

Fasteners For The Steel Industry

Steel Frame Applications

Gripshank[™] Supersharpy[™] fasteners are manufactured and tested for high tensile steel made by BlueScope® and other major steel manufacturers.

Open the door to huge efficiency increases by using the Structnail® range for countless Steel Frame Applications, your builder will love you!

Ply Bracing Fixing

Steel Bracing Fixing

OSB Bracing Fixing

Plating Lintels

Strap Bracing

(Nail: SNC2359NG)

Timber flooring

(Nail: SNC2359NG)

Fit Out

(Nail: SNS075-100T, SNS075-150T and SNS1200 FINISH)

Timber Cavity Battens

(Nail: SNC2359NG)

Metal Cavity Battens

(Nail: SNC2359NG)

Sheet Cladding

(Nail: SNC2359NG, SNC2509NG and SNC2639NG)

Building Wrap/Paper

(Nail: SNS2229DG and GTW25 Washer)

Modular Building Applications

Structnail's range of fasteners are ideal for the construction of Modular steel buildings. Off-Site fabrication demands rapid and reliable fastening solutions. The potential to save significant labour costs through faster installation methods is now available to you.

Why screw when you can nail? Reduce your costs and improve efficiencies!

Timber Flooring

(Nail: SNS5454PG)

Building Wrap

(Nail: SNS2229DG and GTW25 Washer)

Sheet Cladding (Nail: SNC2359NG)

Fit Out

(Nail: SNS075-100T, SNS075-150T and SNS1200 FINISH)

Caravan and Trailer Applications

Structnail® offers fasteners designed for the mobile home and trailer industry. We can supply a range of nails to fix to any thickness of steel.

Visit www.structnail.com to view our videos and see how easy and quick it is.

Flooring to Chassis

(Nail: SNS5454PG)

Fit Out

(Nail: SNS075-100T, SNS075-150T and SNS1200 FINISH)

Wine Barrel Applications

Structnail® has secured a specialised range of nails for the cooperage industry. The finish is aesthetic with a smooth profile, safer to handle for you and your clients.

Wine Barrel Hoops (Nail: SNFP012C)





STRUCTNAIL specialised steel fasteners

ICCONS® Supplies a range of fasteners for the steel building industry.

Structnail® is a specialised range of pins used extensively on numerous applications around the building site. Whether installed in the factory or on site, ICCONS® has a fastener for you to provide a efficient, fast and cost effective installation solution.

LINTELS

FASTENER: SNC2359NG

τοοι: 15° Coil Nailer



CLADDING

FASTENER: SNC2509NG, SNC2639NG

тоос: 15° Coil Nailer



FASTENER: SNS5454PG

TOOL: SNTCT9011







COMPLETE RANGE

- 6-8 Times Faster Installation
- Approved for Installing Cladding Systems
- Suitable for Bracing Systems
- Proprietary Coating Compliance with Bluescope®
- Fixing Timber to Steel Buildings
- Fixing Steel to Steel Applications

Bracing

FASTENER: SNC2359NG

τοοι: 15° Coil Nailer



Battens (steel or timber)

FASTENER: SNC2359NG, SNC2509NG, SNC2639NG

τοοι: 15° Coil Nailer



Fix-out

FASTENER: SNS075-100T, SNS075-150T, SNS1200 Finish

TOOL: SNTST1850C4



Note: See page 109 of this document or visit www.iccons.com.au and download the Structnail® document for Structnail® design performance.



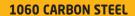




GRIPSHANK™ SUPERSHARPY™

Coil Nail











James Hardie[™] Technical Supplement

RECOMMENDED APPLICATIONS:

- Plated lintels
- Batten installation (Wall Cavity)
- Bracing sheet installation
- Lightweight Cladding Systems

RECOMMENDED TOOL:

FITS MOST 15 DEG COIL NAILER



Part No.	Description	Base Steel Thickness (mm)	Nail Length (mm)	Nail Width (mm)	Nail Head Dia (mm)	qty	♦
SNC2359NG	Gripshank™ Supersharpy™ 38x2.5	0.4 - 2.5	38	2.5	6.4	1000	4000
SNC2509NG	Gripshank™ Supersharpy™ 50x2.5	0.4 - 2.5	50	2.5	6.4	800	3200
SNC2639NG	Gripshank™ Supersharpy™ 65x2.5	0.4 - 2.5	65	2.5	6.4	600	2400



GRIPSHANKT SUPERSHARPYT

Breakaway Nail Strips





James Hardie[™] Technical Supplement

- Plated lintels
- Bracing sheet installation

RECOMMENDED APPLICATIONS:

 Sisalation to metal frame (Washer needed)



1060 CARBON STEEL

Part No.	Description	Nail Length (mm)	Nail Width (mm)	Nail Head Dia (mm)	qty	♣ qty
SNS2229DG	2.5 x 22mm (Nail only)	22	2.5	6.4	1000	5000
SNS38299DG	2.5 x 38mm (Nail only)	38	2.5	6.4	1000	5000

IXF-24

GT Fuel Cell only

Part No.

Description

IXF	24	++	ΓU	61	Cell

Fuel Cell only - suits SNTST3025C, GT6, GT3 & GT140C

(Supplied spacer required for GT3 & GT140C)

1140C) aty	a ty
	1	12



GT-IXF-24+





Gas Tool

Suits for Breakaway Nail Strips

Metal Washer & Adaptor

Fits ICCONS® SNTST3025C Tools, Ideal for Building wrap to steel frame

Part No.	Description	qty	qty
SNTST3025C	Gas Pin Nailer for Break Away Strip Pins	1	n/a
GTW25	25mm O.D Metal Washer (use with GTMA-25W)	250	5000
GTMA-25W	Magnetic Adaptor for use with 25mm O.D metal washer (suitable for GT-6 & GT-3 Tools)	1	n/a

25mm washer & Adaptor also referenced on page 115





Trim Brads 15 gauge Hardened Brads

RECOMMENDED APPLICATIONS:

- Door jambs
- Architraves
- Skirting





Part No.	Description	Base Steel Thickness (mm)	Nail Length (mm)	Nail gauge	qty	\$
SNS075-100T	Trim Brad 25 x 15g	0.4 -1.5	25	15g	3000	30,000
SNS075-150T	Trim Brad 38 x 15g	0.4 - 1.5	38	15g	1500	15,000
SNS1200 Finish	Trim Brad 50 x 15g	0.4 - 1.5	50	15g	1500	15,000

Note: 15 Gauge = 15 Pins per inch

Trim Bradder

Timber Trim to Steel







- Aerosmith[™] Trim Brads
- 25-50mm brad range
- 60 brad load capacity
- 70-110 Psi operation
- Trigger safety lock
- Single fire
- 1.29kg

-	3 ,		
Part No.	Description	qty	♣ qty
SNTST1850C4	Trim Bradder	1	n/a











Part No.	Description	Thickness (mm)	Length (mm)	Width (mm)	Head Dia (mm)	qty	qty
SNS5454PG	Twist Shank Pin with PT2000® Coating 45mm x 3.6 mm	0.9 - 4.0	45	3.6	7.6	3200	n/a

Heavy Floor Nailer

For Fixing To Heavy Steel







- Heavy Floor Nailer
- Steel Chassis Pins
- 19-64mm pin range
- 60 pin load capacity
- 110-150 Psi operation
- Single fire
- 5.0kg

qty	a ty
1	n/a







Part No.	Description	Nail Length (mm)	Nail Width (mm)	Nail Head Dia (mm)	qty	♦
SNFP012C	2.8 x 13mm Cooperage Breakaway Nail Strip (nails only)	13	2.8	6.4	5000	n/a

IXF-24

IXF-24+ Fuel Cell

Fuel Cell only - suits SNTST3025C, GT6, GT3 & GT140C (Supplied spacer required for GT3 & GT140C)

Part No.	Description	qty	qty
GT-IXF-24+	GT Fuel Cell only	1	12

Gas Tool

Suits for Breakaway Nail Strips







Part No.	Description	qty	a ty
SNTST3025C	Gas Pin Nailer for Break Away Strip Pins	1	n/a



ICCONS® Gripshank™ SuperSharpy™ PINS

ICCONS® is proud to offer a range of specialised, high quality, corrosion resistant Pins for the Australian steel construction marketplace. ICCONS® guarantees the Structural integrity of its Gripshank Topology Pins into a wide range of steel fixing applications in BlueScope® Truecore® or similar that meets min. AM150 coating and G550 tensile properties.

Fastener Description		→ ←	→ ←
Description	mm	mm	mm
Gripshank™ Supersharpy™	38 - 65	2.5	6.4

Gripshank[™] Supersharpy[™] Design Capacities

ВМТ	0.55mm (G550)	0.75mm (G550)	1.00mm (G550)	1.20mm (G500)	1.50mm (G500)
Pullout ¹	0.55 kN	0.85 kN	1.04 kN	1.42 kN	1.69 kN
Shear ²	1.00 kN	1.85 kN	2.75 kN		

Gripshank[™] Supersharpy[™] Applications

Fixing Application	Suitable Substrate	Thickness Notes
Timber Flooring	0.75mm to 1.6mm BMT	Not suitable for CFC flooring
Lightweight Cladding	0.55mm to 1.6mm BMT (Shear) 0.75mm to 1.6mm BMT (Pull -out)	Ensure overal capacity equivalent to substituted screws. Refer to manufacturer for approval of nail as substitute to regular fixing. Pull -through testing not carried out.
Steel Lintel Plate	0.55mm to 1.6mm BMT (Shear) 0.75mm to 1.6mm BMT (Pull -out)	Ensure overal capacity equivalent to substituted screws
Strap Bracing	0.55mm to 1.6mm BMT (Shear)	Ensure overal capacity equivalent to substituted screws
Ceiling + Roof Battens	0.75mm to 1.6mm BMT (Pull -out)	Battens into 0.75mm Min Truss Chord Ensure overal capacity equivalent to substituted screws
Connector Brackets	0.55mm to 1.6mm BMT (Shear) 0.75mm to 1.6mm BMT (Pull -out)	Ensure overal capacity equivalent to substituted screws
Timber (direct fixed)	0.55mm to 1.6mm BMT (Shear) 0.75mm to 1.6mm BMT (Pull -out)	Ensure overal capacity equivalent to substituted screws

- ¹ Gripshank™ Supersharpy™ pull out testing has been carried out on 20 nail samples installed on two different C sections of each BMT material noted in the above table (10 tests on each section) as per section 8 of AS4600:2016 draft standard which is in line with Nash standard part 1 (and technical note 4). A coefficient of variation of 20% has been selected which conservatively allows for variation in nails, substrate or installation. Kt values of 1.29 for minimum results and 1.7 for average results have been applied to arrive at design capacities.
- ² Gripshank™ Supersharpy™ shear testing has been carried out on 10 nail samples of each 0.55, 0.75 & 0.95mm BMT material (G550) as per the Shear Test specified in section F4 of AS4600:2016 draft standard which is in line with Nash standard part 1 (and technical note 4). A coefficient of variation of 20% has been selected which conservatively allows for variation in nails, substrate or installation. Kt values of 1.49 for minimum results and 1.77 for average results have been applied to arrive at design capacities.
 - Where Gripshank^{TIM} Supersharpy^{TIM} nails are used in accordance with above capacities and meet manufacturers specifications, the nails are capable of providing a resistance suitable for above applications. It is important for specifier to ensure the number of nails used provides an equivalent capacity to the screws noted in each products manual. Please note that no pull-through testing has been carried out in relation to external cladding systems at this time and it is important to refer to manufacturer for advice in relation to use with such systems to ensure compliance.
- The consumer must ensure that Structnail® specialised steel fasteners and information contained in this document is reviewed and approved by a design professional responsible for the application and/or building products manufacturer to ensure equivalency to substituted screws and compliance prior to use of the fasteners (pins).
- Design performance specification data is based on correct installation and use of correct specified installation tools as
 described in this document and referenced on the Structnail® website www.structnail.com

Reference Documents

- Aerosmith® Fastening Systems, 2011. Versapin Fasteners. [Online]
 Available at: http://www.areosmithfastening.com/versapin [Accessed 9th March 2013].
- Aerosmith® Fastening Systems, n.d. Aeorsmith® GripshankTm Super SharpTm. [Online]
 Available at: http://www.aerosmithfastening.com [Accessed 9th March 2013].
- Materials & Testing Laboratories Limited, 2007. Shear Test of Nail / Gauge Steel, Wellington, NZ: Materials & Testing Laboratories Limited.
- Progressive Engineering Inc., 2008. AISI CF-92 Fastener Shear Test, s.l.: Progressive Engineering Inc.
- Progressive Engineering Inc, 2012. Product Evaluation Report Versapin Gripshank™ & Helical Pneumatic Fasteners, Indianapolis: Progressive Engineering Inc.
- Walther, T., 2006. Impact Steel Frames Nail Pull-out Test, Porirua City, NZ: BRANZ Limited
- STA Consulting Engineers Pty. Ltd. Structnail® Structural Design Certificate 24/01/18.