

# USG STRUCTO-CRETE® BRAND STRUCTURAL PANELS TOOLS

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Efficiently cutting and fastening USG STRUCTO-CRETE® Brand Structural Panels, requires the proper tools and accessories. These are suggested tools for installing STRUCTO-CRETE® Panels and controlling dust during the cutting of the panels. USG recommends that you review and follow all manufacturer guidelines for the use and care of any tools used to install our products and accepts no responsibility for their use or warranty. Model numbers subject to change by tool manufacturers.

## **OSHA Respirable Crystalline Silica Standard for Construction - Rule 29 CFR 1926.1153**

As the cutting of our product is not specifically covered in Table 1, USG recommends developing a written exposure control plan and following the steps necessary to determine the exposure potential of workers and exposure control methods.

### **Cutting Tools**

For straight cuts, use a hand-held circular saw with a carbide-tipped framing blade. A diamond or other specialty blade is **not** required.

- Blade examples:
  - Diablo D0724X - 7-1/4", 24 T Carbide-Tipped
  - Makita T-01426 - 6-1/2", 24 T Carbide-Tipped

Per OSHA Rule 29, saws used outside with blades 8" or less must be equipped with a dust collection port and a VDC (vacuum dust collector) rated at over 80 cubic feet per minute with a 99% or greater filter efficiency. For improved control of dust, use a HEPA filter on the vacuum.

- Circular saw examples:
  - Makita - 5057KB 7-1/4" (Corded)
  - DeWalt - DWS520K 6-1/2" Track Saw (Corded)
  - SkilSaw - SPT67FMD-01 7-1/4" (Corded)
- VDC examples:
  - Makita - VC4710
  - DeWalt - DWV012

For making small openings, use the appropriate size hole saw or rotary tool with dust collector port and VDC.

- Hole saw examples:
  - Milwaukee 49-56-0734 Carbide Tipped Hole Saw
  - Diablo Tools DHS3000 Bi-Metal Hole Saw
- Rotary tool examples:
  - Roto-Zip® XB-UL1, WD1, XB-TC1

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### **Fastening Tools**

Steel Framing: Stand-up style, 2500 RPM or less variable speed screw gun is recommended. Do not use dry or wet lubricants in the drive head mechanism of stand-up drivers. Remove dust frequently with dry, clean compressed air, such as canned air.

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| • Stand-Up Drivers: <ul style="list-style-type: none"><li>- Grabber SuperDrive® 75</li><li>- Simpson Quik Drive® Pro250</li><li>- Muro HDVL71 Heavy Duty Driver</li></ul> | • Power Actuated Tools: <ul style="list-style-type: none"><li>- Aerosmith® HN120</li><li>- DeWalt DFD270</li><li>- Hilti DX 5-MX</li></ul> | • Wood Framing: <ul style="list-style-type: none"><li>- Senco SCN65XP Coil Nailer</li></ul> |
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## Fastener Drive Bits

Fastener selection is based on several criteria and will affect framing type, framing flange size, minimum end distance for fastener insertion, and driver/drive bit used. Only USG recommended fasteners should be used and must be inserted according to the fastener pattern specified.

Framing Type <sup>1</sup>	Fastener Manufacturer	Fastener Part Number	Fastener Description <sup>3</sup>	Drive Bit Part Number
33 mil (20 ga.) CFS	Grabber Construction Products, Inc.	CM10178JBWRG	#10 x 1-7/8" Flat Head DRIVALL Pilot Point Self-Drilling Screw	T2178N LOX #2 (178 mm) <sup>5</sup>
43 mil (18 ga.) CFS	Grabber Construction Products, Inc.	CGH8158LG	#8 x 1-5/8" Winged Flat WaferHead Self-Drilling Screw	T2178N LOX #2 (178 mm) <sup>5</sup>
54 mil (16 ga.) CFS	Grabber Construction Products, Inc.	CGH8158LG	#8 x 1-5/8" Winged Flat WaferHead Self-Drilling Screw	T2178N LOX #2 (178 mm) <sup>5</sup>
	Grabber Construction Products, Inc.	CGHM8200LG	#8 x 2" Flat WaferHead Self-Drilling Screw	T2178N LOX #2 (178 mm) <sup>5</sup>
	Simpson Strong-Tie Company, Inc.	CBSDQ158S	#8 x 1-5/8" Winged Self-Drilling Screw	BIT2SU #2 (Undersized sq.)
1/4" (6.4 mm) A36 HRS	Grabber Construction Products, Inc.	CC12250LRG	#12 x 2-1/2" Winged Self-Drilling Screw	T3178LN LOX #3 (178 mm)
	Simpson Strong-Tie Company, Inc.	TBG12605	#12 x 2-3/8" Flat Head Strong Drive TB Wood-to-Steel Screw	BIT2SU #3 (Undersized sq.)
	Muro North America, Inc.	RSM645WFL-GY	M6.0 x 45 mm Winged Self-Drilling Screw	#3 SQ
1/8" (3.2 mm) A36 HRS	Grabber Construction Products, Inc.	CC12250LRG	#12 x 2-1/2" Winged Self-Drilling Screw	T3178LN LOX #3 (178 mm) <sup>6</sup>
	Aerosmith Fastening	5324HPG	0.145" x 1-1/4" Helical PowerPin	Tool Setting and Load will vary based on steel thickness and hardness.
	DeWalt - Engineered by Powers, Inc.	50458-PWR	0.157" x 1-1/4" CSI Spiral Drive Powder Actuated Pin	
	Hilti, Inc.	X-U 32 MX	0.157" x 1-1/4" Knulred Shank Powder Actuated Pin	
1/4" Steel Tubing (min 50 KSI)	Hilti, Inc.	X-U 27 Pin	0.157" x 1-1/4" Knulred Shank Powder Actuated Pin	Tool Setting and Load will vary based on steel thickness and hardness.
3/8" Steel Tubing (min 50 KSI)	Hilti, Inc.	X-U 27 Pin	0.157" x 1-1/4" Knulred Shank Powder Actuated Pin	
1/2" Steel Tubing (min 50 KSI)	Hilti, Inc.	X-U 27 Pin	0.157" x 1-1/4" Knulred Shank Powder Actuated Pin	
SPF Lumber	Grabber Construction Products, Inc.	C8200L2M	#8 x 2" Flat Head Type 17 Nibs GrabberGard	T2178N LOX #2 (178 mm) <sup>5</sup>
	Simpson Strong-Tie Company, Inc.	WSNTLG2S	#8 x 2" Flat Head Twin Thread Nibs	BIT2SU #2 (Undersized sq.)
	SENCO Brands, Inc.	GL24AABF	8d Ring Shank Nails <sup>4</sup>	N/A

### Table Notes:

- CFS** = cold-formed structural steel **HRS** = hot-rolled structural steel **Lumber** = specific gravity 0.42 or greater.  
Gauge/thickness of steel, fastener end distance, and joist flange width is identified for each fastener and are minimums. Framing gauge, size, and type is determined by the engineer, architect, or design professional.
- 33 mil (structural 20 ga.) is for gravity loads only.
- Any length of the same fastener is approved provided a minimum of 3 threads penetrate the steel framing.
- SENCO 8d ring shank nails are manufactured with a length of 2-3/8 in., head diameter of 0.266 in. and a shank diameter of 0.113 in. Equivalent 8d ring shank nails meeting these dimensional requirements may be utilized when approved by the engineer or designer of record.
- Grabber SuperDrive® 75 uses the 178mm LOX® #2 drive bit. They also offer a 3" LOX® #2 drive bit for hand held drill use, Part # 3002L.
- Grabber SuperDrive® 75 uses the 178mm LOX® #3 drive bit. They also offer a 3" LOX® #3 drive bit for drill use, Part # 3003L.

### General Note:

In accordance with [ICC Product Evaluation Report, ESR-1792](#), the minimum screw pattern is 6 in. (153 mm) o.c. along the perimeter and 12 in. (305 mm) o.c. in the field of the panels.

Made in Delavan, WI, USA

A qualified architect or engineer should review and approve calculations, framing, and fastener spacing for all projects.

### PRODUCT INFORMATION

See usg.com for the most up-to-date product information.

### DANGER

The following are warnings when installing the panels: Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer by inhalation of respirable crystalline silica. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use only in a well-ventilated area, wear a NIOSH/MSHA approved respirator. Wear protective gloves/ protective clothing/eye protection. If swallowed, inhaled, or skin irritation occurs get medical attention. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing. Wash contaminated clothing before reuse. Dispose of in accordance with local, state, and federal regulations. For more information call Product Safety: 800 507-8899 or see the SDS at usg.com

**KEEP OUT OF REACH OF CHILDREN.**

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### SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

800 USG.4YOU  
800 (874-4968)  
usg.com/structocrete

Manufactured by  
United States Gypsum Company  
550 W Adams Street  
Chicago, IL 60661

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