

Tech Bulletin:
A Guide to Cementitious Stucco Installation
On Amvic Insulating Concrete Forms



Application: This is applicable when conventional cementitious stucco, either three coat or one coat, is to be applied over an Amvic Insulating Concrete wall system. This does not apply to synthetic or EIFS applications.

Amvic ICF blocks. The EPS foam panels of the Amvic ICF system are held together with a polypropylene plastic tie system. These ties provide the fastening surface to insert screws to attach lathe. The webs (studs) are 1 ½” wide, and are located vertically up the face of the block (just like studs would be in frame construction), and are spaced 6” apart. The webs are buried ½” below the surface of the foam but their location is indicated by a deep groove on the surface of the block.

Lathe Fastening Systems

The lathe must be securely fastened to the imbedded plastic webs (not just the foam). The approved and certified fastener system for attaching lathe is either a coarse-threaded or fine-threaded screw. Staples are not certified for use.

Installation practices:

- **Weather resistive barrier required.** *“Walls must be covered on the exterior with either a weather-resistive barrier in accordance with section 1402 of the UBC, a weather-resistive barrier in accordance with Section 1404.2 of the IBC, or weather resistant sheathing paper in accordance with Section R703.2 of the IRC. – ICBO ER-5948”*
- The location of the webs will be clearly evident on the exterior of the block when the block is exposed. Each web location is indicated by a deeper groove.
- Web locations on each wall segment, both vertically and horizontally should be located and transferred to a story pole or other device, so that once the paper and lathe are in place, the installer can find the locations for the attaching screws.
- Screws must be screwed through the foam and into the polypropylene webs which are imbedded ½ inch below the surface of the foam. Careful attention needs to be paid to workers to be certain they understand the placement of the screws so they are hitting webs not just foam.
- The webs do not extend fully to the top and bottom of each block and screw placement needs to work around this.
 - In the original Amvic block design the webs stop 2 ½ inches short of the top and bottom of each block, leaving a 5” space centered over the block line *where there is no web to screw into*. Screw placement needs to be planned to avoid this area.
 - Amvic New Block (after July 1, 2004). The webs extend vertically to within ½ inch of the top and bottom of each block. There is approximately a 1-inch gap at the block line *where there is no web to screw into*. Screw placement needs to be planned to avoid this area.
- The plastic webs have slightly different characteristics than either a wood or metal stud. The pull out value of a screw in the Amvic web is nearly 200 lbs., however, it is easier to strip out a hole in the plastic webs than it would be in an equivalent wood or metal stud.
- Drivers must be adjusted appropriately either with a clutch type driver or a sheet rock dimple type driver so that screws don’t strip out the plastic web.
- Attaching patterns for screws are as specified by appropriate codes and or stucco manufacturer’s installation instructions.
- Once lathe is attached, standard stucco practices should be followed.

Suggestion: On first time installations to ICF, installers should obtain some scraps of block from the job site and experiment with screws and drivers in advance so that they are certain their tools and procedures are going to work.

Screw specifications:

- Screws should be a #6, 7, or 8 and with a minimum length of 1 5/8" and either a type S fine thread, or a type W coarse-threaded screw. (Screws longer than 2 3/8 inches cannot be used as they will hit the concrete). On *corners only*, a screw of a minimum of 2" length is required to anchor into the corner rod which is buried deeper than the other webs.
- Screws should have a sharp point (do not use self-tapping screws).
- Screws should have an appropriate corrosion resistant coating.
- If flat head bugle screws are used then a Lath-Lock galvanized washer is also used that captures the lathe. This is the system to be used when using a high speed a coil or strip fed driver such as the Senco DuraSpin.
- An alternative is to use pan-headed screws without a washer in which case the screw is stretched into the "corner" of the lathe so that when it is driven in and slightly recessed it causes the lathe to pucker slightly.

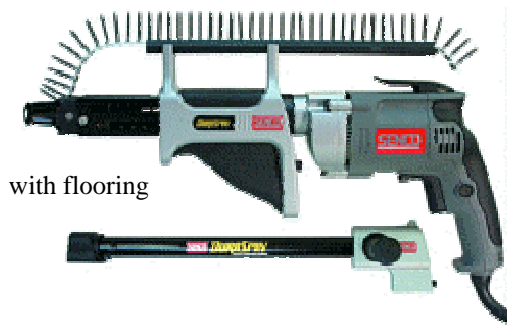
Driver Recommendations:

- Any driver drill, either a clutch type or a drywall type driver can be used. Installers should practice on some scrap block prior to install day, to assure their driver will work appropriately.
- For faster production, the Senco DuraSpin DS200-S2 driver is recommended. This driver has a strip feed mechanism that greatly speeds up the installation. If this driver is used then the appropriate Senco screw (#06A162W. #6 X 1 5/8" Sharp Pointed, #2 Phillips head Weatherx II coated) with a washer such as the Windlock Lath-Lock or equivalent is required.

IF you have any additional questions about installation, contact:
Bill Juhl at Amvic Pacific 530-265-9085

Products for Stucco Application to ICF Walls Available from Amvic Pacific

Senco Dura-Spin DS200-S2.



Capable of driving all SENCO® DuraSpin™ screws from 1" - 2" in length, this tool is ideal for lathe installation over ICF. The SENCO DuraSpin DS200-S2 collated screw system comes conveniently assembled to a rugged 2,500 rpm SENCO screwdriver. The DS200-S2 comes complete with the DuraSpin™ collated screw feed system, mounted on a SENCO screwdriver extension which extends the screw system to approx. 36", in a rugged carrying case, and with two spare bits. Corded.

Pain-Free Productivity. DuraSpin collated screws make even the novice or apprentice user as fast as the most experienced bulk screw user. Plus, collated screws mean no more screw slivers underneath your fingernails, or painful finger cuts from bulk screws.

Reduced waste. Eliminate the waste experienced with bulk screws (can be 10% to 15% of total screws used). Patented SENCO DuraSpin feed system drives screws quickly and efficiently without jams or misfeeds.

Ergonomic design. May be used with a one-handed or two-handed grip. Cushioned second hand grip provides added comfort and reduced exertion.

Flooring extension included. 18" extension allows screws to be driven efficiently from a comfortable standing position.

Easy Depth-of-Drive Adjustment. Just turn the thumb screw to regulate the precise amount of countersink.

Quick Release. Feed system snaps off to give easy bit access.

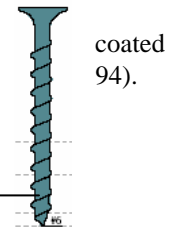
Adjustable Nose Piece. Easily adjusts tool for screw sizes from 1" - 2" (25 mm - 50 mm).

Modular design. Snaps together with or without flooring extension, quickly and easily (with no tools).

Tool Specifications: RPM: 2500 rev/min Weight: 4.9 lbs. (2.2 kg) Height: 9.25" (235 mm) Length: 10.5" (267 mm) Width: 2.75" (70 mm)

Price: \$195.00 each

Senco 06A162W collated screws. #6 X 1 5/8" Sharp Pointed, #2 Phillips head Weatherx II (provides corrosion resistance in excess of 1,000 hours in salt spray (in accordance with ASTM-B117-



Price: \$39.00 per box of 1,000. (strips of 50 screws).

Lath-Lock fastening washers.

Designed to be used with insulated stucco systems and stucco systems utilizing expanded metal lath or stucco wire over rigid ICF EPS foam.

Engineered features

1 1/4" diameter, G-90 galvanized steel

Flat profile

Tabs reduce spin in foam surface of ICF

Recessed center chamber allows for flush seating of fastener

Turned tabs allow for pre-spotting



Price: \$58.00 per 1000

RASPS

Rasps are used with ICF to smooth and correct any irregularities in the EPS foam prior to lathe installation. The UGZ rasps have copper electroplated tungsten grit. Grits are uniform and even, and corners are rounded to prevent gouging. UGZ rasps last up to 100 times longer than paper. Type A rasp has a toothed edge for shaving and trimming, Type B has all smooth edges.



A. EverRasp

Same great UGZ®, but now with a toothed edge for shaving and trimming EPS

Item	Description	Price
I-4TUGZ	4"x14"	\$65.00
I-TUGZ	6"x14"	\$75.00
I-8TUGZ	8"x14"	\$85.00

B. UGZ® EverRasp

Item	Description	Price
I-UGZ2	2"x14"	\$49.00
I-UGZ4	4"x14"	\$59.00
I-UGZ6	6"x14"	\$69.00
I-UGZ8	8"x14"	\$79.00

To check current pricing order any of these products or if you have any questions,
call Amvic-Pacific at 800-296-1971 or Fax to 530-265-9086.