

## Chemistry Controlling Sound







## A step-by-step look at the construction and assembly of a Green Glue wall.

### Where is Green Glue used?

Green Glue can be used to soundproof walls, floors and ceilings. Green Glue can be used both in new construction, building upgrades and renovations.

Since Green Glue is intended to be sandwiched between two sheets of building materials such as drywall, it eliminates the need to remove existing wall and floor materials.

### INSTALLING GREEN GLUE IS FAST!

-  Use a standard quart size caulk gun
-  Because of its thin consistency (like ketchup), you can easily dispense a tube of Green Glue in **15 seconds**
-  Green Glue will not flow off a board when installing.
-  No specific coverage pattern is necessary to ensure excellent results.
-  No measuring or troweling
-  A larger tip opening (3/8" opening) can be used to speed application without concern for performance.



### Green Glue is sticky

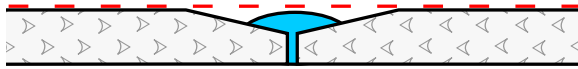
There is nothing harmful about Green Glue, but it is important to warn your installers that it can be tough to clean up, especially after it has dried. Take precautions such as drop cloths and latex gloves when using Green Glue. Take care to remove the Green Glue from unwanted surfaces before it dries. Products that clean well are Avon Skin So Soft Bath Oil®, as well as citrus based solvents and cleaners such as Goof-Off®.

### Green Glue smell

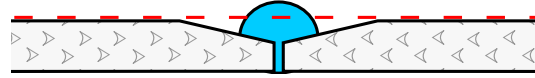
Green Glue is not odorless. In the same way that you can smell paint while you are painting a room, you will be able to smell Green Glue as you are applying it. Most installers aren't bothered by the smell, but it is nevertheless important to keep the room well ventilated to prevent a build up of smell. Cold temperatures or high humidity will slow drying. Smell will not linger on furniture, clothing or carpeting. Like paint, once dry, the smell will fade. Keep the spent tubes in a plastic bag and remove them regularly.

### Hanging the first layer of drywall

After hanging the first layer of drywall, it is recommended that you seal the seams between sheets. This can be done with either caulk or drywall mud. If using caulk, take care not to use a bead so large that it protrudes outside the plane of the drywall, preventing the second layer from sitting flat (below). If speed is an issue, you can omit this step and seal the perimeter after the last sheet of drywall is installed.

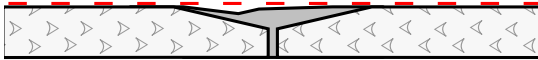


**Correct** - The caulking bead applied to the drywall seam is below the plane of the wall.

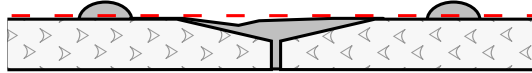


**Incorrect** - The caulking extends beyond the plane of the wall. This will prevent the next layer of drywall from contacting the first layer lowering your performance.

If using drywall mud, fill the seam and the indentation caused by the tapered edge of the drywall. A perfect finish is not essential, so a single broad swipe with the drywall knife should do. If speed is an issue, you can omit this step. Just hang the first layer, and move to the second layer.



**Correct** - A quick layer of setting type drywall mud is applied below the plane of the wall. This method also increases the area of contact between layers.



**Incorrect** - Avoid these types of protruding caulk beads, and random spills/smears/drips of mud that extend past the plane of the first layer.

If you mud the first drywall layer make the first layer flat, smooth and free of protruding bits of mud, caulk, or fractures in the drywall that might prevent the second layer of drywall from sitting flat against the first. Filling seams smooth with drywall mud can increase overall contact area and may slightly improve performance over caulk alone.



### Opening the Green Glue tube

Acceptable tip openings range from 1/8" to 3/8". We have researched coverage patterns and bead sizes considerably in our labs and have not found a dramatic difference among different techniques and choices.

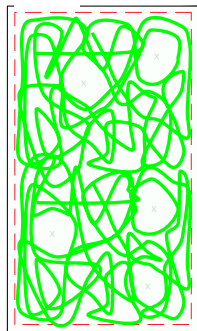
### Green Glue coverage

The ideal coverage should be uniform throughout the sheet using 1 - 3 tubes.

Applying 1 tube of Green Glue per 4' x 8' sheet will deliver about 70% of the performance of 2 tubes. Three tubes is optimal per 4' x 8' sheet will improve low-frequency performance around the primary resonance. We do not recommend using more than 3 tubes per sheet. If you use too much Green Glue, performance will decline.



**Yes** – Uniform coverage gives desired performance.



**Yes** - Leaving 20% of the area uncovered while still using the same amount of Green Glue (1-3 tubes) will result in a marginally thicker film when the two sheets are compressed together. This will slightly improve low frequency behavior at the slight expense to your higher frequency performance (The difference is small).

### **Leave border around material**

Leave a 2-3 inch border around the edge of the drywall or building material. This will allow you to carry the sheet without getting your hands into the Green Glue.

Leaving this border will not affect your sound isolation performance. (See the red dotted line above and below)

### **Applying Green Glue**

After application of Green Glue, use standard drywall screws to fasten the drywall to the studs. Green Glue has been specially formulated to “squish” the large beads into a thin layer (about 0.5 mm).

It is usually more convenient to apply Green Glue to a loose drywall sheet at floor level (or sawhorses) and then raise the panel. Press the building material against the wall or ceiling and then screw it to the studs.

If installation conditions prohibit Green Glue from being applied at floor level, it is just as effective to apply Green Glue to the first layer of drywall and raise the second sheet of drywall onto the wet surface.

### **Green Glue drying Time**

Do not let dry. Apply Green Glue within 15 minutes. Drywall sheets must be screwed together while the material is still wet.

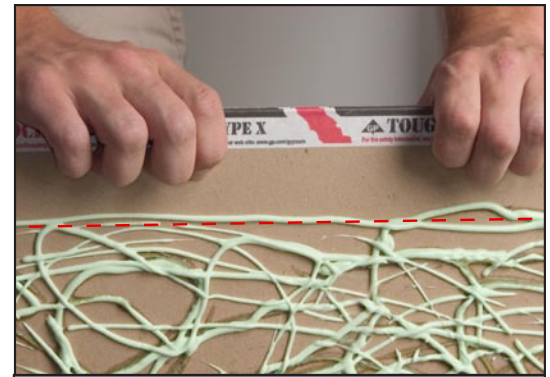
Allow Green Glue 30 days of drying time for optimal sound isolation performance. Because it needs to dry, Green Glue must be allowed 7 to 10 days drying time before sound isolation will start to improve.

High humidity, cold temperatures and multiple drywall layers could slow the drying time considerably.

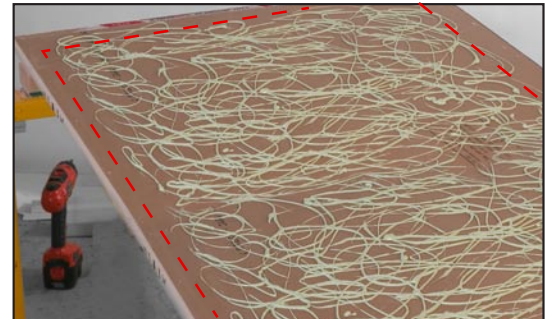
### **Green Glue clean up**

Take care to remove the Green Glue from unwanted surfaces before it dries. Products that clean well are Avon Skin So Soft Bath Oil®, as well as citrus based solvents and cleaners such as Goof-Off®. Keep the spent tubes in a plastic bag and remove them regularly.

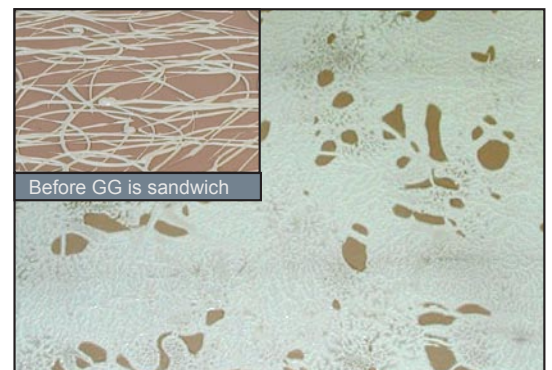
Because of the many installation variables beyond our control, we shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claims shall be deemed waived unless made in writing to us within thirty (30) days from the date it was or reasonably should have been discovered.



Leave a 2-3" border around the drywall



Green Glue applied to 4'x8' sheet of drywall



After Green Glue is sandwiched between 2 layers

