch Shank

WASHER

Eco-BDN® Green Washer



BROADEN
WORLDWIDE CO., LTD.

SST 1000 hrs + Kesternich 7 cycles

PART NUMBER

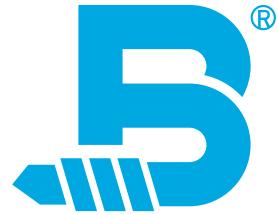
#12 Gauge

BN3-T17HCG1250C3N 12-11 x 50mm

BN3-T17HCG1265C3N 12-11 x 65mm

BN3-T17HCG1275C3N 12-11 x 75mm





BDN FASTENERS

BDN FASTENERS

IS18471:2025



CM/L-4100260065

QUALITY ASSURANCE

BDN Fasteners's Management processes are backed and certified by International ISO 9001:2015, and products conform to EN14566, AS3566, IS18471:2025, and FM Approval Standards.



SGS Certification

BDN Fasteners BN3 Series screws are regularly sent to SGS for Kesternich & Spray Salt Test (1000 hrs) certification.

As part of our new quality assurance policy, which aims to provide high quality, third-party laboratory certified products – customers will now receive the most up-to-date corrosion resistance certifications upon request.



BDN FASTENERS

 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

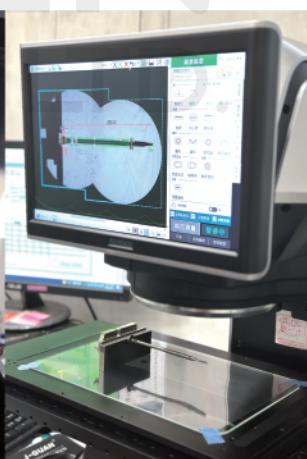
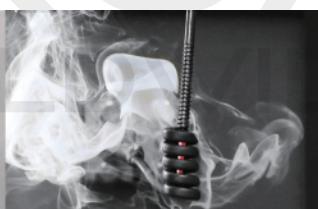
Well equipped with salt-spray and corrosion test machinery
Test Reports are provided by subcontractors for each batch.
Sent to 3rd Party Accredited Labs by request.

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.

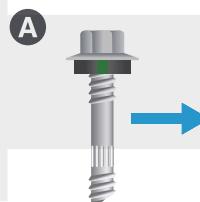


Mechanical Properties

Screw Gauge / TPI	A Single Shear Strength (N)	B Axial Tensile Strength (N)	C 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

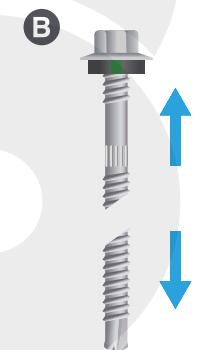
A Single Shear Strength (N)

The shear load required to break the screw



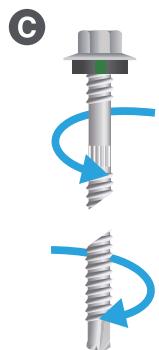
B Axial Tensile Strength (N)

The tensile load required to break the screw



C Torsional Strength (Nm)

The torque required to break the screw

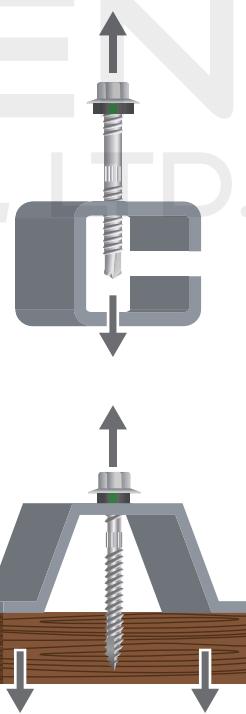


Pullout Values

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)



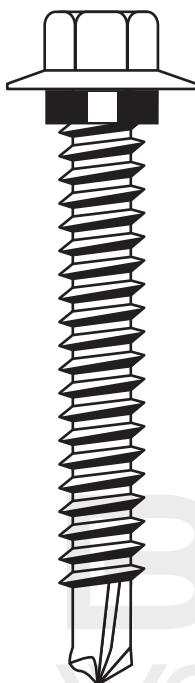
BDN FASTENERS into Timber, Lightweight Battens & Steel

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	
	4.5	13587.11	
	6.0	16752.21	Failure occurred at both plate and fastener threads

ULTIMATE SHEAR STRENGTH

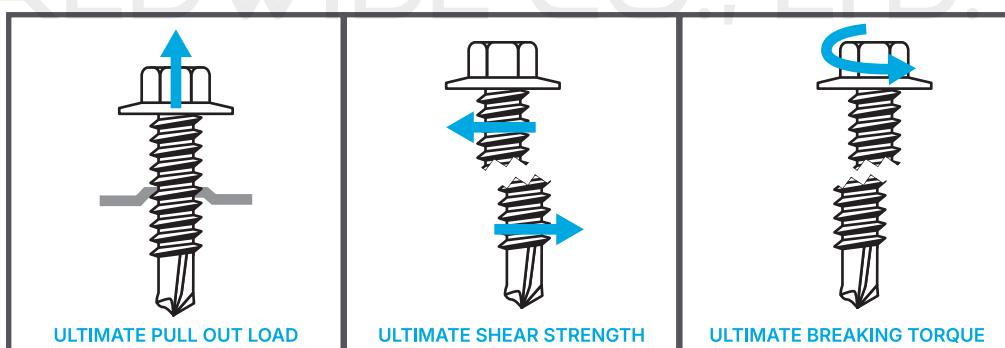
Method: Shear tests are done using an Universal Material Testing Machine (YM-H4501) at a speed rate of 10 mm/min until failure.

Nom. Inner Thread Diameter (mm)	X-Sectional Area (mm ²)	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 clatorQ 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



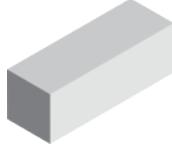
Standard Inner Box
i24: 90x80x90(H)mm



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

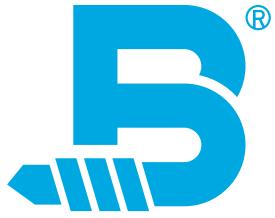


Standard PE Bag
Large: 210x230mm



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

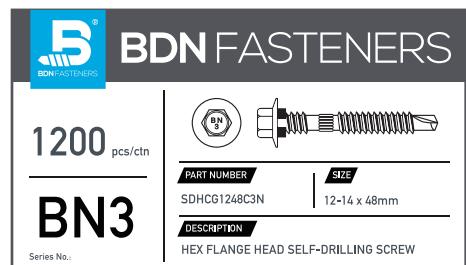
Standard Kraft Paper Inner Box
i6 Size: 125 x 250 x 90mm



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.



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

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

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

 Eco-BDN
Green Washer



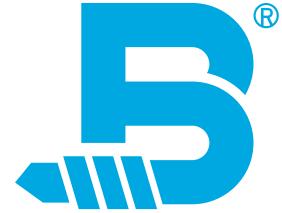
BDN FASTENERS, guarantee that the goods from the above "Product range" complies with the Australia & International Standards details below.

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-condutive
	Volume Resistivity(Ω-cm)	-	Non-condutive



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.



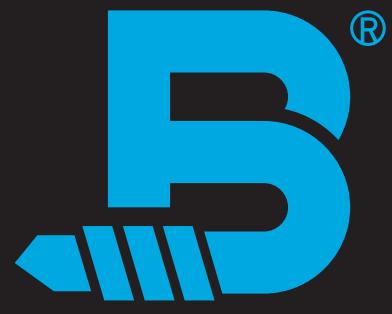
BDN FASTENERS

 BDN FASTENERS



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 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



BDN FASTENERS

HEADQUARTERS – TAIWAN

Broaden Worldwide Co., LTD.

NO. 47-37, Jiahua Rd., Gangshan Dist., Kaohsiung City 820, Taiwan

T +886 7 6282702 **F** +886 7 6282601 **E** info@bdnfasteners.com

WhatsApp: +886 978 230 791

www.bdnfasteners.com

