

Fastening Solutions

for Cold Formed Steel Construction



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FRAMECAD® steel framing screws are engineered for speed, durability and performance. Designed to deliver the most advanced end-to-end steel frame building solution.

Cold formed steel framing is one of the fastest growing construction technologies in the world. As the industry grows new technologies are developed to increase the speed and efficiency of cold formed steel, and the application of steel framing to new areas of construction. FRAMECAD®, as the world leader in cold formed steel systems is at the forefront of this development.

The FRAMECAD® range of steel framing screws covers all aspects of steel framing including frame assembly, frame erection, structural connections, fixing claddings and linings, flooring and roofing.

All fasteners are designed with 3 main objectives - speed, durability and performance.

SPEED

FRAMECAD® steel framing screws have been developed to optimise the speed and efficiency of the FRAMECAD® Design Build Solution. With FRAMECAD® innovations such as the XDrive® high torque drive and DualThread FRAMECAD® steel frame assembly is the fastest and most efficient in the industry.

DURABILITY

Corrosion resistance is a critical consideration in the performance of the total FRAMECAD® system. FRAMECAD® steel framing screws use industry leading corrosion protection treatments to offer the highest performing protection in their class.

PERFORMANCE

FRAMECAD® steel framing screws are independently tested to show they achieve or exceed industry standards and performance requirements. In addition to this compliance to international standards all FRAMECAD® screws undergo strict compatible within the FRAMECAD® building system to ensure the system performance is maximised. Manufacturing facilities are ISO 9001 certified

FRAMECAD® fasteners are complimented by a range of quality fastening tools recommended by our technicians for use with light gauge steel framing and construction.





Screw Point Types and Head Types

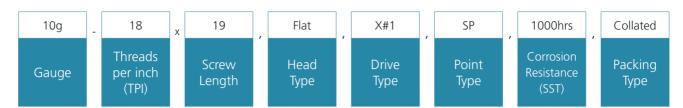
Screw Point Types	;	
Sharp Point (SP)		Sharp Point screws typically have a hardened sharp point allowing direct penetration into 0.75 and thinner steel. Sharp points are also ideal for all pre-punched steel framing ensuring accurate framing. Various thread designs further specialise screws to perform more efficiently in their specific application.
Drill Point (DP)		Fasteners with a point capable of drilling into medium to heavy gauge steel. Drill Points are classified as #1 through to #5 with a #5 point being capable of penetrating thicker gauge metals. FRAMECAD® manufacture fasteners with #2 to #5 points.
Winged Drill Point (WDP)		Used to attach hard board products such as timber, fibre cement and composite boards to 12 - 16 gauge steel without the need to pre-drill pilot holes. The wings bore a hole in the board greater in diameter than the thread to ensure the threads do not engage with the board material, allowing the screw to pass through the board without resistance. As the point of the fastener enters the steel the wings break off allowing the threads to tap into the material and secure the board in place.
Tri-Lobular® Thread	MMMI	This thread rolling screw uses a Tri-lobular design to cause the grains of the mating material to reform to the thread contour rather than be sheared during tapping. This action causes a stronger fit.
Type 17 Point		A Sharp Point screw with a 'slotted' point (shank is slotted) to aid in the drilling and penetration of hard steel. The slotted shank also aids in the displacement of drilled material during penetration. Type 17 points are ideal for use with roofing screws when fixing to cold formed steel battens up to 0.95mm thick.
Head Types		
Flat Head		Low profile head useful for steel framing applications, where the screw must fit flush within the dimple to allow for a smooth finish for cladding or lining materials over the top.
Wafer Head		Typically a lower profile head especially designed to suit FRAMECAD® frames, as the head fits neatly into the dimple of the frame. The screw fits flush within the dimple to allow for a smooth finish for cladding or lining materials over the top.
Hex Washer Head (HWH)		High torque head for metal to metal applications, great for frame to frame, frame to truss and truss assembly connections.
Hex Washer Head with Neo- prene Washer		HWH screws with EPDM washers is a common head type used when fixing roofing and exterior steel cladding. The washer provides a waterproof seal around the fastener and hole.
Scavenger Head		The Scavenger Head offers a secondary ring under the standard bugle head to further reduce paper burrs when installing gypsum plasterboard, effectively reducing paper burrs for a smoother finish.
Countersunk Head (CSK)		Designed to countersink easily into the full range of cladding types to allow the application of a suitable stopping compound for a smooth finish.
Countersunk Ribbed		A larger head to securely hold cladding materials. The aggressive cutting ribs allow the larger head to embed effectively into the board.
Pan Head		The pan head is a deeper and therefore stronger head for more secure structural fixings common in metal to metal applications.



Screw Drive Types

Drive Types		
XDrive®	(‡)	FRAMECAD® developed the XDrive® specifically for the cold formed steel construction industry. Customers highlighted the need for a more stable, higher torque drive recess which would not 'cam-out' like the Phillips Drive. The benefits were immediate; operator fatigue was reduced and speed of assembly increased significantly.
Square Drive		The Square Drive has been widely adapted for the assembly of cold formed steel in the transportables and low cost modular or social housing. The drive offers the benefit of 'stick fit' and sufficient torque for the lower gauges of steel used in these industries.
Hex Washer Head		A Hex Washer Head (HWH) offers very high torque and is ideal for metal to metal connections. The HWH offers an incredibly stable drive which will hold its connection even when driven at an angle. Due to the size of the head it is not suitable for frame assembly but is ideal during erection for panel to panel connections.
Phillips Drive		The classic 'cross-slot' drive very commonly used in applications with low torque performance requirements such as when fixing gypsum or MGO wall linings - not suitable for high torque requirements of steel frame assembly. The common problem is that the conical side walls deflect torque upwards causing 'camout' - therefore constant downward pressure is required to maintain engagement between driver bit and screw recess during application.
Torx® TTAP® Drive		Torx® TTAP® offers excellent torque and is commonly used in high torque applications in the automotive industry. Specialised torque limiting tools are commonly used due to the very secure connection between driver and screw, without the use of specialised tools damage to driver bit or screw head can result.

Screw Measurements



e.g. 10g - 18 x 19mm, Flat, X#1, SP, 1000hrs, Collated

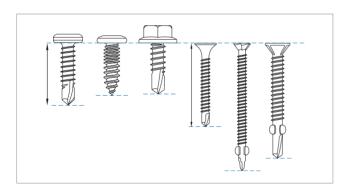
FASTENER LENGTH

The fastener length is defined as the total length of penetration. For screws with heads designed to rest on top of the substrate the length is measured from the underside of the head to the end of the point:

- Hexagonal Head Screws (HWH)
- Wafer Head Screws
- Button Head Screws
- Pan Head Screws
- Flat Head Screws

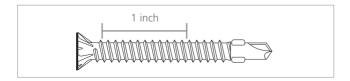
For screws with heads designed to countersink into the substrate the length is measured from the top of the head to the end of the point:

- Bugle Head Screws
- Self embedding Head Screws
- Countersunk Screws (CSK)



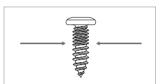
TPI (Threads per inch)

The T.P.I (Threads per inch) is the number of full thread crests that can be counted along a lineal measurement of 1" (25.4mm) of the fastener thread.



SCREW GAUGE

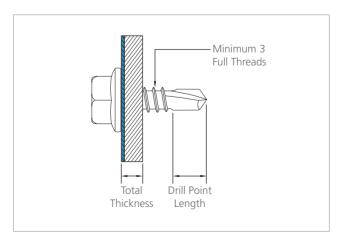
Screw gauge is determined by the basic size of the thread outside diameter.



Gauge	Diameter	Inches
6g	3.5mm	9/64"
8g	4.2mm	11/64"
10g	4.8mm	3/16"
12g	5.5mm	7/32"
14g	6.3mm	1/4"
16g	6.8mm	0.268
18g	7.5mm	0.294

FASTENING TO METAL

For full connection strengths to be achieved a structural fixing screw must be of sufficient length to ensure at least 3 full threads are protruding through the substrate material. Note that when assessing the correct length of the screw required any gap or space between the two substrates must also be allowed for in the total length of the screw.





Mechanical Properties

Screws are a crucial part of the FRAMECAD® manufacturing system.

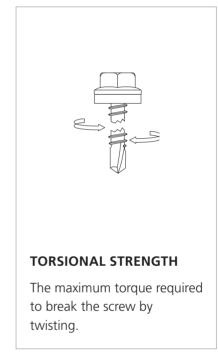
FRAMECAD® screws are manufactured in high quality facilities to comply with industry standard requirements and ensure consistency in all aspects of their performance. Mechanical performance properties of screws may help when selecting appropriate screws for each application however, the most relevant data is the tested capacity of a screw 'in situ' or when installed as part of the total FRAMECAD® system.

For complete connection design capacity information please refer to the following documents:

- FRAMECAD® In-line Framing Screw Connection Design Capacity Verification Report (AISI S100 2007)
- FRAMECAD® In-line Framing Screw Connection Design Capacity Verification Report (AS/NZS 1170, AS/NZ 4600)







Note: For fastener Axial Tension, Shear and Tensile Loads, and Torsional strengths please refer to individual screw data sheets. All performance figures quoted are indicative only based on nominal values expected by industry norms. Please ensure your design is professionally engineered. Contact your FRAMECAD representative for more information.

Screw Coatings

Coatings are applied to screws for three primary reasons:

- appearance
- to protect against corrosion
- to reduce friction

Choosing a suitable screw coating requires consideration of screw application, environmental conditions and lifetime expectancy. FRAMECAD® offers various grades of protective coatings to suit a wide range of applications and environmental conditions.

CORROSION RESISTANCE

Corrosion is typically the key concern in specifying a screw coating. Corrosion can be caused by industrial pollution, moisture (rain or humidity) and salt spray in coastal environments. Fasteners can also be exposed to moisture over their service life in applications such as bathrooms and other wet areas.

Recommended Corrosion Resistance			1
Applications	Coating Class (AS 3566.2:2002)	Salt Spray Test (ASTM B117)	Kesternich Cycles (DIN 50018)
Interior Linings & Non-Structural Steel Framing		24-96 hrs	0
External Cladding & Structural Steel Framing	3	1000 hrs	15
Exposed Roofing	4 & 5	2000 hrs	15 to 20

Coatings: FRAMECAD® E-Coat

FRAMECAD® E-coat is the latest generation in coating / corrosion resistance technology and offers many advantages to traditional coatings and which are especially beneficial for cold formed steel frame assembly.

FRAMECAD® E-COAT ADVANTAGES:

 A 'low build' and smooth ceramic coating which ensures the drive recess and threads are not clogged allowing screws to be driven more easily.

- Secondary protective coating of Zinc to act as a sacrificial coating if exposed to moisture.
- Meets or exceeds testing requirements: Salt Spray
 Test (SST) = 1000hrs & Kesternich Test =15 Cycles .
- Scratch and chip resistant increasing service life as the protective coating is much less likely to be damaged during installation.
- Environmentally friendly manufacturing and coating process.

Corrosion Resistance	Corrosion Resistance Test Methods				
ASTM B117 Salt Spray Test (SST)	The most common test method to classify the corrosion resistance of platings and finishes. Items to be tested are placed in a fog chamber at 35°C with an salt spray atmosphere of 5% sodium chloride. The results are expressed in hours of exposure without evidence of corrosion of the protected substrate. All FRAMECAD® coatings are tested in accordance to ASTM B117 "Practice for operating Salt Spray (fog) Apparatus"				
Kesternich Test	A test to classify the corrosion resistance of items which involves repeated cycles of saturation and drying. Items are exposed to a repeated cycle of 18 to 28 degrees and 75% humidity for 16 hours, and then a sulphur dioxide atmosphere at 40 degrees and 100% humidity for 8 hours. The results are measured in the number of cycles completed without evidence of corrosion of the protected substrate. Testing in accordance to DIN 50018 standard.				



Corrosion Resistance: Different Environments



MILD URBAN/RURAL (ISO CATEGORY 1-2)

Away from all above environments and corrosive fall-out within 2 kms.

LIGHT INDUSTRIAL/URBAN (ISO CATEGORY 2-3)

This environment is widespread in industrial/urban areas, away from all environments listed below, and typically 500m from heavy industrial fall-out, or where small industries lead to moderate level of fall-out from small stacks etc.

INDUSTRIAL (ISO CATEGORY 3)

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

MODERATE MARINE (ISO CATEGORY 3)

Generally between 300m and 1000m from marine surf, although topography and/or strong prevailing winds may extend this distance. Characterised by noticeable airborne salt spray, but not visible haze and salt smell.

SEVERE INDUSTRIAL (ISO CATEGORY 4)

Characterised by fall-out and emissions from stacks, sulphur and acid smells. Includes only plant buildings themselves and any building immediately under stacks. Also includes buildings high internal humidity and/or corrosion from internal operations.



SEVERE MARINE (ISO CATEGORY 4)

Generally between 100m from the beach front and approximately 300m inland. High wind areas may extend this area. Characterised by strong salt smell, haze, salt smearing and salt build-up in unwashed areas of structures. Generally a noticeable deterioration of building materials.

VERY SEVERE INDUSTRIAL (ISO CATEGORY 5)

Characterised by heavy fall-out and emissions from stacks, and strong sulphur and acid smells. Generally very high rates of corrosion in most buildings structures evident.

VERY SEVERE MARINE (ISO CATEGORY 5)

Includes off-shore areas and up to 100m from the high waterline of areas with breaking surf (site inspection required).



Steel Frame Assembly: XDrive® Framer

APPLICATION

- Assembly of steel frame walls, joists and trusses.
- Sharp Point: For pre-punched, TCT 0.75 0.95 mm steel (22 20 gauge)
- Drill Point: For pre-punched as well as non-punched, TCT 0.95 to 1.95 mm steel (20–16 gauge)

FEATURES AND BENEFITS

- Sharp Point aligns pre-punched holes during frame assembly for a high quality accurate finish.
- Drill Point is designed for easy penetration into heavier gauge steel for guick and easy assembly.
- XDrive® recess delivers increased stability and higher torque making it significantly easier to drive, reducing worker fatigue and increasing productivity.
- XDrive® incorporates a larger surface area of engagement, reducing stress on driver bits resulting in fewer breakages.
- Low profile flat head sits perfectly flush with the steel frame edge, providing a smooth, flat finishing surface for easy and accurate installation of cladding and lining.
- Under head serrations slow the rotation of the head to reduce the possibility of strip out, they also provide pressure under head to reduce vibrational loosening during transportation.
- E-Coat offers a high level of corrosion resistance and durability.
- Compatible with Superdrive® collated screw system to increase the efficiency in frame assembly.

SPECIFICATIONS

• Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

FRAMECAD® E-Coat: AS3566.2 2002: Class 3

• Installation: RPM 1,800 - 2,500

• Compliance: ISO 9001

ISO14001

Product	Order Code	Size	Description	Carton Qty
XDrive® Framer SP	Ideal for use in all industrial, commercial, and residential projects. Suitable for pre-punched steel frames up to 0.95mm thick.			
	001236	10g x 19mm	XDrive Framer SP, 1000hrs, Loose	8,000
	002962 **	10g x 19mm	XDrive Framer SP, 1000hrs, Collated	4,000
XDrive® Framer DP	Ideal for use in all industrial, commercial, and residential projects. Suitable for steel frames between 0.95mm and 1.95mm thick.			
	001877	10g x 19mm	XDrive Framer DP, 1000hrs, Loose	8,000
	002964 **	10g x 19mm	XDrive Framer DP, 1000hrs, Collated	4,000
	002965	12g x 19mm	XDrive Framer DP, 1000hrs, Loose	6,000
	002966 **	12g x 19mm	XDrive Framer DP, 1000hrs, Collated	4,000

^{&#}x27;**' indicates a supply lead time may be applicable.



Steel Frame Assembly: M6 FASTITE® Framer

APPLICATION

- Specialised fastener for transportable buildings, modular buildings, or pre-fabricated steel framing that will be transported long distances.
- Sharp Point (SP) ideal for pre-punched steel framing 0.55mm to 1.15mm
- Drill Point (DP) ideal for metal 0.95mm to 1.95mm, no pre-punched holes required.

FEATURES AND BENEFITS

- Sharp Point (SP) aligns pre-punched holes during frame assembly creating exceptionally accurate framing and stronger connections.
- Drill Point (DP) enables drilling into medium to heavy gauge steel. No pre-punched holes are required.
- Asymmetric thread cross-section provides superior resistance to vibrational loosening during transport by extruding thin metal for maximum thread engagement.
- Twin Helix Thread provides double thread engagement, increased stability and guicker installation.
- Undercut head with serration ensures maximum strength engagement with substrate.

SPECIFICATIONS

Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

FRAMECAD® E-Coat: AS3566.2 2002: Class 3

• Installation: RPM 1,800 - 2,500

• Compliance: ISO 9002

ISO14001

Product	Order Code	Size	Description	Carton Qty
FASTITE 2000® Framer	Ideal for use in transportables, modular buildings or prefab unit manufactures where the frames will be transported. Suitable for steel frames 0.55mm to 1.55mm			
	309880	M6 x 17mm	FASTITE 2000® Framer SP, Ph#3, 1000hrs	5,000

Steel Frame Assembly: DualThread Framer

APPLICATION

- Fabrication of steel wall framing, roof trusses and floor joists.
- Sharp Point (SP) suitable for pre-holes metal 0.55mm to .95mm Light Gauge Steel Frames.
- Drill Point (DP) suitable for no pre-hole metal 0.95mm to 1.2mm Light Gauge Steel Frames.

FEATURES AND BENEFITS

- Square drive recess delivers increased driving stability and higher torque, reducing operator fatigue.
- Sharp Point aligns pre-punched holes during frame assembly creating accurate frames.
- Dual Thread configuration results in a tight connection suitable for transportable buildings.
- Wafer head sits flush with dimple providing a smooth surface for cladding and lining.
- Undercut head with serration: Absorbs material extruded by the screw and increases the underhead contact area to increase resistance to stripping.
- Square drive enables screw to stick to driver bit allowing for single hand operation.

SPECIFICATIONS

Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

• Installation: RPM 1,800 - 2,500

• Compliance: ISO 9001

Product	Order Code	Size	Description	Carton Qty		
Dualthread Framer SP		Ideal for use in large volume social housing projects, or low cost transportables manufacture. Suitable for pre-punched steel frames up to 0.95mm thick.				
	002589	10g x 16mm	Dualthread Framer SP, Sq#2, 1000hrs, Loose	10,000		
	003155 **	10g x 19mm	Dualthread Framer SP, Sq#2, 1000hrs, Collated	10,000		
	308237	10g x 16mm	Dualthread Framer SP, Sq#2 48hrs, Loose	10,000		
	308238 **	10g x 19mm	Dualthread Framer SP, Sq#2 48hrs, Collated	10,000		
Dualthread Framer DP	Ideal for use in large volume social housing projects, or low cost transportables manufacture. Suitable for steel frames from 0.95mm to 1.15mm thick.					
	003012 **	10g x 21mm	Dualthread Framer DP, Sq#2 1000hrs, Loose	10,000		
	308332 **	10g x 21mm	Dualthread Framer DP, Sq#2 1000hrs, Collated	10,000		
	308239 **	10g x 19mm	Dualthread Framer DP, Sq#2 48hrs, Loose	10,000		
	308240 **	10g x 19mm	Dualthread Framer DP, Sq#2 48hrs, Collated	10,000		
	308342 **	12g x 19mm	Dualthread Framer DP, Sq#2, 1000hrs, Loose	8,000		
Dualthread Framer		Ideal for use in large volume social housing projects, or low cost transportables manufacture. Suitable for steel frames from 0.95mm to 1.15mm thick. Standard Phillips No. 2 Drive				
	309813	10g x 16mm	Dualthread Framer SP, Ph#2, 48hrs, Loose	10,000		
	002601 **	10g x 16mm	Dualthread Framer SP, Ph#2, 1000hrs, Loose	10,000		
	030030 **	10g x 19mm	Dualthread Framer DP, Ph#2 1000hrs, Loose	10,000		

^{&#}x27;**' indicates a supply lead time may be applicable.



Frame Erection: Hex Head FrameFix Screws

APPLICATION

- Metal to metal connections for joining frames and trusses, connecting frames to steel floors or adding strength to connectors.
- Suitable metal 0.75mm (22 gauge) to 2.0mm (14 gauge).

Note: 12 gauge screws are recommended for steel thicknesses 1.5mm and greater.

FEATURES AND BENEFITS

- Hex Washer Head provides a high torque which is ideal for metal to metal applications.
- The Hex Washer Head provides additional screw strength and holding capacity.
- Drill Point (DP) enables drilling into medium to heavy gauge steel. No pre-punched holes are required.
- Used in conjunction with FRAMECAD® Certified Connectors, to provide additional structure support and strength.

SPECIFICATIONS

• Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

FRAMECAD® Galv.: 2000hrs in accordance with ASTM B117 (for Roofing Screws)

Installation: RPM 1,800 - 2,500
 Compliance: ISO 9001, SAE J78

Product	Order Code	Size	Description	Carton Qty
HWH FrameFix DP	Ideal for panel to panel fixing during frame erection and for fixing connectors. Also used to fix framing to hot rolled steel structures or concrete. Suitable for steel thicknesses up to 8mm.			
	307387	10g x 19mm	Hex Head FrameFix DP, 1000hrs, Loose	5,000
	002409 **	12g x 25mm	Hex Head FrameFix DP, 1000hrs, Loose	5,000
HWH FrameFix DP #5	Metal to metal screw for fixing Light Gauge Steel to heavy gauge steel			
	002251	12g x 32mm	Hex Head FrameFix DP#5, 1000hrs, Loose	2,500

^{&#}x27;**' indicates a supply lead time may be applicable.

Frame Erection: FRAMECAD® Flathead

APPLICATION

- Metal to metal screw ideal for fixing strap bracing and connectors.
- Used as an additional screw in panel connections when the software indicates that more than 2 screws are required.
- Used to fix connectors to walls where the super flat 1mm head ensures cladding and lining can be installed without the chance of cracking.

FEATURES AND BENEFITS

- Fully tested and certified for use with the FRAMECAD® System to provide the connection strengths required to perform to calculated load requirements.
- Low profile 1mm thick head ensures flush bearing surface for lining substrates.
- Drill Point (DP) enables drilling into medium to heavy gauge steel.
- Used in conjunction with FRAMECAD® Certified Connectors, to provide additional support and strength.

SPECIFICATIONS

• Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

• Installation: RPM 1,800 - 2,500

• Compliance: ISO 9001

Product	Order Code	Size	Description	Carton Qty
FRAMECAD® Flathead	Ideal for connecting metal strapping or bracing and adding additional strength to connectors.			
	001539	10g x 16mm	FRAMECAD® Flathead DP, 1000hrs, Loose	10,000



Cladding, Lining and Flooring: Phillips Drive

APPLICATION

• Suitable for a wide range of cladding and flooring substrates, such as Fibre cement, MGO Board Engineered timbers etc.

FEATURES AND BENEFITS

- Winged Drill Point (WDP) design for fixing claddings, linings and floorings greater than 10mm thick into steel supstrates greater than 0.95mm thick without the need to pre-drill boards.
- Drill Point (DP) enables the fixing of claddings and linings up to 10mm into all gauges steel.
- Flat Countersunk (CSK) head with aggressive under head nips ensures full countersinking to provide a flat bearing surface for a high quality finish.
- Wings bore out cladding for easy drilling and snap off seamlessly when they hit the steel for a more stable and secure connection.

SPECIFICATIONS

• Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

• Installation: Drill Point 0-2500 / Winged Drill Point

RPM 1,500 - 2,500

• Compliance: ISO 9001, ASTM C1002

Product	Order Code	Size	Description	Carton Qty	
CladFix DP & WDP Shifting	Suitable for fixing 4.5mm to 18mm claddings such as Fibre Cement, MGO Board, Plywood and other engineered timbers to 0.95mm to 1.95mm steel frames.				
	030029	10g x 25mm	CladFix DP, Ph#2,1000hrs, Loose	8,000	
	001364	8g x 35mm	CladFix WDP, Ph#2,1000hrs, Loose	6,000	
	002968	10g x 45mm	CladFix WDP, Ph#2,1000hrs, Loose	4,000	

^{&#}x27;**' indicates a supply lead time may be applicable.

Interior Lining

APPLICATION

• Suitable for fixing Gypsum and MGO Board lining to light gauge steel frames.

FEATURES AND BENEFITS

- Self Tapping Drill Point design for fixing claddings to Light Gauge Steel Frames over 0.95mm.
- Self Tapping Pin Point design to penetrate quickly and easily into steel.
- Flat Countersunk (CSK) head provides a flat bearing surface.
- Phillips head drive enables cam-out, preventing overdriving and breaking paper surface of lining boards.
- The Bugle Scavenger head is designed to seat fast and easily into soft wood or drywall, creating a flush surface finish.

SPECIFICATIONS

• Coating: FRAMECAD® Blackcote: SST: 24hrs in accordance with ASTM B117.

• Installation: RPM 1,800 - 2,500

• Compliance: ISO 9002

ISO14001 SAE J78 DIN 18182 ASTM C1002

Product	Order Code	Size	Description	Carton Qty
Scavenger Head DP	Specifically designed for fixing gypsum board and MGO to steel framing up to 1.2mm thick.			
	309019	6g x 32mm	Bugle Scavenger DP, Ph#2, 24hrs, Loose	8,000
	001362	6g x 41mm	Bugle Scavenger DP, Ph#2, 24hrs, Loose	6,000

'**' indicates a supply lead time may be applicable.



General Purpose Fixing: Buttonhead DP

APPLICATION

- Attaching building wrap / weather barrier or insulation to steel framing.
- Attaching steel mesh to cladding.
- All general purpose non structural fixing requirements.

FEATURES AND BENEFITS

- Extra wide head for greater surface area to increase holding power.
- Drill Point (DP) enables drilling into medium to heavy gauge steel. No pre-punched holes are required.
- Wafer Button is designed to have more surface area contact.
- Phillips #2 head drive enables cam-out, preventing overdriving and break through of substrate.

SPECIFICATIONS

Coating: FRAMECAD® YZ: SST: 48hrs in accordance with ASTM B117.

• Installation: RPM 1,500 - 2,500

• Compliance: ISO 9002

ISO14001 SAE J78 DIN 18182 ASTM C1002

Product	Order Code	Size	Description	Carton Qty	
Wafer Buttonhead DP	Wafer Button provides a head with a very high surface area contact, enabling it to hold light items such as building wrap and other components to Light Gauge Steel Framing.				
	040286 **	8g x 25mm	Wafer Buttonhead DP, Ph#2, 48hrs, Loose	5,000	
	030079 **	8g x 32mm	Wafer Buttonhead DP, Ph#2, 48hrs, Loose	5,000	

'**' indicates a supply lead time may be applicable.

Roofing Screws

APPLICATION

- For metal roof installation
- Designed for fixing long run steel for roofing, as well as side cladding (e.g. Sandwich Board).

FEATURES AND BENEFITS

- Hex Head provides a high torque which is ideal for metal to metal applications.
- Drill Point (DP) enables drilling into medium to heavy gauge steel.
- Quality DEKS EPDM washers provide and effective long term waterproof seal.
- Head painting available to match roof colour.



SPECIFICATIONS

• Coating: FRAMECAD® E-Coat: SST: 1000hrs in accordance with ASTM B117

FRAMECAD® E-Coat: Kesternich Test: 15 Cycles

FRAMECAD® Galv.: 2000hrs in accordance with ASTM B117 (for Roofing Screws)

• Installation: RPM 1,500 - 2,500

• Compliance: ISO 9001

ISO14001 AS3566.1

AS3566.2 Class 4.

EPDM WASHERS

FRAMECAD® roofing screws incorporate the use of 'DEKS" premium EPDM washers. A high quality EPDM washer is critical for the watertightness of the roof or cladding fixing. A failure in the washer can mean at best replacement of the screws, or at worst, considerable damage to the entire roof and building structure.

Care must be taken to not overdrive roofing screws, over-compression will damage the washer and reduce its effectiveness.

Too Loose: Sealing material is not visible: not enough compression to seal.
Too Tight: Washer is deformed; sealing material pressed beyond fastener edge.
Correct: Sealing material slightly visible at edge of washer - assembly is water tight.



FRAMECAD® ScrewBolts

APPLICATION

Heavy Duty Screw Anchor Bolt for Fixing Cold Formed Steel to Concrete and Masonry.

The self-undercutting, non-expansion characteristics of the FRAMECAD ScrewBolts make it ideal for structural applications, even at reduced edge distances and spacings.

- Structural Steel
- Cold Formed Steel Structures
- Seismic and Static applications.
- Concrete Formwork and Bracing
- Machinery and Equipment
- Safety Equipment: Guardrails, Railings, etc.

FEATURES AND BENEFITS

- **Higher Load Capacity.** Threads along the entire length to efficiently transfer the load.
- Less Spacing and Edge Distance Required. The FRAMECAD ScrewBolt does not exert expansion forces on the base material. This means greater placement flexibility because anchors can be places closer to foundation edge.
- **Full Body Diameter.** The diameter of the anchor is equal to the nominal diameter. This means that the body of a 16mm anchor is a full 16mm giving the FRAMECAD ScrewBolt higher shear values than other products.
- Applicable for all Conditions. Designed for optimum performance in cracked and uncracked concrete under both static and seismic loading conditions.

SPECIFICATIONS

Coating: Mechanically Galvanized, 2000hrs in accordance with ASTM B117

• Compliance: ISO9001, ISO14001, ICC-ES, AC193, ACI 355.2, AC106

Name	Code	Description	Box Qty		
FRAMECAD® ScrewBolt	Screw ancho	Screw anchors which provide the ideal balance of capacity, budget and ease of installation			
-1	310019	FRAMECAD ScrewBolt MG M8x75mm, 50/Carton	50		
	310020	FRAMECAD ScrewBolt MG M10x75mm, 25/Carton	50		
	310021	FRAMECAD ScrewBolt MG M10x100mm, 25/Carton	25		
	310022	FRAMECAD ScrewBolt MG M12x75mm, 25/Carton	25		
	310023	FRAMECAD ScrewBolt MG M12x100mm, 25/Carton	25		
	310024	FRAMECAD ScrewBolt MG M12x120mm, 25/Carton	25		
	310025	FRAMECAD ScrewBolt MG M12x150mm, 25/Carton	25		

Notes:

 $1. \ \ For full specifications, capacity and application information please refer to the datasheet relating to the specific product \ .$

FRAMECAD® Shear Bolt Connector

APPLICATION

Installing steel-concrete composite flooring with ease.

FEATURES AND BENEFITS

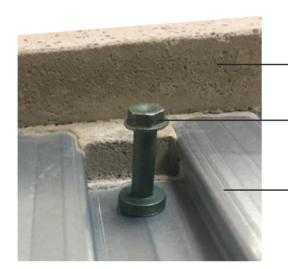
- Reduces noise throughout floor assembly
- Ensures composite action throughout floor assembly
- Reduces build costs by eliminating the need for steel mesh reinforcement
- Drill Point penetration of up to 6.35mm steel, eliminating the need to weld in place.
- Stop Ring Designed to stop the screw when hex head is at the optimum hight from the load bearing surface during installation. This positition is ideal for strong engagement with poured concrete.

SPECIFICATIONS

Coating: Ruspert®. SST: 1000hrs in accordance with ASTM B117

FRAMECAD® E-Coat: Kesternich Test: 15 Cycles

Compliance: ISO9001, ISO14001
 Installation: RPM 1,500 - 2,500



Concrete floor. 50mm C20 / C25

FRAMECAD® Shear Bolt Connector installed before concrete floor is poured

Roll formed steel decking tray

Name	Code	Description	Box Qty	
FRAMECAD Shear Bolt Connec-	Self Drilling/ Tapping pre-concrete shear connector screw			
tor	308195	Shear Connector 14g, 36mm Standoff, #4Drill, 3/8" HWH, 1000hr	1,100	



Driver Bits

Image	Driver	Product Description	Code
	Square #2	Driver Bit - SQ#2 x 50mm	001552
		Driver Bit - SQ#2 x 153mm	003156
	XDrive® #1	Driver Bit - X#1 x 25mm	
		Driver Bit - X#1 x 50mm	001441
		Driver Bit - X#1 x 153mm	002793
	Phillips #2	Driver Bit - Ph#2 x 25mm	001381
		Driver Bit - Ph#2 x 50mm	001549
		Driver Bit - Ph#2 x 153mm	001380
		Driver Bit - Ph#2, 163mm	002647
	Phillips #3	Driver Bit - Ph#3 x 50mm Blunt	002959
	Torx® TTAP®	Driver Bit - Torx TTAP T25 x 50mm	308981
	Hex 5/16"	Driver Bit - Hex Socket 5/16" x 65mm with Magnet	307162
		Driver Bit - Hex Socket 5/16" x 150mm with Magnet	001554
	Hex 3/8"	Driver Bit - Hex Socket 3/8" x 65mm with Magnet	307163
		Driver Bit - Hex Socket 3/8" x 150mm with Magnet	003221

Recommended Tools: Cordless Power Tools

HITACHI CORDLESS IMPACT DRIVER KIT

FRAMECAD® provides only industrial grade Hitachi Impact Drivers for the tough, demanding environments of an CFS assembly line.

Max Torque: 150Nm / 1,330 in.lbsNo-Load Speed: 1,000 - 2,6000/min.

• Impact Rate: 1,000 -3,200/min

HITACHI CORDLESS IMPACT WRENCH KIT

An industrial grade impact wrench. Enough torque to drive Framecad M12 ScrewBolts into concrete foundations.

Max Torque: 220Nm / 1,950 in.lbs

Bolt Capacity: 10 - 16mm

• Impact Rate: 1,000 -3,200/min

HITACHI CORDLESS ROTARY HAMMER DRILL KIT

An industrial grade rotary hammer drill. Optimal performance when drilling holes in concrete for the installation of foundation anchor bolts.

Max Torque: 220Nm / 1,950 in.lbs
Bolt Capacity: 16mm (concrete)
Impact Rate: 1,000 - 6,200/min

SUPERDRIVE® COLLATED SCREW SYSTEM

The Superdrive® is an automatic screw delivery system that maximises the speed for fastening screws. Fits easily onto Hitachi Impact Driver using the included adapter.

Used in conjunction with collated screws the Superdrive® Extension Kit provides 550mm of extra reach for screwing off ceilings and flooring without ladders or bending.

DEWALT CORDLESS SHEAR

A heavy duty, cordless, swivel head shear designed to cut through cold rolled steel up to 18 gauge with accuracy. Ideal for quick coil changes and all on-site cutting requirements.

- Head swivels 360 degrees.
- Cuts a 5.5mm strip which curls away from work area.
- Cordless to allow flexibility in workplace.



Product	Order Code	Description	Unit
Hitachi Cordless Power Tools	Durable range of Cordless Powertools ideal for use in the Cold Formed Steel industry		
	308987	Hitachi 18V Li-ion Cordless Impact Driver Kit - WH18DEBL	1 Kit
	307390	Hitachi 18V Li-ion Cordless Rotary Hammer Drill Kit DH18-DL	1 Kit
	308368	Hitachi 18V Li-ion Cordless Driver/Drill Kit - DS18DFL	1 Kit
Superdrive® Collated System	000397	Superdrive® 05 - 16 to 32mm Screws (w/ Dimple Nose)	1 pc
	000416	Superdrive® Coupler - for Hitachi Impact Driver	1 pc
DeWalt Cordless Shear	030202	DeWalt 18V Li-ion Cordless Shear Kit - DC490KA	1 Kit

^{&#}x27;**' indicates a supply lead time may be applicable.



Tools: Other Tools and Accessories

FRAMECAD® Manual Stud Punch

The FRAMECAD® Stud Punch Standard will punch 34 mm round holes in up to 20 gauge (0.95mm) steel studs for wiring or conduit requirements.

- Self-clearing mechanism to discharge waste.
- Self-centring on standard width studs.
- Thickness Capacity: Up to 0.95mm (20 Gauge)
- Stud Width Capacity: 63.5mm (2 1/2") +
- Hole Diameter: 34.1mm
- Weight: 3.2kg

FRAMECAD® Grommets

FRAMECAD® Grommet can be installed quickly and easily to protect cables and pipes from the sharp edges of cut service holes in steel studs and framing.

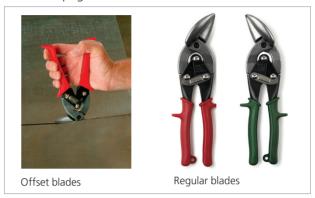
The 'wings' of the grommet are designed to hold water pipes in place to reduce water 'hammer' from plumbing.

Benefits

- Suitable for both machine punched and hand punched holes of various shapes and sizes.
- Temperature resistant plastic ensures lasting durability for plumbing and electrical cabling.
- Easily split to allow installation around existing pipes and cables.

FRAMECAD® Aviation Snips

FRAMECAD® offers the highest quality snips on the market with best in class blade life and cutting performance. Available in left or right with regular or offset or upright blades.



FRAMECAD® Antivibe Joist Tape

Easy to apply to joists for maximum noise insulation. FRAMECAD® Antivibe Joist Tape is made from self adhesive open cell NBR foam with paper liner.



Product	Order Code	Description	Unit
Manual Stud Punch	001428	Manual Stud Punch round 34mm hole - Standard	1 Kit
Midwest Aviation Snips	003102	Aviation Snips - Midwest Upright (90 Degree) Right Cut	1 pc
	003101	Aviation Snips - Midwest Upright (90 Degree) Left Cut	1 pc
	003190	Aviation Snips - Midwest Regular Right Cut	1 pc
	003191	Aviation Snips - Midwest Regular Left Cut	1 pc
FRAMECAD Manual Lip Flattener	001458	Manual Lip Flattening Tool	1 pc
FRAMECAD Grommets	001254	Grommet 34mm Universal - Green, 500/bag (4 bags /carton)	2,000 / carton
FRAMECAD Antivibe Joist Tape	309068	Antivibe Joist Tape - 3mm thick x 40mm wide x 30m Roll	20 / carton

^{&#}x27;**' indicates a supply lead time may be applicable.

Adhesive: FRAMECAD® FastBond

FRAMECAD® FastBond is a premium, water based, multi purpose construction adhesive providing strong initial grab and high bond strength.

FRAMECAD® FastBond: Fast cure, zero solvent, multi purpose construction adhesive.

Application

FRAMECAD® FastBond can be used on most substrates due to its excellent adhesion.

These include bonding;

- Panels to wall studs
- Fibre cement, plywood, particleboard and strip flooring to joists
- Polystyrene wall panels
- Architraves, trims and skirting boards to walls & loose tiles onto walls.

Advantages:

- Can be repositioned for up to 60 minutes after application
- Easy to use, easy clean up
- Reduces squeaking associated with nail ride in floors
- Can be painted with water-based coatings
- Can bridge gaps up to 9 mm
- High bond strength, with particularly strong adhesion to metal
- Fast initial grab minimises slippage on vertical surfaces
- Reduces number of mechanical fasteners required to install floors or walls.
- Zero solvent* low odour and no fumes
- Low V.O.C.** (Volatile Organic Compounds)
- High heat resistance
- Flows easily at all temperatures

Test Approvals and Standards

- Complies to AS2329-1980, "Mastic Adhesives for Fixing Wallboards".
- FRAMECAD® FastBond is solvent free, low V.O.C. and non-flammable. No solvents are added or used during the manufacturing process.
- FRAMECAD® FastBond has been independently tested for V.O.C. content as a general purpose construction adhesive for the purpose of Green Star rating. Certificate ref. F0909-12.

Product and Technical Data

- Specific gravity: ~1.4
- Skinning time: 20 minutes
- Repositioning time: 20 minutes (approx.) at 25°C.
- Full cure: 24 hours depending on conditions.













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