STEALTH ACOUSTICS

LINEARADIANCE

INVISIBLE SPEAKERS | SUBWOOFERS

CELEBRATE GEN 3

FOR ALL MODELS OF STEALTH ACOUSTICS INVISIBLE SPEAKERS AND SUBWOOFERS.

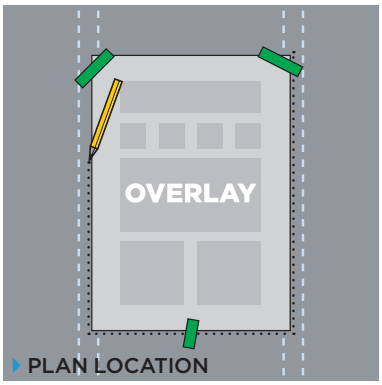
Quick Start Installation Guide

For New Construction and Retrofit Installations

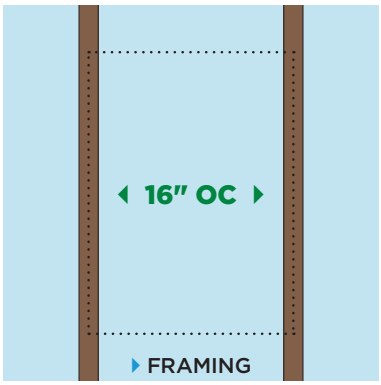
Installation Questions?

Full instructions, installation videos, troubleshooting, tips, and more available at *StealthAcoustics.com*

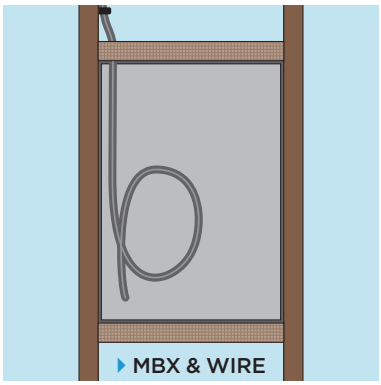
SCAN FOR VIDEO



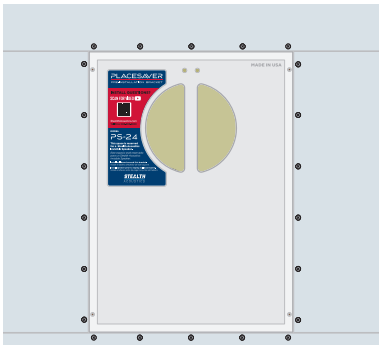
PLAN LOCATION



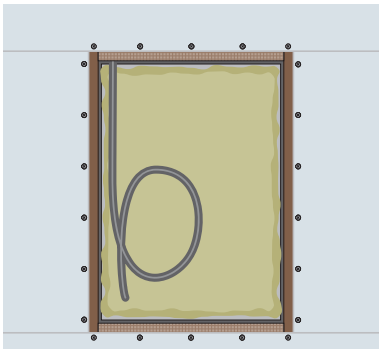
FRAMING



MBX & WIRE



PLACESAVER THEN DRYWALL



REMOVE PLACESAVER

RETROFIT INSTALLATION

- Installing a Stealth Acoustics LineaRadiance Invisible Speaker into an already finished wall is similar to making a wallboard patch.
- Remove the overlay sheet that comes attached to the face of each speaker and temporarily attach it to the wall to assist in planning speaker placement.
- Once the approximate speaker locations have been selected, use a stud finder to locate the nearest framing cavity and drill test holes to verify. Align the sides of the overlay sheet so they are centered over the existing framing members and use the overlay as a template to cut the wallboard to the size of the speaker. The finished opening should be the size of the overlay with the width centered on the 16" framing studs. See specificaitons for specific minimum framing dimensions. Additional framing may be necessary.

SPEAKER INSTALLATION

1. FRAMING AND PLACESAVERS™

- For retrofit and for new construction, it is recommended to add cross member framing above and below the speaker opening so that the speaker and surrounding drywall may be attached on all four sides.
- PlaceSavers™ are installed before drywall in new construction when the job is pre-wired. Center the PlaceSaver™ on the framing and attach with provided hardware. This reserves the exact space for the speaker during the wallboard installation preventing the speaker panel itself from exposure to the harsh construction environment.

2. BACK BOXES

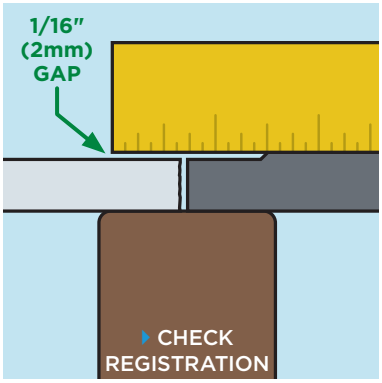
- **LineaRadiance** speakers ship with a pre-installed, insullated back box ready for installation. **For locations with narrow framing or shallow installation depth, the pre-installed back box on LineaRadiance model speakers may need to be removed.** *See specifications for individual speaker models for minimum framing dimensions.*
  - To remove the built-in back box, locate and remove the four phillips screws on either edge of the back box. Gently separate the back box from the speaker frame (painters caulk may be present between the box and the frame), then disconnet the back box wiring from the connection terminals on the crossover. Incoming wiring will now attach to the crossover before speaker installation.
- Optional metal **MBX**, **MBA**, and **MBC Back Boxes** should be installed into the opening before the speaker is installed. **Follow the instructions included with each back box.**

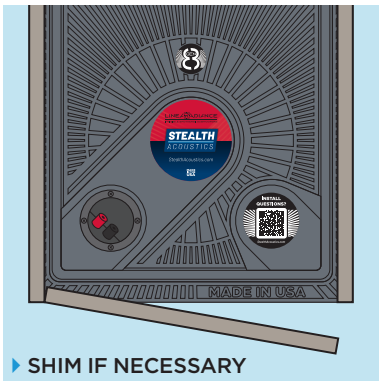
3. WIRING

- Install regular speaker wiring and attach it securely to the studs leaving sufficient slack length to be able to connect to the speaker panel.
  - For runs up to 50 feet (15m) use 16 gauge wire.
  - For runs 50 feet (15m) or more use 14 gauge wire.

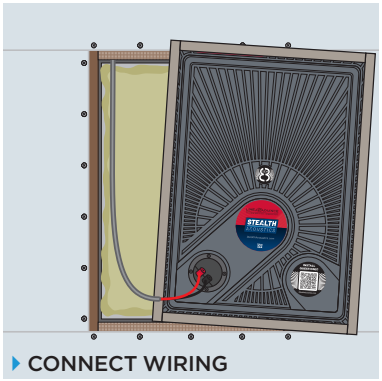
4. SPEAKER TEST FIT

- After the wallboard has been installed, remove the PlaceSaver™ and test fit the speaker. The speakers are designed for 1/2" (13mm) wallboard. For thicker wallboard, apply the provided self-adhesive shims around the perimeter of the rear of the speaker.
- Correct speaker depth registration is achieved when the perimeter screw flange of the speaker frame is flush with the adjoining wallboard allowing the face of the speaker to protrude approximately 1/16" (2mm) beyond the wallboard. This creates a recess for the seam tape which prevents sanding back into the tape during the finishing process.
- **If the speaker is recessed in relation to the wallboard excessive material build-up on the surface of the speaker can occur during the finishing process which leads to poor sound quality and possible premature failure.**

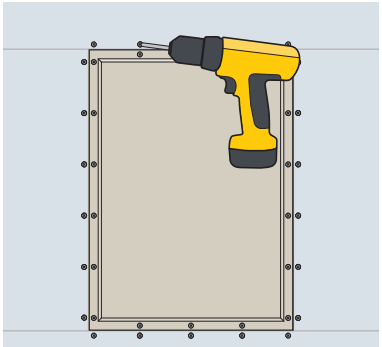




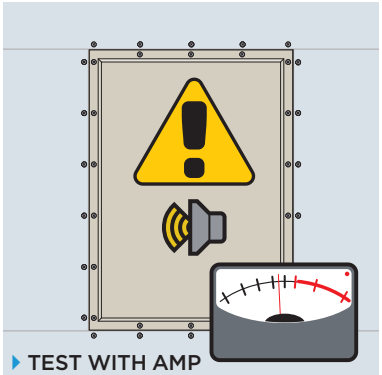
SHIM IF NECESSARY



CONNECT WIRING



ATTACH SPEAKER



TEST WITH AMP

5. CONNECT SPEAKER WIRES

- Insert the speaker wires into the binding posts on the speaker crossover or back box noting proper polarity.
- For smaller gauge wires, bend the exposed wire back upon itself prior to insertion to make better contact with the binding posts.

6. SPEAKER MOUNTING

- Attach the speaker panel screw flanges directly to the structural framing using the provided wallboard screws. The panels have been manufactured with the proper number of screw holes. Be sure that all of the screws are installed and that they hold securely to the framing.

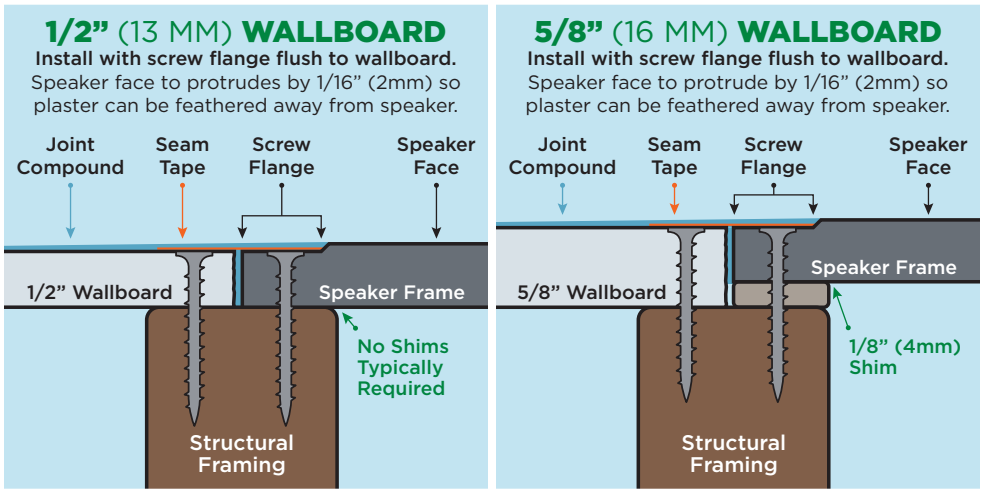
⚠ **Do not use nails.**

7. RECHECK SPEAKER DEPTH REGISTRATION

- Now that the speaker is secured, recheck that the outer flange of the speaker is flush with the surrounding wallboard.
- Place a 4-foot straight edge across middle of the speaker to verify that the speaker face protrudes approximately 1/16" (2mm) beyond the wallboard in each direction.

⚠ **Check that the speaker is not warped from strain caused by uneven framing or over tightening of screws. A warped speaker frame can cause the speaker face to bulge, reduced sound quality, or failure.**

- Having the correct registration minimizes the amount of joint compound that might be built up over the face of the speaker during the finishing process. This 1/16" (2mm) protrusion of the speaker face will become invisible after the seams are properly finished and joint compound is feathered out from the speaker appropriately.

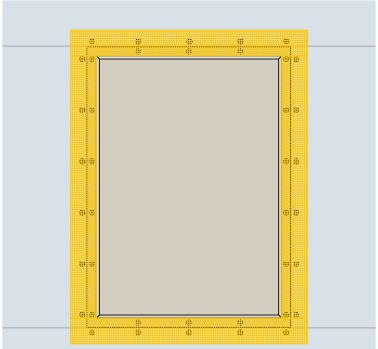


Note: The typical installations shown above are provided as guidelines. For your installation, the number and thickness of shims needed may differ due to variances in wallboard material and other construction variables.

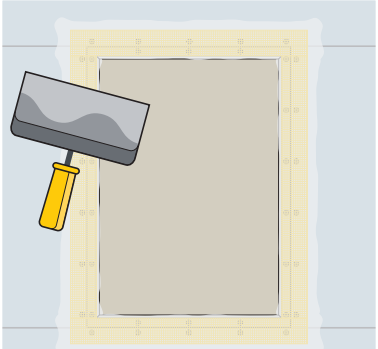
8. TEST SPEAKER SOUND

⚠ **Before proceeding to wall finishing, test each speaker with music or pink noise from an amplified sound source at listening volume to ensure full speaker functionality.**

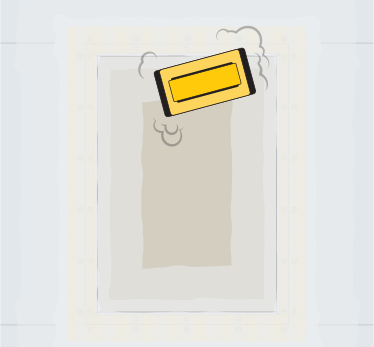
- Make note of sound coming from the high/mid/low frequency drivers of each speaker and listen for any rattling or vibration from the speaker or from within the wall.
- **Now is the time to correct any potential issues.**



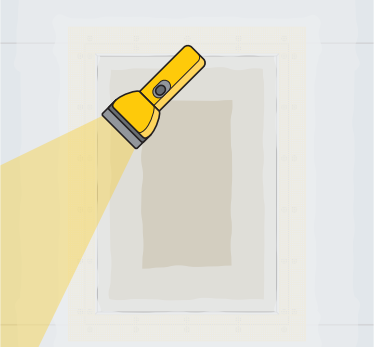
SEAM TAPE



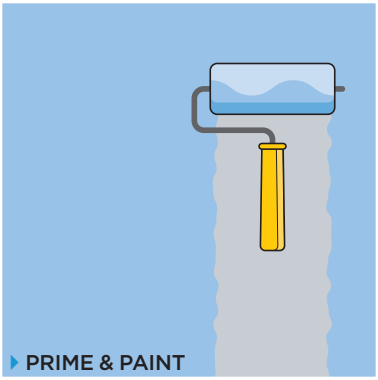
JOINT COMPOUND



SAND BETWEEN COATS



INSPECT FINISH WHEN DRY



PRIME & PAINT

WALL FINISHING

9. SEAM FINISHING

- After the depth registration and sound check, seam finishing can proceed. The speaker panel should be finished in place similar to any other piece of wallboard.
- Self-adhesive nylon mesh tape is recommended, however paper tape is also acceptable.
- **Use only air-dry joint compounds and plasters for seam finishing. Do not use chemically curing joint compound.**
- For best results, we recommend at least three light applications of joint compound, sanding between coats.
- **Allow 24 hours between each application of joint compound for complete drying. Failure to allow the joint compound to completely dry between applications may result in fine hairline cracking around the speaker. If this occurs, repair the crack using standard wall finishing techniques. The crack will not reappear.**
- The joint compound should be spread beginning 2"-3" in from the speaker edge and then feathering outward 16"-20" in order to achieve a smooth, flat transition.
- It is important that enough joint compound be applied around the speaker to make a very gradual transition from the face of the speaker panel to the surface of the wallboard. Every situation is different, but it will normally take at least a 16"-20" (30cm) fan of joint compound around the perimeter of the panel to create a flat-looking transition.
- Be sure to feather the joint compound away from the speaker as to not build up more than the maximum allowed 1/16" (2 mm) of joint compound over the face of the speaker panel.
- Stealth Acoustics speakers do not require a skim coat to attain a smooth finish. However, some advanced finishing techniques and materials such as Venetian plaster or heavy plaster coats may require skimming over the front of the speaker. In these situations, it may be necessary to shim the speaker proud of the surrounding wallboard to avoid build-up of more than 1/16" (2 mm) of material on the face of the speaker.

10. SAND SMOOTH

- Sanding is an important step before the painting begins. This can make or break the quality of the installation.
- When sanding, imperfections in the application of the joint compound may appear. If so, additional joint compound and sanding may be needed to create a seamless transition.
- Best practice may include the use of a flashlight to shine sheer light down the wall or ceiling in order to identify high/low spots in the finish work.

11. PAINT AND FINISH

- Once sanding is complete the speaker is ready for painting.
- Light "orange peel" texture, light knock-down texture, wallpaper, veneer, or level 5 finish may be applied.
- **Heavy knock down or trowel finishes are not recommended. Stealth Acoustics speakers are engineered for optimum audio performance with no more than 1/16" (2mm) of any material applied to the surface of the speaker. To exceed the 1/16" (2mm) limitation will cause degradation of audio quality.**

STEALTH ACOUSTICS

StealthAcoustics.com

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