

SONANCE

Invisible Series Finishing Guide

SONANCE

BEYOND SOUND

DESIGNED TO DISAPPEAR

Technology should disappear into architecture...this simple philosophy continues to inspire everything we do. Our hidden audio solutions deliver an even, balanced sound experience that is nothing short of magical, blending into any style, installation, or budget.

AUTHENTIC PARTNERSHIP

Every day at our facilities in San Clemente, CA, and Minden, NV, you will find passionate, immensely knowledgeable people forging some of the strongest relationships in our industry. From our customer-centric culture to our not-to-be-missed Studio Seminars, we aim to define what authentic partnership looks like. Connecting our strategy and products to your company, we help unlock the most value possible for your business. [OUR TEAM IS YOUR TEAM.](#)

A HERITAGE OF INNOVATION

The history of our independently-owned company is rooted in a deep knowledge of our customers and construction. From award-winning audio solutions to our unique TRUFIG mounting technology to our IPORT solutions that hold, charge, and protect, and connect tablets, customers rely on our culture of creativity to continue to push the boundaries of technology and design.

MAKING THE WORLD A BETTER PLACE

At Sonance, we believe that we have a responsibility to use our business and our resources as a force for good in the world. We know that when we focus our efforts on giving back philanthropically, and in the areas of Environmental Impact, Social Responsibility, and Good Governance, we take small but fundamentally important steps towards Making the World a Better Place.

INVISIBLE SERIES



FINISHING INVISIBLE SPEAKERS

Motion Flex Invisible Series speakers are the ultimate expression of the Sonance Designed to Disappear Philosophy. Once installed properly, they are truly undetectable by the eye while creating an immersive sensation of sound coming from everywhere. To perfectly blend Sonance Invisible Speakers into the design of your space, a wide variety of finishes are possible. This guide will provide tips, tricks, and overall best practices for ensuring seamless, reliable, and repeatable results with uncompromised audio performance.



IS8 Speaker





FINISHING MATERIALS

If a different finishing material is desired beyond what is described in this guide, we recommend experimenting with a mock-up installation before implementation on a project.

DRYWALL



VENETIAN PLASTER



WOOD VENEER



WALLPAPER



FABRIC



LEATHER



SELECTING A FINISH

As a starting point for determining if a finish material is a good candidate for compatibility with Invisible Speakers, adhere to three simple rules.

1. Thickness of 3mm or less: The total finish thickness over the speaker surface must be no thicker than 3mm (1mm-1.5mm is optimal).
2. High Flexibility: The covering material must be flexible. Stiff or rigid materials are incompatible.
3. Lightweight: To not impede the speaker's movement, the covering material must be lightweight.

PREPARATION AND FINISHING

DRYWALL | GYPSUM WALLBOARD | PLASTERBOARD

The majority of Invisible Speakers are integrated into drywall panels (also called gypsum wallboard or plasterboard) and finished over with topping compound and interior paint. As an alternative to painting, many other types of finishes such as wallpaper and wood veneer can be applied over the drywall finish. Regardless of the final finish over the drywall installation, the following guidelines will ensure optimal results.

If paint is the final finish, a fully Finish-over install is recommended. This is also known as a Level 5 drywall finish where a thin skim coat is applied completely over the surface of the speaker and drywall panel then sanded smooth. A Finish-up-to installation is recommended when the speakers and installation surface will be covered with a thin membrane such as wallpaper, wood veneer, fabric, etc. This typically means a Level 4 drywall finish where topping compound or joint compound is feathered up to the surface of the speaker and surrounding installation surface. In either case, make sure to use the minimal thickness of drywall topping compound required to achieve a smooth, even, and level surface. Definitions for Level 4 and 5 Drywall finishes can be found on the next page.

Detailed drywall installation instructions can be found in the product manuals and via videos online.



KEY PRINCIPLES

- Use an easy-sand, lightweight topping compound (density less than or equal to water 1kg/L or 8lb/gal).
- Do not use fast-curing compounds, sometimes referred to as “hot mud.” Instead, use a slow-curing compound with typical cure time of 12–24 hours.
- The final finish thickness must not exceed 3mm (1mm–1.5mm is optimal).
- Use primer prior to painting. Multiple coats of paint are recommended.
- Use the Sonance DG-1 depth gauge to measure and validate the finish thickness (learn more in the product manual).

Note on drywall texture: generally, textured drywall finishes over Invisible Speakers are not recommended because they tend to be very thick and exceed the maximum 3mm finish thickness requirement. Light textures are suitable if they do not exceed 3mm over the speaker surface.



LEVEL 4 DRYWALL

Drywall/plasterboard must be taped along all joints. All joints/angles need to be mudded with a skim coat plus another two additional layers of compound for flat joints and one additional coat for interior angles. Screws and accessories will require three separate mud coats. Each new coat of mud over joints and screws is applied progressively wider than the previous coat and feathered out across the drywall/plasterboard. Any ridges or irregularities need to be sanded down.

LEVEL 5 DRYWALL

Drywall/plasterboard finishing includes all measures included in Level 4, plus another, additional skim coat of compound applied evenly across the entire surface of the drywall/plasterboard. Any irregularities or imperfections are sanded down for a flush, perfectly flat surface.



VENETIAN PLASTER

Premium decorative plaster finishes are finding their way into more and more high-end interiors; however, most styles of plaster have two characteristics that make them incompatible with Invisible Speakers: (1) they require several coats resulting in too much material over the surface of the speaker, and (2) they have a high percentage of lime, cement, or other minerals that when cured are non-flexible and super-stiff. This restricts the motion of the speaker and degrades performance significantly.

However, there are modern plasters that use polymers such as acrylic as a binder, resulting in a flexible and easier-to-apply final product. Venetian plasters, for example, that are based on acrylic are virtually indistinguishable from their traditional counterparts and are compatible with Invisible Speakers provided that the final finish thickness over the speakers is 3mm or less. Request the MSDS or SDS datasheet from the plaster supplier and look at the ingredients list for acrylics and other polymers or plastics to ensure a good match with Invisible Speaker installations.

Alternatively, there are many varieties of lime wash paints that can emulate the look and feel of traditional plasters with almost no additional thickness. Such paints can be applied over a standard Level 5 drywall finish atop Invisible Speakers with outstanding results.



KEY PRINCIPLES

- Use an acrylic-based plaster product
- Do not use traditional plasters based mostly on lime or minerals
- Check the MSDS/SDS sheet for the plaster contents
- Lime wash paints can be a great alternative to plaster

WOOD VENEER

For best results with a wood veneer, a Finish-up-to drywall topping compound installation is highly recommended due to the recessed edges of the speaker panel. Otherwise, the center of the speaker may be visible as a contour under the veneer. As with any other installation style, ensure the center of the speaker panel is flush and level with the installation substrate surface before applying any finish.

Any species of wood veneer may be used—ensure that the veneer has a paper backing. The ideal total thickness of veneer + paper backing is 0.5mm; up to 1mm may be used. Remember to keep the final thickness of veneer and adhesives at 3mm or less, which can be validated with the Sonance DG-1 depth gauge. Do not use peel-and-stick veneers. Instead use a contact cement. Cover the back of the veneer 100% with a thin layer (1mm or less) of contact adhesive. Cover the speaker and wall installation surface 100% with a thin layer (1mm or less) of contact adhesive. Let the adhesive cure for a few minutes until the adhesive is slightly tacky to the touch (refer to the adhesive manufacturer's instructions for precise recommended cure time). Bond the wood veneer to the installation surface over the speakers and apply even pressure with a roller tool over the entire veneer surface. Do not press too hard; the speaker can be damaged with excessive pressure.

KEY PRINCIPLES:

- Use paper-backed veneer
- Total thickness of veneer and paper-backing must be 1mm or less
- Bond the veneer to the speaker using contact cement on both surfaces





WALLPAPER, FABRIC, AND LEATHER

Thin, flexible covering materials such as wallpaper, fabrics, and leathers work best when a Finish-up-to drywall installation is implemented with Invisible Speakers. That said, even subtle variations in the surfaces where the wallboard and speakers meet will “print through” thin covering materials. Therefore, an exceptionally well-executed Level 4 finish or Level 5 drywall finish is recommended. For wallpaper, follow the manufacturer’s recommendations for adhesive type and application process. For fabrics and leathers, use a contact adhesive applied to both the covering material and speaker/installation surface (refer to the Wood Veneer section for more details). Ultra-thin, sheer fabrics are not recommended.

KEY PRINCIPLES:

- A smooth, even drywall finish is required—just as if the surface were to be painted
- Use the manufacturer-recommended adhesive and process for wallpaper
- Bond fabric and leather to the speaker using contact cement on both surfaces



WET LOCATIONS AND TEMPERATURE EXTREMES

Invisible speakers can be installed in wet locations such as bathrooms, spas, saunas, etc. provided that the surrounding wallboard and finishing materials used are rated and certified for such environments and that installation best practices for wet environments are followed.

The operating temperature range for Sonance Invisible speakers is -4°F to 122°F (-20°C to 50°C).

Before installing Invisible Speakers in any environment with high humidity or temperature extremes, it is highly recommended to perform a mock-up trial of the finish materials, speaker, and environment to validate the performance long-term.



INSTALLATION LOCATIONS, QUANTITY, AND LAYOUT

Sonance Invisible Speakers can be installed in both walls and ceilings. If installing into walls, make sure they are at least 7' (2.13m) from the floor. This helps prevent them from being blocked by furniture/wall hangings or pierced by wall hanging hardware. In both walls and ceilings, evenly space the speakers for optimal coverage and avoid corners if possible.

The principles for determining optimal quantity and layout of Invisible Speakers to maximize smooth, balanced coverage are the same as traditional speakers with one notable exception. Because of the improved off-axis coverage pattern of Sonance Invisible Speakers, they are less sensitive to exact positioning, which presents an advantage versus traditional architectural speakers. Should an Invisible Speaker's position in the room layout need to be altered due to interference with electrical, plumbing, HVAC, structural members, etc., this can typically be done by relocating an Invisible Speaker forward, backward, or one stud-bay over without compromising coverage performance. For assistance with speaker layout planning, contact Sonance Design Services:

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<https://www.jotform.com/DIQuotes/new-sonance-design-service-form>

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BEYOND SOUND



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Due to continuous product improvement, all features and specifications are subject to change without notice.
For the latest Sonance product specification information visit our website: www.sonance.com
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