



# The Building Envelope Specialist

Fastening Solutions: North America Division Construction

# Design, Manufacture & Supply

**SFS is the building envelope specialist. We serve the construction industry with fastening solutions for low slope roofing, post-frame construction, metal building systems, commercial construction facades and curtain walls, subframe support systems, offsite and modular construction and mass timber construction.**

But we're not just a fastener company. We have designed and developed innovative installation tools that increase productivity and make installation more accurate and easier.

At SFS, our vertically integrated supply chain keeps the fastener production, coating and packaging of our products in our hands. This provides greater assurance that we will live up to our quality, delivery and service commitments.

Together with our expertise, we can help you find the right product and systems for your project.

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# Intense Color, Ultimate Performance

Our VistaCoat® premium system is a proprietary high-performance finish that is durable, provides exceptional UV and corrosion resistance and is environmentally friendly. This system is designed to endure rigorous fastener applications and provide the highest quality installed product.

SFS has the ability to color match to any panel color, but we've already made it easy by offering a broad pallet of standard colors that match the majority of OEM panels. Check out our online color selector tool – its easy to find the SFS color code to match many OEM panel colors.

If you are a panel manufacturer and want fasteners perfectly matched to your panels, just submit a color chip to us.

## SFS Standard VistaCoat® colors

The below chart is a representation of our standard VistaCoat® color offering. Color swatches are a representation only, and not to be used for exact matching.

### White

- 014 Bright White
- 001 White
- 348 Bone White
- 330 Warm White
- 818 Sierra White

### Brown

- 020 Tan
- 548 Ivory
- 248 Light Stone
- 415 Beige
- 109 Sand Beige
- 422 Taupe
- 230 Desert Brown
- 110 Brown
- 374 Dark Brown

### Green

- 385 Patina
- 052 Teal Green
- 660 Hemlock
- 047 SFS Green
- 232 Evergreen
- 732 Denali Green
- 228 Green
- 925 Classic Green
- 798 Hartford Green

### Red

- 102 Crimson Red
- 928 Terra Cotta
- 890 Red
- 691 Barn Red
- 074 Colonial Red
- 1210 Brite red
- 393 Burgundy

### Bronze

- 537 Medium Bronze
- 042 Burnished Slate
- 324 Dark Bronze

### Blue

- 432 Blue Teal
- 012 Blue
- 843 Regal Blue
- 421 Navy

### Black

- 023 Black
- 507 Matte Black

### Gray

- 850 Ash Gray
- 302 Pearl Gray
- 578 Old Town Gray
- 696 Pewter Gray
- 091 Zinc Gray
- 051 Charcoal Gray
- 416 Slate Gray

### Metallic

- 1160 Champagne Metallic
- 1161 Silver Metallic
- 1162 Zactique Metallic
- 1116 Copper Penny Metallic



# We're Committed to Service

At SFS, positive customer experience is paramount. We are committed to fulfilling customer requirements by going above and beyond expectations. We blend proactive engineering and holistic add-on services to provide our customers end to end solutions.



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## Our services at a glance

### Engineering services

Our highly creative technical specialists provide a systematic approach. This includes multi-disciplined engineering services which ensure optimal performance of the building envelope.

### Services for facade framing systems

We are experts in design development, shop drawings and submittal calculations on complex building facades.

### Order and delivery services

Our reliable order processes and worldwide delivery network, ensure complete and on-time as ordered service.

### Job site services

Our professional network offers on-site product training.

### Tool repair program

We offer quick turn-around repair service of SFS productivity tools.

### eLogistics

Our automated logistics processes with track and trace features mean customers spend less time from order to delivery.

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## ConnectSuite: Our Digital Power Tools

### NVELOPE budget calculator

Quickly and easily estimates the square foot cost of NVELOPE thermally broken cladding support system materials needed for your project.

### NVELOPE Design Assist

Determine which NVELOPE cladding system is ideal for your project. Design a rainscreen bracket system dependent on factors such as local wind loads, height of the facade, substrate being fixed to, selected cladding material and the cladding zone.

### Fastener color selector

Makes finding the perfect SFS color match to an OEM panel easy.

### Panel clip product finder

Provides all the SFS standing seam roof panel clips that work with your roll forming equipment and attachment method.

### VistaVent® ridge ventilation product finder

Identifies the SFS product which is cut to fit your panel profile.

### VistaFoam® closure product finder

Three easy ways to find closure cut to fit your panel profile.















# Post Frame Building Fastening Solutions

# Post Frame Building Fastening Solutions

## Woodgrip™ metal panel to wood fasteners





	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#10 Woodgrip+	#10	12/24	1/4" HWH	Control seal	Sharp point	1" to 2-1/2"
	#10 Woodgrip HiLo	#10	15	1/4" HWH	Bond seal	Type 17 milled point	1" to 3"
	#10 Woodgrip	#10	14	1/4" HWH	Control seal	Sharp point	1" to 3"
	#12 Woodgrip XG	#12	8	1/4" HWH	Bond seal	Sharp point	1" to 2-1/2"
	#14 Type 17 A-MP	#14	10	5/16" HWH	Bond seal	Type 17 A-milled point	1" to 3"
	#10 Woodgrip HiLo LP Exterior sidewall	#10	15	1/2" pan head T25	Bond seal	Type 17 milled point	1" to 2"
	#10 Woodgrip HiLo LP Interior liner panel	#10	15	1/2" pan head T25	Bond seal	Sharp point	1" to 1-1/2"

## Long-life metal panel to wood fasteners



	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#10 WoodZAC® HiLo	#10	15	5/16" HWH Zinc alloy capped	Aluminum bond seal	Type 17 milled point	1" to 3"
	#12 WoodZAC® XG	#12	8	5/16" HWH Zinc alloy capped	EPDM sealer	Sharp point	1" to 2-1/2"
	1/4-14 ZAC® Type AB	1/4"	14	3/8" HH Zinc alloy capped	EPDM sealer	Type AB milled point	1" to 2-1/2"


# Post Frame Building Fastening Solutions

## Long-life metal panel to wood fasteners continued

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#10 WoodMAC HiLo	#10	15	1/4" HWH stainless capped	EPDM sealer	Type 17 milled point	1" to 2-1/2"
	#9 Evergrip® 304SS Bi-Met HWH	#9	15	1/4" HWH	Stainless bond seal	Carbon steel sharp point	1" to 2-1/2"
	#9 Evergrip® 304SS Bi-Met T25	#9	15	3/8" pan head T25	Stainless bond seal	Carbon steel sharp point	1" to 3"
	#9 Aluminum Panel 304SS	#9	15	1/4" HWH	Aluminum bond seal	Sharp point	1" to 3"

## Stitch and light metal connections




	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#12 Woodgrip Lap	#12	14	1/4" HWH	Control seal	Sharp point	3/4"
	#12 Woodgrip Lap	#12	14	1/4" HWH	Bond seal	Sharp point	3/4"

	Product	Diameter	Body	Mandrel	US dimensions
	American Standard Blind Rivet	1/8"	Stainless	Stainless	43, 44, 46




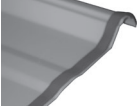



# Post Frame Building Fastening Solutions

## ConnexTite™ structural wood screw

	Product	Diameter	Head style/drive	Washer	Point	Lengths
	Flange head	1/4"	Flange T25	–	ribbed	1-1/2" to 2-3/4"
	Flange head	5/16"	Flange T40	–	ribbed	2-3/4" to 5-1/2"
	Countersunk	5/16"	Flange T40	–	ribbed	2-3/4" to 4"

## Accessories








	Product	Description
	VistaVent® Ridge Ventilation	Panel fit and universal venting material. Many panel profiles available.
	VistaFoam® Closure Strips	Panel opening filler designed to close gaps in roof and sidewall applications. Available in most panel profiles.
	Hannoband® BG1	Self-expanding joint sealing tape for joints, seams and gaps.
	Butyl Tape	Side and end lap sealing of metal panels, roof vents and pipe flashing.
	Pipe Flashing	Round, square and retrofit configurations. Gray and black EPDM and red silicone. Many size options available.



# Metal Building Fastening Solutions

# Metal Building Fastening Solutions



## Impax™ self-drill

	Product	Diameter	Threads per inch	Head style/drive	Washer*	Point	Lengths
	#12-14 Impax SD3	#12	14	5/16" HWH	Bond seal	SD3	3/4" to 4"
	1/4-14 Impax Lap	1/4"	14	5/16" HWH	Bond seal	SD1	7/8"
	1/4-14 Impax SD2	1/4"	14	5/16" HWH	Bond seal	SD2	1-1/4" to 1-1/2"
	1/4-14 Impax SD2	1/4"	14	3/8" HWH	Bond seal	SD2	1"
	1/4-14 Impax SD3	1/4"	14	3/8" HWH	Bond seal	SD3	3/4" to 4"
	#12-24 Impax SD4.5	#12	24	5/16" HWH	Bond seal	SD4.5	1-1/4"
	#12-24 Impax SD5	#12	24	5/16" HWH	Bond seal	SD5	1-1/4" to 2"
	1/4-20 Impax SD5	1/4"	20	3/8" HWH	Bond seal	SD5	3" to 8"
	#10-16 Impax Utility SD3	#10	16	5/16" HWH	Bond seal	SD3	3/4" to 1-1/2"
	#8-18 Impax Utility SD2	#8	18	1/4" HWH	Bond seal	SD2	1/2" to 3/4"



\*Available without washer.

# Metal Building Fastening Solutions

## Impax™ sealer self-drill

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#12-14 Impax sealer SD3	#12	14	5/16" cupped HWH	EPDM sealer	SD3	3/4" to 1-1/2"
	1/4-14 Impax sealer lap	1/4"	14	5/16" cupped HWH	EPDM sealer	SD1	7/8"



## Impax™ 410 Stainless

	Product	Diameter	Threads per inch	Head style/drive	Washer*	Point	Lengths
	#12-14 410SS SD3	#12	14	5/16" HWH	Aluminum bond seal	SD3	1 to 1-1/2"
	1/4-14 410SS Lap	1/4"	14	5/16" HWH	Aluminum bond seal	SD1	7/8"

\*Available without washer.

## ZAC® Impax™ self-drill and tapping




Zinc alloy cap that will never red rust

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#12-14 ZAC® SD3	#12	14	3/8" HWH zinc alloy capped	EPDM sealer	SD3	1" to 3"
		#12	14	5/16" HWH zinc alloy capped	EPDM sealer	SD3	1" to 2"
	#1/4-14 ZAC® Lap	1/4"	14	3/8" HWH zinc alloy capped	EPDM sealer	SD1	7/8"
		1/4"	14	5/16" HWH zinc alloy capped	EPDM sealer	SD1	7/8"

# Metal Building Fastening Solutions



## ZAC® Impax™ self-drill and tapping continued

Zinc alloy cap that will never red rust

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#1/4-14 ZAC®	1/4"	14	3/8" HWH zinc alloy capped	EPDM sealer	SD2	1-1/4" to 1-1/2"
		1/4"	14	5/16" HWH zinc alloy capped	EPDM sealer	SD3	1-1/4"
	#12-24 ZAC®	#12	24	3/8" HWH zinc alloy capped	EPDM sealer	SD4.5	1-1/4"
		#12	24	3/8" HWH zinc alloy capped	EPDM sealer	SD5	1-1/4" to 1-1/2"
	1/4-14 ZAC® AB	1/4"	14	3/8" HWH zinc alloy capped	EPDM sealer	Type AB milled point	1" to 2-1/2"
	#17 ZAC® AB	#17	14	3/8" zinc alloy capped	EPDM sealer	Type AB	1" to 1-1/2"

## MAC™ Impax™ Self-drill





304 stainless capped head

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	#12-14 MAC SD3	#12	14	5/16" HWH stainless capped	EPDM sealer	SD3	1" to 2"
	1/4-14 MAC Lap	1/4"	14	5/16" HWH stainless capped	EPDM sealer	SD1	7/8"

# Metal Building Fastening Solutions

## Self-tapping





Available in carbon steel or 304 stainless steel

	Product	Diameter	Threads per inch	Head style/drive	Washer*	Point	Lengths
	#14 Type A	#14	10	3/8" HH	Bond seal	Type A	3/4" to 6"
	1/4-14 Type B	1/4"	14	3/8" HH	Bond seal	Type B	3/4" to 6"
	1/4-14 Type AB	1/4"	14	3/8" HH	Bond seal	Type AB	CS 3/4" to 1-1/2" SS 3/4" to 1-1/2"
	#17 Type AB	#17	14	3/8" HH	Bond seal	Type AB	CS 3/4" to 1-1/2" SS 3/4" to 1-1/2"

\*Available without washer.

## Flex5® Grade 5

Selectively hardened alloy steel with Grade 5 performance

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	10-16 Flex5® SD3	#10	16	5/16" HWH	–	SD3	3/4"
	12-14 Flex5® SD3	#12	14	5/16" HWH	–	SD3	7/8" to 2"
	1/4-14 Flex5® SD3	1/4"	14	3/8" HWH	–	SD3	1" to 2"
	1/4-20 Flex5® SD4	1/4"	20	3/8" HWH	–	SD4	1-1/8" to 2-1/2"



# Metal Building Fastening Solutions

## Bi-Met 300®

304 stainless fastener with carbon steel point

	Product	Diameter	Threads per inch	Head style/drive	Washer	Point	Lengths
	1/4-14 Bi-Met 300® SD2	1/4"	14	3/8" HWH	–	SD2	1" to 2"
	1/4-20 Bi-Met 300® SD4	1/4"	20	3/8" HWH	–	SD4	1-1/8" to 2"
	1/4-20 Bi-Met 300® SD5	1/4"	20	3/8" HWH	–	SD5	2" to 4"
	#10-16 Bi-Met 300® SD2	#10	16	5/16" HWH	–	SD2	3/4" to 1-1/2"
	#12-14 Bi-Met 300® SD3	#12	14	5/16" HWH	–	SD3	1" to 2"
	#12-24 Bi-Met 300® SD5	#12	24	5/16" HWH	–	SD5	1-1/2"
	#12-14 Bi-Met 300® pancake SD3	#12	14	#2 pancake	–	SD3	1"

## BULB-TITE® Rivets

	Product	Body	Head style/drill point	Substrate
	9/32" BULB-TITE® Rivet	Aluminum body and mandrel	Dome head or large flange head	Steel or aluminum
	3/16" BULB-TITE® Rivet	Aluminum body and mandrel	Dome head	Steel or aluminum



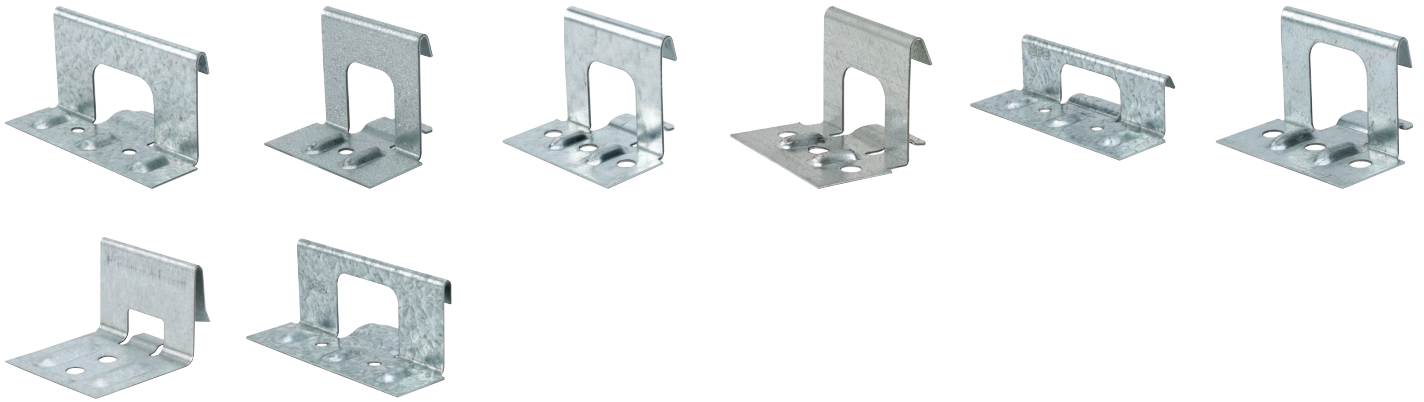
# Standing Seam Panel Fastening Solutions



# Standing Seam Panel Fastening Solutions

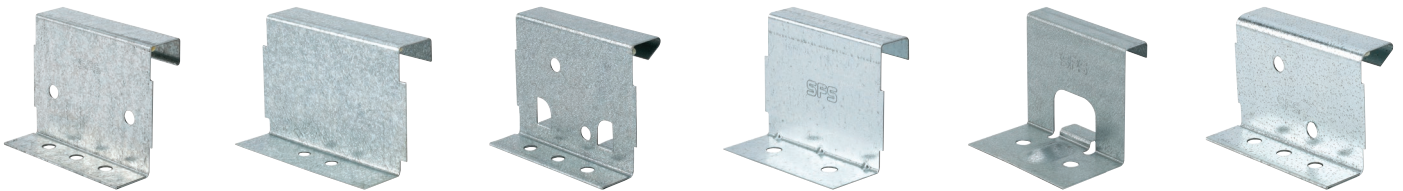
## Snap Lock Panel Clips

Broad selection of height, galvanized or stainless steel gauges, with or without sealant.



## Fixed Panel Clips

Broad selection of height, galvanized or stainless steel gauges, with or without sealant.



## Float Panel Clips

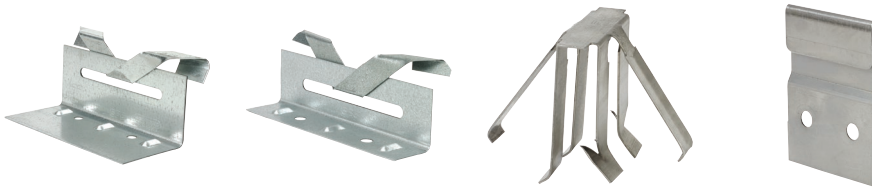
Broad selection of height, galvanized or stainless steel gauges, with or without sealant.



# Standing Seam Panel Fastening Solutions

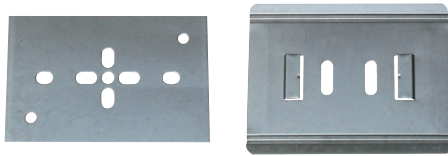
## Specialty Clips

Butterfly, batten trim (spider), and Bermuda (wall) clips.



## Bearing Plates

Snap lock and universal bearing plates in a variety of G-90 Galvanized steel gauges.

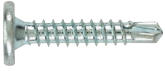






## Metal to wood clip fasteners

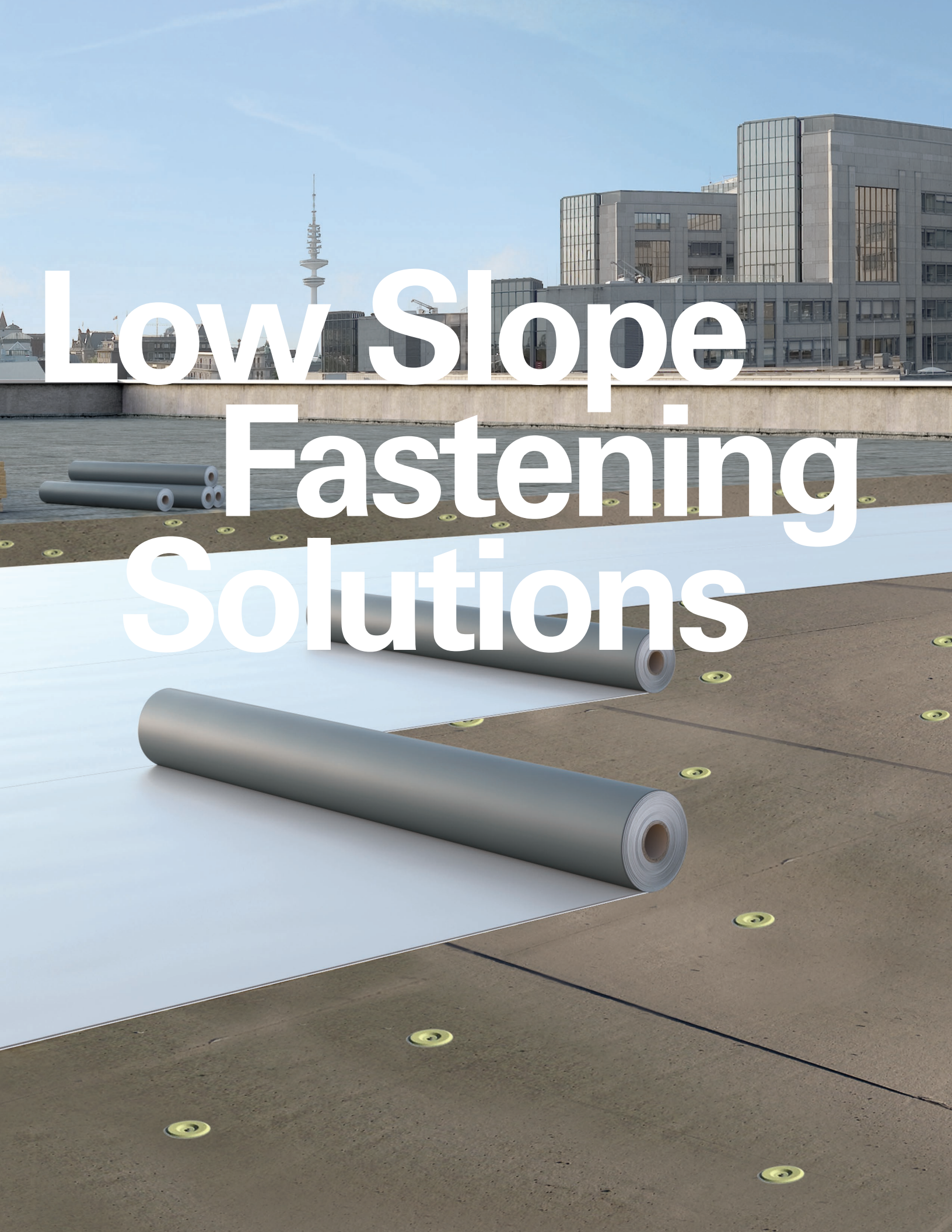
	Product	Diameter	Threads per inch	Head style/drive	Point	Lengths
	#10 Type A Pancake	#10	12	Pancake #2 square	Type A	1" to 2"
	#10 Type A Pancake 304SS	#10	12	Pancake #2 square	Type A	1" to 2"
	#12 Type A Pancake	#12	11	Pancake #2 square	Type A	1"
	#12 XG Low Profile	#12	8	Wafer #2 square	Sharp point	1" to 2"
	#12 XG Pancake	#12	8	Pancake #2 square	Sharp point	1" to 2"
	#14 Dekfast	#14	13	Truss #3 Phillips	Reduced SD1	1-1/4" to 12"

# Standing Seam Panel Fastening Solutions

## Metal to metal clip fasteners





	Product	Diameter	Threads per inch	Head style/drive	Point	Lengths
	#10 Self-Drill Pancake	#10	16	Pancake #2 square	SD2	1" to 2"
	#12 Self-Drill Pancake SD2	#12	14	Pancake #2 square	SD2	1"
	#12 Self-Drill Pancake SD5	#12	24	Pancake #2 square	SD5	1-1/2"
	1/4-14 Self-Drill HWH SD2	1/4"	14	3/8" HWH 5/16" HWH	SD2	1" 1-1/4" to 1-1/2"
	#14 Dekfast	#14	13	Truss #3 Phillips	Reduced SD1	1-1/4" to 12"

# Low Slope Fastening Solutions



# Low Slope Roof Fastening Solutions

## Dekfast™ Fasteners




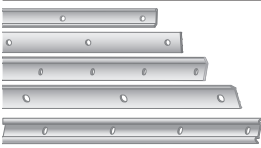
	Product	Diameter	Threads per inch	Head style/ drive	Lengths
	#12 Dekfast	#12	13	#3 Phillips truss	1-5/8" to 8"
	#14 Dekfast	#14	13	#3 Phillips truss	1-1/4" to 12"
	#15 Dekfast	#15	13	#3 Phillips truss	2" to 16"
	#14 Stainless Dekfast (410SS)	#14	13	#3 Phillips truss	1-1/2" to 12"

## Specialty Fastening Solutions

	Product	Diameter	Threads per inch	Head style/ drive	Lengths
	#12 Purlin	#12	24	Pancake #3 square	3-3/4" to 8-3/4"
	#14 Insulation Panel Fastener	#14	13	Flat #3 square pancake	2-5/8" to 10"
	Dekspike Structural Concrete Roof Anchor	#14	–	1/2" Mushroom	1-1/4" to 14"
	ZAC® Anchor Termination Fastener	#14	24	3/8" HWH zinc alloy capped	1-3/8"
	Zinc Nailin Termination Fastener	1/4"	–	Mushroom head	1" to 2"
	TPR Peel Rivet	1/4"	–	Low profile mushroom head	1-1/2" to 10"






# Low Slope Roof Fastening Solutions

## Specialty Fastening Solutions continued





	Product	Diameter	Threads per inch	Head style/ drive	Lengths
	Deklite™ Nylon Reinforced Fiberglass Auger	0.437"	4	Flat head 1/4" square drive	2" to 13"
	Deklite™ Round Stress Plate				2" seam plate 3" insulation plate
	FI-R-20 Sleeve	0.591"	–	–	2-3/4" to 6-1/4"
	Termination Bars				All purpose, single lip, ribbed single lip, ribbed flat, lip and ball

# Low Slope Roof Fastening Solutions

## Dekfast™ Insulation Stress Plates

	Product	OD	ID	Thickness	Finish/material
	2-7/8" Hex	2-7/8" Hex	0.270"	0.019"	AZ50 Galvalume®
	3" Round	3.0"	0.260"	0.019"	AZ50 Galvalume®
	3" Round Plastic Lock	3.0"	0.260"	0.26"	Polypropolene
	isoweld® TPO	3.15" 3.15"	0.260" 0.625"	0.03" 0.03"	G-90 steel with proprietary adhesive coating
	isoweld® PVC	3.15" 3.15"	0.260" 0.625"	0.03" 0.03"	G-90 steel with proprietary adhesive coating

## Dekfast™ Membrane Stress Plates

	Product	OD	ID	Thickness	Finish/material
	2" Round Barbed	2.0"	0.265" / 0.270"	0.032"	AZ55 Galvalume®
	2" Round Non-Barbed	2.0"	0.255"	0.032"	AZ55 Galvalume®
	2-3/8" Round Barbed	2-3/8"	0.250"	0.038"	AZ50 Galvalume®
	Oval Barbed	2.75"x1.50"	0.250"	0.047"	AZ50 Galvalume®

\*Galvalume® is a registered trademark of BIEC International, Inc.

# isoweld<sup>®</sup> Induction Welding System

## Why isoweld<sup>®</sup>

- Ultimate speed and agility - The fastest weld
- Time-saving 1-step calibration
- Constant monitoring of ambient temperature and adjustment of weld parameters
- 3-way weld verification
- Plate-finding search function
- No "false positive" welds
- "x2" welding - two membrane thickness

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### isoweld<sup>®</sup> 3000 stand-up tool



Tools include:

- 1 isoweld<sup>®</sup> 3000 stand-up tool
- 1 calibration template
- 5 replacement protective pads for inductor
- 1 instruction manual
- 1 transport case

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### isoweld<sup>®</sup> Backpack



Tools include:

- 1 induction welding tool isoweld<sup>®</sup> Backpack
- 1 calibration template
- 5 protective foils for inductor
- 1 instruction manual
- 1 hand-held inductor with cord straps
- 1 wired activation switch
- 1 adjustable handle
- 1 flexible handle adapter
- 1 transport case
- 5 replacement protective pads for inductor



# isoweld® Induction Welding System

## Stress plates

Plates with proprietary adhesive coatings uniquely designed for use with isoweld® on PVC and TPO membrane.



## Low profile hand held inductor

Provides the same secure weld function in tight spaces, near rooftop protrusions and on parapet walls.



## Fasteners

Use with isoweld® induction welding tools and applications approved by the roofing system manufacturer. Use with:

- #15 Dekfast
- #12 Purlin
- TPR-L Peel Rivet



## Magnets

A set of 12 specially designed isoweld® magnets, used for clamping and cooling of the weld. Detachable handles allow for use in tight areas and parapet walls. Supplied in their own shipping/storage case.












A low-angle photograph of a modern building's exterior. The building features a prominent blue cylindrical column in the foreground on the left. The facade is composed of grey panels and large windows with red frames. The sky is a clear, pale blue. The text 'Architectural / Commercial Construction Fasteners' is overlaid in large, white, bold letters across the center of the image.

# Architectural / Commercial Construction Fasteners


# Architectural / Commercial Construction Fasteners

## Facade Panel Attachment

	Product	Body	Head style/drive	Substrate
	SX3-D12	304SS or 316SS Bi-Metal	Dome head, T25W drive	Steel or aluminum
	SX3-D16	304SS Bi-Metal	Dome head, T25W drive	Steel or aluminum
	irius® SX3-L12	304SS Bi-Metal	irius® head, E420 irius® drive	Steel or aluminum
	TDA-S-D16	304SS with Type A Point	Dome head, T25W drive	Steel or aluminum
	10-12 Bi-Met 300® SD2	304SS Bi-Metal	Pan head, T20W drive	Steel or aluminum
	#12-16 ACM Screw	304SS	Flat head, T25W drive	Aluminum
	AP16 Rivet	Aluminum body, 304SS mandrel	Dome head	Aluminum furrings
	SSO-D15 Rivet	316SS body and mandrel	Dome head	Aluminum or steel furrings
	BULB-TITE® Rivet	Aluminum body and mandrel	Dome head	Steel or aluminum
	TW-S-D12 Self-tapper TW-A4-D12	304SS 316SS	Dome head, T20W drive	Wood
	TU-S / TUF-S / TUC-S	316SS	–	Hidden attachment to the back of HPL, fiber cement or fiber concrete panels





# Architectural / Commercial Construction Fasteners

## Curtain Wall Solutions








	Product	Body	Head style/drill point	Substrate
	1/4-14 SD2 Bi-Met 300®	304SS Bi-Metal	3/8" HWH, SD2 point	Steel or aluminum
	1/4-20 SD4 Bi-Met 300®	304SS Bi-Metal	3/8" HWH, SD4 point	Steel or aluminum
	1/4-20 SD5 Bi-Met 300®	304SS Bi-Metal	3/8" HWH, SD5 point	Steel or aluminum
	SX3	304SS Bi-Metal	5/16" HWH, SD2 point	Steel or aluminum
	SX5	304SS Bi-Metal	5/16" HWH, SD3 point	Steel or aluminum
	SX14	304SS Bi-Metal	5/16" HWH, SD5 point	Steel or aluminum
	Flex5® 10-16 SD3	Alloy steel, selectively hardened, grade 5 performance	5/16" HWH, SD3 point	Steel or aluminum
	Flex5® 12-14 SD3	Alloy steel, selectively hardened, grade 5 performance	5/16" HWH, SD3 point	Steel or aluminum
	Flex5® 1/4-14 SD3	Alloy steel, selectively hardened, grade 5 performance	3/8" HWH, SD3 point	Steel or aluminum
	Flex5® 1/4-20 SD4	Alloy steel, selectively hardened, grade 5 performance	3/8" HWH, SD4 point	Steel or aluminum

# Architectural / Commercial Construction Fasteners

## Insulated Metal Panel Attachment

	Product	Body	Head style/drill point	Substrate
	9/32" BULB-TITE® Rivet	Aluminum body and mandrel	Dome head or large flange head	Steel or aluminum
	3/16" BULB-TITE® Rivet	Aluminum body and mandrel	Dome head	Steel or aluminum
	SXC5 Self-drill	304SS Bi-Metal	5/16" HWH	Steel or wood
	SXC16 Self-drill	304SS Bi-Metal	5/16" HWH	Steel

## Sub Frame Installation

	Product	Body	Head style/drill point	Substrate
	1/4-14 SD2 Bi-Met 300®	304SS Bi-Metal	3/8" HWH, SD2 point	Steel or aluminum
	1/4-20 SD4 Bi-Met 300®	304SS Bi-Metal	3/8" HWH, SD4 point	Steel or aluminum
	1/4-20 SD5 Bi-Met 300®	304SS Bi-Metal	3/8" HWH, SD5 point	Steel or aluminum
	SDA5	316SS	5/16" HWH with SR2 internal drive, SD3 point	Aluminum
	SX3	304SS Bi-Metal	5/16" HWH, SD2 point	Steel or aluminum
	SX5	304SS Bi-Metal	5/16" HWH, SD3 point	Steel or aluminum
	SX14	304SS Bi-Metal	5/16" HWH, SD5 point	Steel or aluminum



# Envelope Thermally Broken Cladding Support Systems

# NVELOPE Cladding Support Systems

## Systems

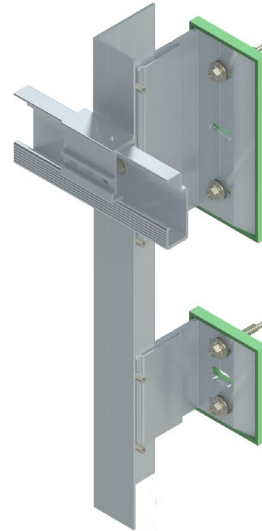
### NV1 – Vertical Face Fastened System

Adjustable main support system for vertical rainscreen cladding applications. Mechanical face fastened panels.



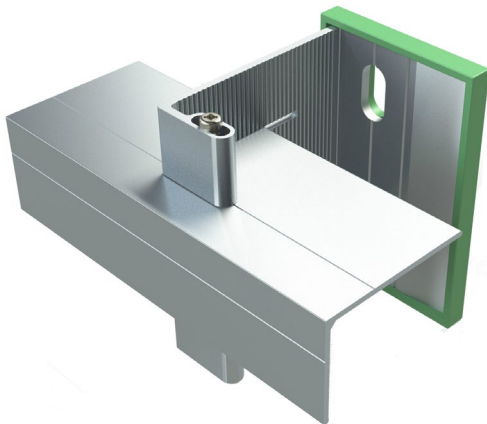
### NV3 – Hidden Mechanical Fastened System

Adjustable system for hidden fastened applications. Cladding panels mechanically attached.



### NH3 – Horizontally running rail system

Subframe system used to support vertical elements. Mechanical face fastened panels.



### NVF2F – Floor to Floor Face Fastened System

Brackets and rails provide a vertical back frame system for floor to floor spanning.



# NVELOPE Cladding Support Systems

## Brackets

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### Single Vertical Bracket

For steel, wood, concrete or filled CMU substrates.  
sizes: 40 mm–300 mm



### Double Vertical Bracket

For steel, wood, concrete or filled CMU substrates.  
sizes: 40 mm–300 mm



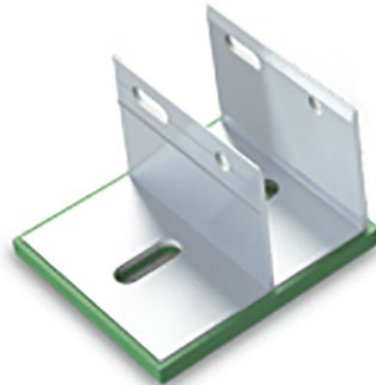
### NH3 Horizontal Bracket

For steel, wood, concrete or filled CMU substrates.  
sizes: 75 mm–300 mm



### Floor-to-Floor Bracket

For concrete floor slabs  
sizes: 72 mm–272 mm





# NVELOPE Cladding Support Systems

## NVELOPE Fasteners

	Application	Fastener description	Diameter	Length
	Bracket to steel substrate	304SS bi-metal self-drill	#14	2"
	Bracket to wood substrate	304SS bi-metal self-drill	#14	2-1/6"
	Bracket to concrete substrate	304SS bi-metal Type B	3/8"	3" or 4"
	Bracket to concrete masonry and brick (only option for F2F)	304SS bi-met	3/8"	3-3/8"
	NV1 rail to rail / bracket to rail	316SS self-drill screw	#12	7/8"
	NH3 rail to rail / bracket to rail	316SS self-drill screw	#12	1-3/4"
	NV3 hanger to rail panel locking	304SS bi-metal self-drill	#12	1-5/8"
	NV3 hanger to rail panel adjustment	304SS machine screw	M6	3/4"
	NV F2F Spigot to box	304SS bi-metal self drill	#14	1-1/8" to 2"
		NV F2F fastener kit includes M8 bolt, M8 washer, Nylon M8 washer, M8 nyloc nut		



# Offsite and Modular Construction Fastening Solutions

# Offsite and Modular Construction

## Products and Applications

### Products

- Structural wood fasteners
- Thermally broken wall framing systems for continuous exterior insulation
- Exposed and concealed cladding fasteners
- Blind rivets
- Hinges
- Self-drilling fasteners
- Sealants and adhesives
- Fenestration and window installation fasteners

### Applications

- Metal, wood and concrete substrates
- Drain back ventilated wall systems
- Exposed and concealed fastened wall cladding
- Steep slope metal roofing
- Low slope single ply roofing
- Window and door assembly and installation
- MEP installations
- Basically, anything you dream to fasten together within the building envelope and interior





### Services

- eLogistics
- Custom formed parts and development
- In-house structural and environmental testing
- Painting and custom color matching
- Expedited service options
- After sales service and technical support
- Private labeling and custom packaging
- National distribution locations

### Automation



- SFS is a world leader in automation and setting tool technology. Our experience in the automotive industry makes SFS the ideal solution provider for automated fastener installations in factory settings which:
- Increase productivity
  - Ensure accuracy
  - Can be customized to customer requirements
  - Optimize the entire value added chain

## Fasteners for Cladding Attachment







	Fastener	Application	Diameter
	SX3-D12 stainless bi-metal self-drill	Ideal for cladding panels, (HPL, fiber cement, others) to aluminum or steel	5.3 mm (0.209") stainless
	irius® SX3-L 12 stainless bi-metal self-drill	Ideal for cladding panels, (HPL, fiber cement, others) to aluminum or steel	5.3 mm (0.209") stainless
	AP16 aluminum rivet SSO-D15 stainless 316 rivet	Ideal for cladding panels (HPL, fiber cement, others) to aluminum, steel, or stainless steel	5 mm (0.190") aluminum and stainless
	ACM screw	Self-drilling and self-countersinking. Ideal when flush installation into ACM facade panel is desired	5.4 mm (0.212") stainless

# Offsite and Modular Construction

## Fasteners for Cladding Attachment (continued)







	Fastener	Application	Diameter
	TW-S-D12 stainless self-tapping TDA-S-D16 stainless self-tapping	Ideal for cladding panels (HPL, fiber cement, others) to wood, aluminum and light gauge steel	4.8 mm to 5.8 mm (0.191" to 0.228") stainless
	TU/TUF/TUC hidden rivet fastener	Attaches brackets, straps or clips to the back (hidden) of HPL, fiber cement, or fiber concrete panels	6 mm (0.236") stainless

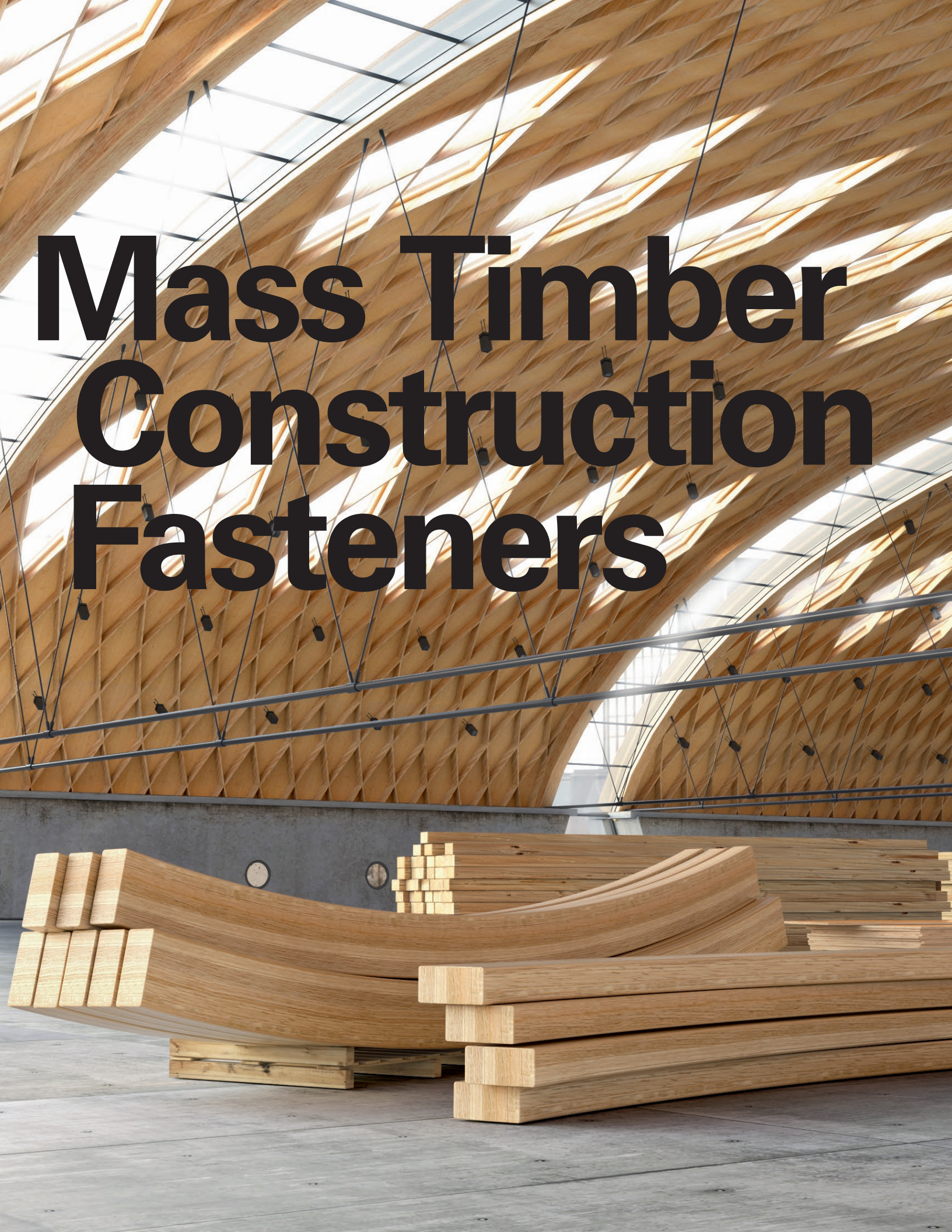
## Structural Wood Fasteners

	Fastener	Application	Diameter
	HTP countersunk head, full thread	Ideal for applications where high withdraw values are required and when a flush finish is desired	3.5 mm to 6 mm (0.138" to 0.236") carbon 3.5 mm to 5 mm (0.138" to 0.197") stainless
	HTP countersunk head, partial thread	Ideal for clamping force in applications where lateral loading is a determining factor and when a flush finish is desired	3.5 mm to 10 mm (0.138" to 0.394") carbon 3.5 mm to 8 mm (0.138" to 0.315") stainless
	HTP flange head, full thread	Ideal for applications where high withdraw values as well as high fastener head pull-through values are required	6 mm to 10 mm (0.236" to 0.394") carbon 6 mm to 8 mm (0.236" to 0.315") stainless
	HTP flange head, partial thread	Ideal for clamping force in applications where lateral loading as well as fastener head pull-through are determining factors	6 mm to 10 mm (0.236" to 0.394") carbon 6 mm to 8 mm (0.236" to 0.315") stainless
	CC cylindrical head	Lag system for joining members in pre-fabrication or on-site	4.5 mm to 8.2 mm (0.177" to 0.323") carbon
	WS self-drilling dowel, Cylindric countersunk head, T-drive, secondary thread	WS system for multiple shear plane steel-timber connections	7 mm (0.276") carbon

# Offsite and Modular Construction

## Metal to Metal Fasteners





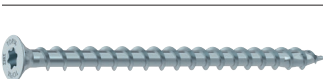


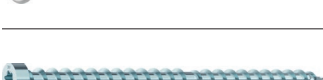



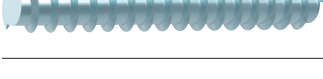
	<b>Fastener</b>	<b>Application</b>	<b>Diameter</b>
	Impax carbon steel self-drill	Ideal for making basic metal-to-metal connections with or without sealing washers	4.2 mm to 6.3 mm #8 to 1/4" (0.163" to 0.250")
	Flex5 <sup>®</sup> selectively hardened with grade 5 performances	Ideal for critical curtain wall and rainscreen applications where dissimilar metals bring fastening concerns	4.75 mm to 6.3 mm #10 to 1/4" (0.186" to 0.250")
	Bi-met 300 <sup>®</sup> self-drill 304 stainless with carbon steel point	Ideal for applications with high potential for corrosion, or when you just need the utmost security and quality	1/4" (0.250") [6.3 mm]
	TDBL self-tapping for structural metal to metal connections	Ideal for blind fastening of steel support structures where rear side access to the support structure is limited, thus making a nut and bolt connection cumbersome. Replace nut and bolt connections with a single fastener that resists over-driving and underwinding.	8 mm to 13 mm (0.315" to 0.512")
	BULB-TITE <sup>®</sup> rivet for structural connections	Ideal for applications in need of tamper proof, vibration resistant connection while also being weather resistant	7.1 mm to 4.75 mm 0.281" to 0.187" (9/32" to 3/16")
	Blind rivet nut	Female thread anchors for ultimate clamp load in thin sections. Various head and body geometries available	Internal thread diameter: M4 to M10



# Mass Timber Construction Fasteners

# Timber Construction Fasteners

## Fasteners

	Product	Application	Material	Thread	Diameter	Drive	Lengths
	HTP countersunk head	Heavy timber connections	Carbon steel	Partial thread	1/4" 5/16" 3/8"	T30 T40 T40	2" to 11-3/4" 3-1/8" to 19-5/8" 3-1/8" to 19-5/8"
	HTP countersunk head	Heavy timber connections	304 stainless steel	Partial thread	3/16" 1/4" 3/8"	T20 T30 T40	1-1/4" to 4" 1-5/8" to 7-7/8" 3-1/8" to 15-3/4"
	HTP flange head	Heavy timber connections	Carbon steel	Partial thread	1/4" 5/16" 3/8"	T30 T40 T40	3-7/8" to 11-3/4" 4-3/4" to 19-5/8" 5-1/2" to 15-3/4"
	HTP flange head	Heavy timber connections	304 stainless steel	Partial thread	3/8"	T40	5-1/2" to 11-3/4"
	HTP countersunk head	Heavy timber connections	Carbon steel	Full thread	5/16" 3/8"	T40 T40	2-3/8" to 15" 4-3/4" to 15"
	HTP flange head	Heavy timber connections	Carbon steel	Full thread	5/16" 3/8"	T40 T40	3-1/8" to 4-3/4" 3-1/8" to 4-3/4"
	HTP flange head	Heavy timber connections	304 stainless steel	Full thread	5/16"	T40	3-1/8" to 4-3/4"
	CC cylindrical head	Combination connection; double thread	Carbon steel	Double thread	1/4" 5/16"	T30 T40	3-7/8" to 8-7/16" 3-7/8" to 15-3/4"
	WR countersunk head	Wood reinforcement	Carbon steel	Full thread	1/2"	T50	15-3/4" to 39-3/8"
	WS cylindrical countersunk head	Wood through steel; self-drilling dowel	Carbon steel	Under head threads	1/4"	T40	2-7/8" to 9-1/8"
	WB headless threaded rod	Wood bar	Carbon steel	Full thread	5/8" 13/16"	- -	118-1/8" 118-1/8"
	VB special head	Timber concrete composite	Carbon steel	Partial thread	5/16"	external T40	6-1/8" to 8-5/8"



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