USG STRUCTURAL PANEL TOOLS

Efficiently cutting and fastening USG Structural Concrete Panels, also known as USG Structo-Crete® Panels, require the proper tools and accessories. These are suggested tools for use in applying USG Structural 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. The recommendations provided are based on the control of dust during the cutting of the panels.

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 that a competent person develop a written exposure control plan and follow the steps necessary to determine the exposure potential of workers and the control plan 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 VDCS (vacuum dust collection device) 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)

- VDCS examples:
  - Makita – VC410
  - DeWalt – DWV012

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

- Hole saw examples:
  - Milwaukee 49-56-3003 Carbide Tipped Hole Saw
  - Diablo Tools DHS3000 Bi-Metal Hole Saw

- Rotary tool examples:
  - Roto-Zip® XB-UL1, WD1, XB-TC1

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.

- Stand-Up Drivers:
  - Grabber SuperDrive® 75
  - Simpson Quik Drive® Pro250
  - Muro HDVL71 Heavy Duty Driver

- Power Actuated Tools:
  - Aerosmith® HN120
  - DeWalt DFD270
  - Hilti DX 5-MX

- Wood Framing:
  - SencoSCN65XP Coil Nailer
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.

<table>
<thead>
<tr>
<th>Framing Type</th>
<th>Fastener Manufacturer</th>
<th>Fastener Part Number</th>
<th>Fastener Drive Bits</th>
</tr>
</thead>
<tbody>
<tr>
<td>322 mil (20 ga) CFS</td>
<td>Grabber Construction Products, Inc.</td>
<td>CM10178JBWRG</td>
<td>#10 x 1-7/8” Flat Head DRIVALL® Pilot Point Self-Drilling Screw</td>
</tr>
<tr>
<td>43 mil (18 ga) CFS</td>
<td>Grabber Construction Products, Inc.</td>
<td>CGH8158LG</td>
<td>#8 x 1-5/8” Winged Flat Wafer Head Self-Drilling Screw</td>
</tr>
<tr>
<td>54 mil (16 ga) — 97 mil (12 ga) CFS</td>
<td>Grabber Construction Products, Inc.</td>
<td>CGH8158LG</td>
<td>#8 x 1-5/8” Winged Flat Wafer Head Self-Drilling Screw</td>
</tr>
<tr>
<td>1/4” (6.4 mm) A36 HRS</td>
<td>Grabber Construction Products, Inc.</td>
<td>CC12250LRG</td>
<td>#12 x 2-1/2”, Winged Self-Drilling Screw</td>
</tr>
<tr>
<td>1/8 in (3.2 mm)</td>
<td>Aerosmith® Fastening DeWalt - Engineered by Powers, Inc.</td>
<td>S324HPG</td>
<td>.145 x 1-1/4&quot; Helical PowerPin®</td>
</tr>
<tr>
<td>1/2 in (13 mm) A36 HRS</td>
<td>Hilti, Inc.</td>
<td>S0458-PWR</td>
<td>0.157 in x 1-1/4” CSI Spiral Drive Powder Actuated Pin</td>
</tr>
<tr>
<td>SPF Lumber</td>
<td>Grabber Construction Products, Inc.</td>
<td>C8200L2M</td>
<td>#8 x 2”, Flat Head, Type 17, Nibs, GrabberGard®</td>
</tr>
<tr>
<td></td>
<td>Simpson Strong-Tie Company, Inc.</td>
<td>WSNTLG2S</td>
<td>#8 x 2”, Flat Head, Twin Threads, Nibs</td>
</tr>
<tr>
<td></td>
<td>SENCO Brands, Inc.</td>
<td>GL24AABF</td>
<td>8d Ring Shank Nails®</td>
</tr>
</tbody>
</table>

Table Notes:
1. CFS = cold-formed structural steel HRS = hot-rolled structural steel Lumber = specific gravity 0.42 or greater.
2. Gauge/thickness of steel, fastener end distance, and joist flange width is identified for each fastener and are minimums. Framing gauge, size & type is determined by the engineer, architect or design professional.
3. 33 mil (structural 20 ga) is for gravity loads only.
4. Any length of the same fastener is approved provided a minimum of 3 threads penetrate the steel framing.
5. 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.
6. Grabber SuperDrive® 75 uses the 178mm LOX® #2 drive bit. They also offer a 3" LOX® #3 drive bit for hand held drill use, Part # 3002L.
7. 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 PER-13067 (Subfloor) and PER-14076 (Roof Deck), 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. Refer to PER-15092 for Foundation Wall fastener schedules.