



## QuietRock 545THX Installation Instructions

Read all instructions before installation. Remember: Safety first!

Serious Materials has done an excellent job labelling the blue tape (that surrounds the product edges) to notify installer that this tape must be removed.

**NOTE: Hang QuietRock immediately or store in a dry location. Protect the QuietRock materials from exposure to moisture during the construction or remodelling process, from product storage to project completion. Moisture or water can cause problems with any drywall product, including QuietRock. Do not cover with plastic for extended periods, as that may allow condensation.**

The QuietRock line of engineered products is a sound isolation panel designed to replace standard drywall in any wall or ceiling construction, including wood and metal studs. QuietRock is a 5-9 layer gypsum board product which includes highly engineered internal damping layers that provide enhanced transmission loss. QuietRock can be used with a variety of standard framing techniques, including staggered and double stud construction. You may use QuietRock panels just like any other gypsum wall product. The panels can be drilled, cut and attached just like drywall. The only difference in installation is that QuietRock panels must be cut with a saw. Please completely read these instructions below before beginning installation and always be sure to follow all OSHA safety guidelines when installing any Serious Materials product.



## **Prep for Using QuietRock 545THX**

### **New construction prep:**

- 1) Choose your preferred construction method such as standard 406 mm (16") OC, 610 mm (24") OC, staggered, or double framing. QuietRock works with both wood and metal framing.
- 2) Clean all surfaces before installation so they are free of dust and dirt.

### **New Construction Prep (for best results):**

- 3) Before the top and bottom stud plates and end studs are installed, run two beads of 3 mm – 10 mm (1/8 - 3/8 inch) diameter of QuietSeal between them and the wall, floor or ceiling. This should create an airtight seal between the framing member and the host surface (floor, wall, etc.). (See American Society for Testing and Materials (ASTM) C919-02 Standard Practice for Use of Sealants in Acoustical Applications for additional information.)
- 4) Treat all electrical and plumbing outlets with a fire or sound rated putty pad (see section regarding QuietPutty pads below). Avoid placing outlet boxes that service opposite sides of the wall into the same stud cavity.
- 5) Install insulation in the stud cavity, filling the entire cavity.

### **Retro Fit Prep:**

- 1) Remove any existing moulding/trim, wainscotting, and wallpaper from walls. Ensure that surface is smooth, clean and free of obstructions, such as nails or tacks.
- 2) When using QuietRock with masonry or concrete construction it is also necessary to attach steel or wood studs. We recommend that you use at least 51 mm (2 inch) steel studs 610 mm (4 inches) OC. This is not required when using QuietRock over existing gypsum wallboard and stud framing.
- 3) Clean all surfaces before installation so they are free of dust and dirt.



### **Cut:**

- 1) Cutouts may be made with a rotary cutting tool such as a RotoZip or Makita cutting tool. 6 mm (1/4") diameter bits designed for tile/rock are recommended.

### **Hang as Usual:**

- 2) Before QuietRock is installed, run a 3 mm – 10 mm (1/8" - 3/8") diameter bead of QuietSeal between the QuietRock and the perimeter of the wall.
- 3) Secure QuietRock to the studs using appropriate #6 or #7 Bugle Head 76 mm to 89 mm (3" to 3 1/2") drywall screws every 305 mm to 406 mm (12" to 16") or as required by code. Use a coarse thread for wood studs and a fine thread for metal studs. Nails are not recommended for long term fastening.
- 4) Finish securing the QuietRock to the studs with drywall screws. The screw head should go just below the surface of the paper. Be careful to drive the screws only enough to dimple the surface. It's easy to over tighten and cause the screw head to go all the way through the paper surface. If you accidentally break through the surface, drive another screw nearby.
- 5) Seal around all electrical and plumbing outlets with QuietSeal.
- 6) When pulling insulated electrical wires through a QuietRock panel without a conduit or junction box, a bushing may be used to prevent possible wear or cuts in the wire insulation. Serious Materials recommends Bridgeport Fittings bushings (catalogue IDs: 9880 or 9882 for round holes 26.2 mm (1-11/32 inch) diameter).
- 7) For best acoustic isolation, apply an optional bead of QuietSeal along the edges of each panel, before putting up the next sheet. (See section regarding seal below)

### **Finish as Usual:**

- 8) Finish the surface with drywall tape and joint compound as usual. **BE SURE TO FOLLOW THE TAPE AND COMPOUND MANUFACTURER'S INSTRUCTIONS REGARDING APPLICATION, SAFETY, AND RECOMMENDED PERSONAL PROTECTION.** knife as needed. **DO NOT LEAVE QUIETSEAL ON THE SURFACE, AS IT CAN INTERFERE WITH TAPE AND MUD.** QuietSeal will remain viscoelastic, i.e. not dry, so it is necessary to tape and texture over the joints. Always use QuietSeal around electrical boxes and at the wall perimeter to seal all airgaps completely. See QuietSeal instructions for more detailed information and apply QuietSeal in accordance with applicable requirements of ASTM C919.



## Using QuietRock in Ceiling Construction

To use QuietRock in a ceiling application, simply follow the above instructions for walls. The only difference in installation will be the number of screws used to hold the panel in place. CONSULT LOCAL BUILDING CODES ON SCREW PLACEMENT. We recommend screws in rows 610 mm (24") apart, and 305 mm (12") apart along the rows. If you are unsure, you should consult with a professional to determine what is needed for your particular application. It is advised that you use a drywall hanger lift to properly install any drywall on ceilings.

## Cutting QuietRock

There are many different types of saws and cutting tools that easily and quickly cut QuietRock. They include:

### Circular Saw

Makita 5057KB 184 mm (7-1/4") Circular Saw w/ Dust Box  
TENRYU steel pro PRF-18548BW (or equal)

### Jig Saw

Makita 4334DWD 18v Variable Speed Jigsaw  
Makita 7230123 10 Pack 24 tpi Blades 79 mm (3-1/8") (or equal)  
Makita 7230084 10 Pack 24 tpi Blades 59 mm (2-3/8")

### Cutout Tool

Makita 3706 Drywall Router  
Makita 733341A 6 mm (1/4") Solid Carbide Bit (3706)

It is also recommended to saw outdoors, or use a vacuum system on the saw to reduce dust if you will be cutting many panels. We recommend using:

Makita XSV10 10 Gal. Wet/Dry Vacuum  
Makita 1934577 Vacuum Attachment (3706) (for drywall router)  
Makita 1922023 Rubber Sleeve 19 mm (3/4") I.D x 22 mm (7/8") O.D. (for jig saw)  
Makita 1924180 Vacuum Attachment (4334DWD) (for jig saw)  
Makita 1922798 10 Ft. Hose (3706,4334DWD)\*  
Makita 410871A Hose Adapter (3706,4334DWD)\*  
Makita 110001A Cartridge Filter (XSV10)



### Using QuietSeal

In general, QuietSeal should be used to fill all air gaps in the wall so that it is completely airtight. For this purpose, apply a continuous 3 mm – 10 mm (1/8" - 3/8") diameter bead of QuietSeal around the perimeter of each surface treated with Serious Materials panels and around all panel cutouts. To ensure the highest acoustical performance, QuietSeal must be used:

- Under the bottom stud plate
- Above the top stud plate
- Between the end studs and the adjacent walls, if applicable
- Around wall or ceiling perimeter (on the edges of the panel)
- Around electrical boxes

When using on the edges of the panels, the adjacent sheet of QuietRock should “squeeze” the QuietSeal in between them. The panels should fit together tightly. Be sure to remove excess QuietSeal with a rag (any paint thinner easily removes QuietSeal) or putty knife as needed. **DO NOT LEAVE QUIETSEAL ON THE SURFACE, AS IT CAN INTERFERE WITH TAPE AND MUD.** QuietSeal will remain viscoelastic, i.e. does not dry, so it is necessary to tape and texture over the joints.

See QuietSeal instructions for more detailed information and apply QuietSeal in accordance with applicable requirements of ASTM C919.

### Using QuietPutty Pads

QuietPutty pads are used to seal the back and sides of electrical outlets and plumbing fixtures for sound control. If not properly treated, these penetrations can severely decrease the acoustical performance of rated wall assemblies. We recommend using QuietPutty pads by Serious Materials. See the application notes for QuietPutty for correct installation.



## General Notes

Use normal care and precaution when working with Serious Materials products:

- QuietRock panels may be heavy (some are no heavier than standard drywall, other models are heavier). Make sure that there are sufficient workers to handle the product, especially when applying to a ceiling. **DO NOT HANDLE MORE LOAD THAN YOU ARE COMFORTABLE WITH, OR NO MORE THAN LOCAL REGULATIONS ALLOW.**
- Lift the panels using OSHA guidelines, e.g. do not bend over and lift using back muscles; instead use the leg muscles.
- QuietRock contains no materials more hazardous than standard drywall. Dispose of excess QuietRock in the same responsible manner as you would any building material. For recycling purposes, note that QuietRock 545THX contains metal, so alert the recycler to those materials.

## QuietRock Safety Notes

### Warning - Avoid Breathing Silica Dust

**Serious Materials** products, like most gypsum wallboard products, contain silica. Inhalation of respirable silica can cause silicosis, which is a potentially disabling lung disease, and which is known to the State of California to cause lung cancer. When drilling, cutting, or abrading products during installation or handling: (1) Work outdoors where feasible, otherwise use mechanical ventilation, (2) Wear a dust mask, or if dust may exceed PEL, use NIOSH/MSHA approved respirator (recommended), (3) Warn others in area. According to medical experts, and the Surgeon General for the United States, cigarette smoking can significantly increase your likelihood for contracting lung-related diseases, including silica-related lung diseases. For further information, refer to our installation instructions and Material Safety Data Sheet available at [www.quietsolution.com](http://www.quietsolution.com) or by calling 1-800-797-8159. **FAILURE TO ADHERE TO WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY.**

### Personal Protection:

- Must wear cut-resistant gloves (such as those containing polyamide cotton or Kevlar while handling or cutting QuietRock which contains metal, including QuietRock 545THX).
- Approved eye protection such as safety glasses or goggles is recommended for operations involving machining such as sawing.
- Use a dust mask when handling or cutting this or other gypsum product. Use a NIOSH/MSHA-approved respirator when necessary.

For additional information see the MSDS sheet available from Serious Materials's Website [www.QuietRock.com](http://www.QuietRock.com).