

INSTALLATION INSTRUCTIONS FOR WOOD & STEEL

INSTALLATION STEPS - VERTICAL INTO WOOD & STEEL:

1. Insert the appropriate nut driver into a 3/8" or 1/2" portable drill.
2. Insert the SAMMYS® into the #14 (black) nut driver (p/n 8113910). Drill should be in a vertical position.
3. Push the face of the nut driver tight to the member. Begin installation when the nut driver spins freely on the SAMMYS, stop drill and remove.
4. The SAMMYS is now ready to receive 1/4", 3/8", 1/2" or metric all thread rod, bolt stock. (The 1/2" requires the #14SW red nut driver)

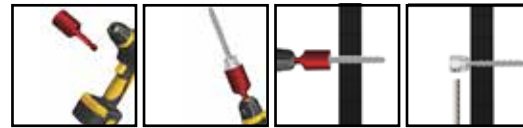
Note: When installing DSTR, follow the above instructions, then add retainer nut and torque to 20 inch lbs. for maximum pullout in purlin steel.



INSTALLATION STEPS - HORIZONTAL INTO WOOD & STEEL:

1. Insert the appropriate nut driver into a 3/8" or 1/2" portable drill.
2. Insert the SAMMYS into the #14SW (red) nut driver (p/n 8114910). With drill unit in a horizontal position and at a right angle to the structural member, begin installation.
3. When the nut driver spins freely on the SAMMYS, stop the drill and remove.
4. The unit is now ready to receive 1/4", 3/8", M10, M8 or metric all thread rod or bolt stock.

Note: When installing SWDR, follow the above instructions, then add retainer nut and torque to 20 inch lbs. for maximum pullout in purlin steel.



INSTALLATION INSTRUCTIONS FOR CONCRETE

INSTALLATION STEPS - VERTICAL INTO CONCRETE:

1. Using an SDS 250 carbide tip bit or a HEX RECEIVER with a #250 carbide tip bit, pre-drill the concrete member to a depth of 2" with a hammer/rotary hammer drill set on impact mode.
2. After pre-drilling has been completed, install the SLEEVE TOOL over the bit (the bit should remain in the drill), and insert the #14 (black) nut driver (p/n 8113910) into the opposite end (see Vertical Installation note above).
3. Insert the CST screw into the nut driver.
4. Place tip of screw into the pre-drilled hole, turn impact/drill unit to drill mode and begin insertion. When the nut driver spins freely on the CST screw, installation is complete. Stop and remove drill.
5. The concrete screw is ready to receive 1/4", 3/8", 1/2", or metric all thread rod or bolt stock. (#14SW red nut driver used with 1/2" screw)

Note: Use a 1200 maximum RPM drill for installation.

Note: Do not install concrete screws while the drill unit is in impact mode — doing so will destroy the pullout factor of the screw.



INSTALLATION STEPS - HORIZONTAL INTO CONCRETE:

1. Using an SDS 250 carbide tip bit or a HEX RECEIVER with a #250 carbide tip bit, pre-drill the concrete member to a depth of 2" with a hammer/rotary hammer drill set on impact mode.
2. After pre-drilling has been completed, install the SLEEVE TOOL over the bit (the bit should remain in the drill), and insert the #14SW (red) nut driver (p/n 8114910) into the opposite end.
3. Insert the SWC screw into the nut driver.
4. Place tip of screw into the pre-drilled hole, turn impact/drill unit to drill mode and begin insertion. When the nut driver spins free on the SWC screw, installation is complete. Stop and remove drill.
5. The SWC screw is ready to receive 1/4", 3/8" or metric all thread rod or bolt stock.

Note: Use a 1200 maximum RPM drill for installation.

Note: Do not install concrete screws while the drill unit is in impact mode — doing so will destroy the pullout factor of the fastener.



SPECIAL NUT DRIVER SYSTEM: The nut drivers were designed with a unique spin-off feature which provides a fast and safe installation each time. When the face of the driver comes into contact with the material you are installing into, continue drilling until nut driver spins free. Installation is then complete. Warranty requires the use of the appropriate nut driver for installations.

APPROVALS

Part Number	Model	Rod Size	Mount Direction	UL Max Pipe Size	UL Test Load (lbs)	UL Min Wood Thickness	FM Max Pipe Size	FM Test Load (lbs)	FM Min Wood Thickness	
SAMMYS FOR WOOD - PIPE HANGER										
8007957	GST 10	3/8"	Vertical	CPVC 1-1/2"	300	1-1/2"				
8020957	SWG 10	3/8"	Horizontal	CPVC 1-1/2"	300	1-1/2"				
8008957	GST 20	3/8"	Vertical	2-1/2"	850	1-1/2"	4"	1475	1-1/2"	
8068925	GST 20-SS	3/8"	Vertical	2-1/2"	850	1-1/2"				
8010957	GST 30	3/8"	Vertical	4"	1500	1-1/2"	4"	1475	1-1/2"	
8009925	GST 25-380	3/8"	Vertical	4"	1500	1-1/2"				
8022925	SWG 25-380	3/8"	Horizontal	3-1/2" - 4"	1500	1-1/2"				
8021957	SWG 20	3/8"	Horizontal	2-1/2" - 3"	1050	1-1/2"				
8073925	SWG 20-SS	3/8"	Horizontal	2-1/2"	850	1-1/2"				
8269957	SH-GST/CST 20	3/8"	45° Angle off Vertical	2-1/2"	850	1-1/2"				
8269957	SH-GST/CST 20	3/8"	45° Angle off Vertical	4"	1500	1-1/2"				
8139957	SH-GST 20	3/8"	17° Angle off Vertical	3"	1050	1-1/2"	4"	1475	1-1/2"	
SAMMYS FOR STEEL - PIPE HANGER										
						Min Steel Thick	Max Steel Thick			
8038957	DSTR 1	3/8"	Vertical	4"	1500	.035"	4"	1475	.105"	
8037957	DSTR 1-1/2	3/8"	Vertical	4"	1500	.035"	4"	1475	.105"	
8039957	DSTR 516	3/8"	Vertical	4"	1500	.037"	4"	1475	.105"	
8045957	DST 516	3/8"	Vertical	4"	1500	.188"	4"	1475	.188"	
8046957	TEK 50	3/8"	Vertical	4"	1500	.250"	4"	1475	.188"	
8055957	SWDR 1	3/8"	Horizontal	4"	1500	.037"	4"	1475	.060"	
8056957	SWDR 516	3/8"	Horizontal	4"	1500	.037"	4"	1475	.060"	
8054957	SWDR 1-1/2	3/8"	Horizontal	4"	1500	.037"	4"	1475	.060"	
8137957	SH-DSTR 1	3/8"	17° Angle off Vertical	4"	1500	.035"	4"	1475	.105"	
8268957	SH-TEK 50	3/8"	Vertical 70° Angle off Vertical	2-1/2" 4"	850 1500					
8150922	XP 20	3/8"	Vertical	2-1/2"	850	.027"	2" 4"	940 1475	.029" .105"	
8153922	XP 35	3/8"	Vertical	4"	1500	.060"	2" 4"	940 1475	.029" .125"	
8294922	SXP 20	3/8"	Vertical or up to 45°	2"	750	.027"	2"	635	.029"	
8295922	SXP 35	3/8"	Vertical or up to 89°	3-1/2"	1250	.060"	2"	635	.029"	
8293957	SWXP 35	3/8"	Horizontal	3-1/2"	1250	.060"				
SAMMYS FOR CONCRETE - PIPE HANGER										
8059957	CST 20	3/8"	Vertical				4"	1475	3000	
8061957	SWC 20	3/8"	Horizontal				4"	1475	3000	
8150922	XP 20	3/8"	Vertical	2-1/2"	850				Pre-Pour Structural @ 3000psi	
8150922	XP 20	3/8"	Vertical	2-1/2"	850				Post-Pour Range II LWC ≤ 35 PCF (lbs/ft ³)	
SAMMYS FOR STEEL - LUMINAIRE FITTING										
						UL Load Rating (lbs)	UL Min Steel Thickness			
8150922	XP 20	3/8"	Vertical			185 250			.027" .035"	
8153922	XP 35	3/8"	Vertical			185 250			.027" .035"	
8181922	XP 200	1/4"	Vertical			185 250			.027" .035"	
8294922	SXP 20	3/8"	Vertical 45°			170 80			.027" .027"	
8295922	SXP 35	3/8"	Vertical 90°			250 80			.060" .060"	
8293957	SWXP 35	3/8"	Horizontal			80			.060"	
Sheet Steel Gauges										
Gauge No.	22 ga.		20 ga.	18 ga.	16 ga.	14 ga.	12 ga.	1/8"	3/16"	1/4"
Nominal Decimal Equivalent	.030"		.036"	.048"	.060"	.075"	.105"	.125"	.188"	.250"
*SWG 25-380 Maximum pipe size in composite wood joist allowed by UL is 3-1/2"										
*SWG 25-380 Maximum pipe size in wood timber or joist allowed by UL is 4"										
**SWG 20 Maximum pipe size in composite wood joist allowed by UL is 2-1/2"										
**SWG 20 Maximum pipe size in wood timber or joist allowed by UL is 3"										
UL compliance with NEC Standards.										
UL and FM tests were performed in compliance with NFPA 13 Standards.										
Fastening requirement: 5 times weight of water-filled schedule 40 pipe plus 250 pounds.										

SPECIAL NOTES

Engineering Note

In 1996, the anchors listed by UL were tested in plate steel that measured .188" and .118". Subsequent testing was done for z-purlin applications in May 1997 using (.037") or 20 gauge steel. Most recently in 2008, testing with the new Sammy X-Press® was completed using (.030") or 22 gauge steel metal deck.

Sammys® Nut Drivers

Special nut drivers were designed to be used with Sammys. When the appropriate nut drivers are used for installation, the driver spins freely on the screw after installation is complete and eliminates the expected wrist snap, reduces over-torque, and prevents screw failure.

Steel Screws

Due to variations in hardness of certain metals, it should be noted that our self-drilling screws for steel will experience different drill speeds. 500-1500 RPM drill speed should be used.

Metric Products

Metric versions of the Sammy anchors are available at www.itwbuildex.com

Sammys for Seismic

Please visit www.itwbuildex.com for our current Seismic product offering.

Vibratory Environments

For attaching or anchoring in high vibratory environments, special care should be taken not just for building attachments but also for the hangers or assemblies being supported. Consult local code authorities for accepted anchoring devices.

Composite Joist/Truss

Truss manufacturers vary installation recommendations for composite joist. UL testing was completed to validate that Sammys and Sidewinders SWG 20 and SWG 25-380 can be installed into the top cord of a truss. Sammy GST 20 can be installed into the center of the lower cord of a composite joist. Penetration of the upright center web is permitted by some joist manufacturers. Consult truss manufacturer for recommended installation point.

Pre-drilling may be required by joist manufacturers. If so, pre-drill pilot hole 1/8" smaller than root diameter of fastener.

Consult the table below:

Model	Root Diameter	Hole Size
GST 20	.182"	1/8"
GST 25-380	.280"	7/32"
SWG 20	.182"	1/8"
SWG 25-380	.280"	7/32"

To increase efficiency of the installation process, sleeve tools, bit receivers, and wood bits are available for pre-drilling.

NFPA/NEC Standards

All UL and FM testing complies with NFPA 13 and NEC standards. Check with your local (AHJ) Authority Having Jurisdiction to confirm application and usage.

UL Listings / FM Approvals

UL and FM reports are available at www.itwbuildex.com



Technical Drawings

Technical drawings are available and can be downloaded at www.itwbuildex.com in the following formats: .dwg, .dxf, and .igs.

Assembled in the U.S.A. Products



Contact Information

Technical Assistance: (800) 848-5611 Option #6 (x 3259)

Customer Service: (800) 848-5611 Option #1

WOOD

STEEL

STEEL

CONCRETE

ACCESSORIES

APPROVALS