

**Walls are rarely plumb, straight, or flat.
This wall is bowed in the center.**



Important note: This wall has been repaired and stabilized structurally. InSoFast panels are designed to be applied to structurally sound walls.

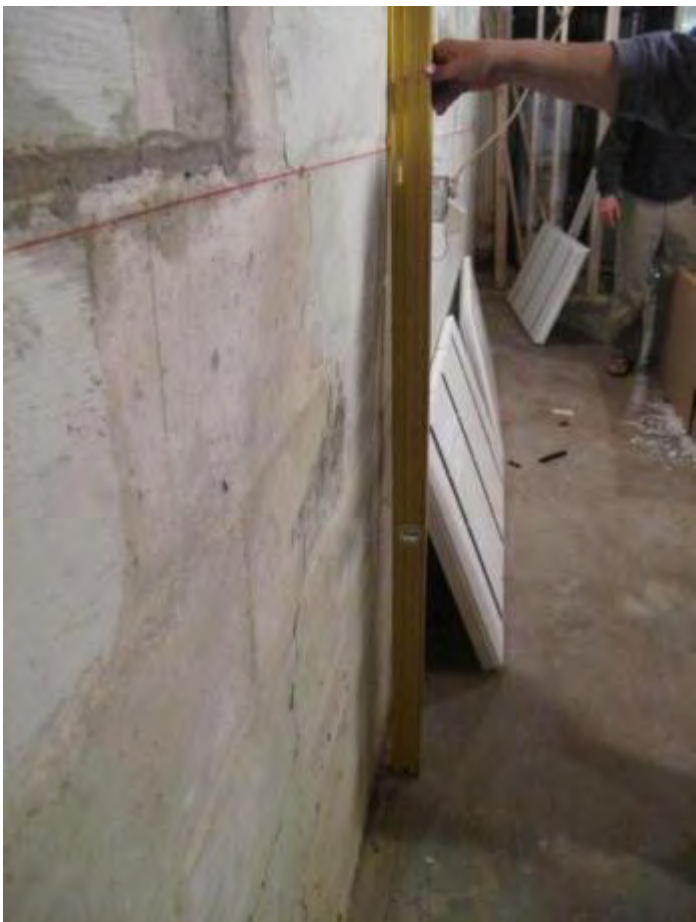
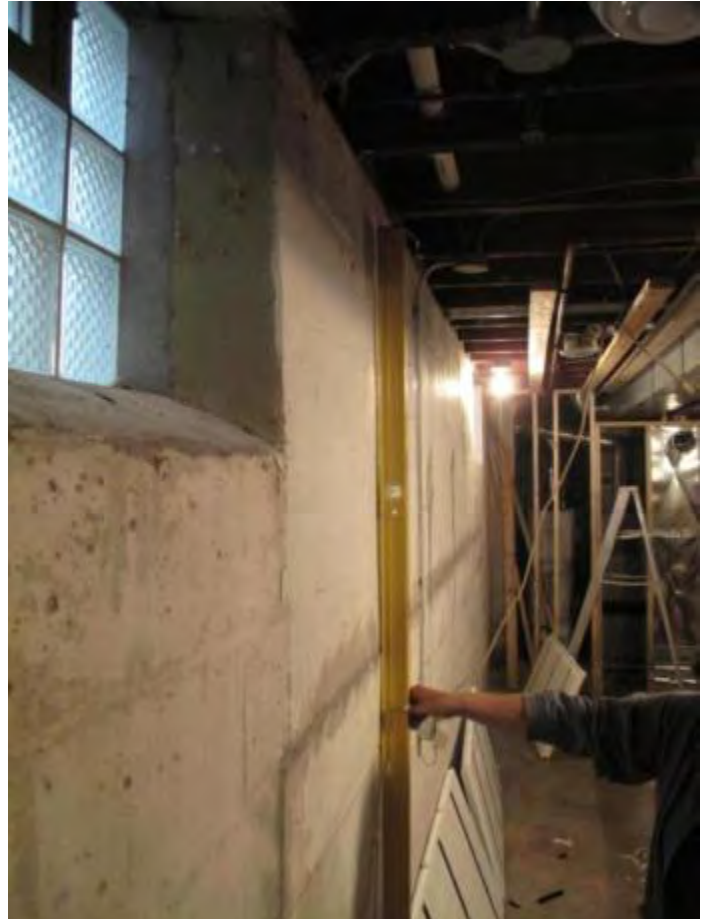
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It is important to check the walls you want to cover before you order InSoFast. InSoFast can be used on even the worst walls, but it is up to you to decide if you have the skills necessary to tackle leveling a wall using these advanced techniques.

***However, do check your own upstairs framed walls for a level reference. You may be surprised.**



These instructions can guide you with a few advanced tips. They are not meant to be a complete comprehensive guide as all walls differ. If you are unsure about installing InSoFast panels over your walls, please find a professional contractor to construct your project.

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This picture shows how an 8' level reveals a high spot or bulge in the middle of the wall.

The top and bottom of the wall are not plumb and they are out of plumb by over an inch from the middle high spot.

Note using a quality level correctly is important.



In this photo to the left, if we ignored the bubble and fit our straight edge flush to the top of the wall, the level's straight edge has kicked away from the wall by over 2 ½" at the floor.



Here we handled the high spot on the wall by modifying the back side of the InSoFast panel. We removed the dove tailed section of the stud and scraped away the foam from the panel to accommodate the wall's bulge.



[InSoFast Wall Conditions video](#)

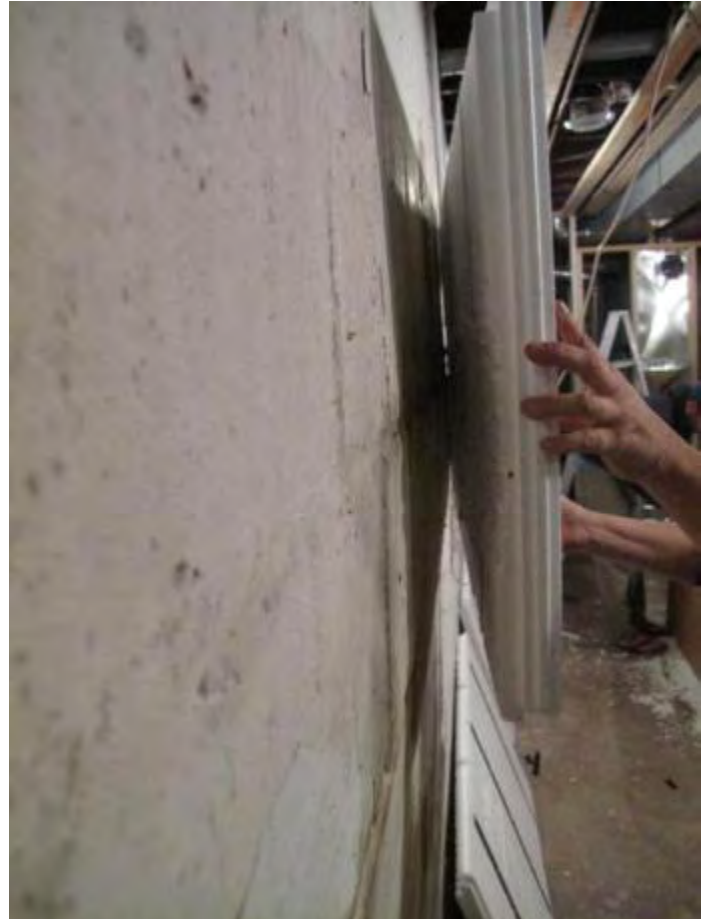
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It is important to check the panel's fit to the contour of the wall. The panel should be snug against the wall and not rock back and forth.

When you have a tight fit, use the 8' level to mark the floor and ceiling. Then snap a chalk line on the floor and ceiling.



Remember to account for the thickness of the panel when you snap your true line.

* Tip: When scraping, dishing out, or sanding away at the panel, use static guard to neutralize the static charge. Clean up will be easier.



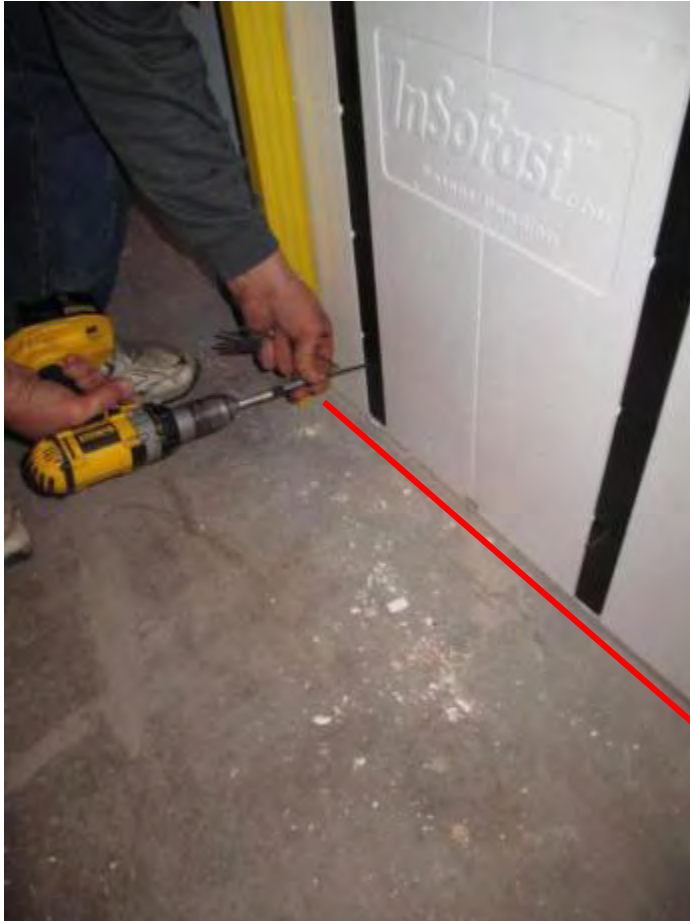
Dry stack the panels to pre-plan how to shim and level the wall to get that flat and true professional finish.



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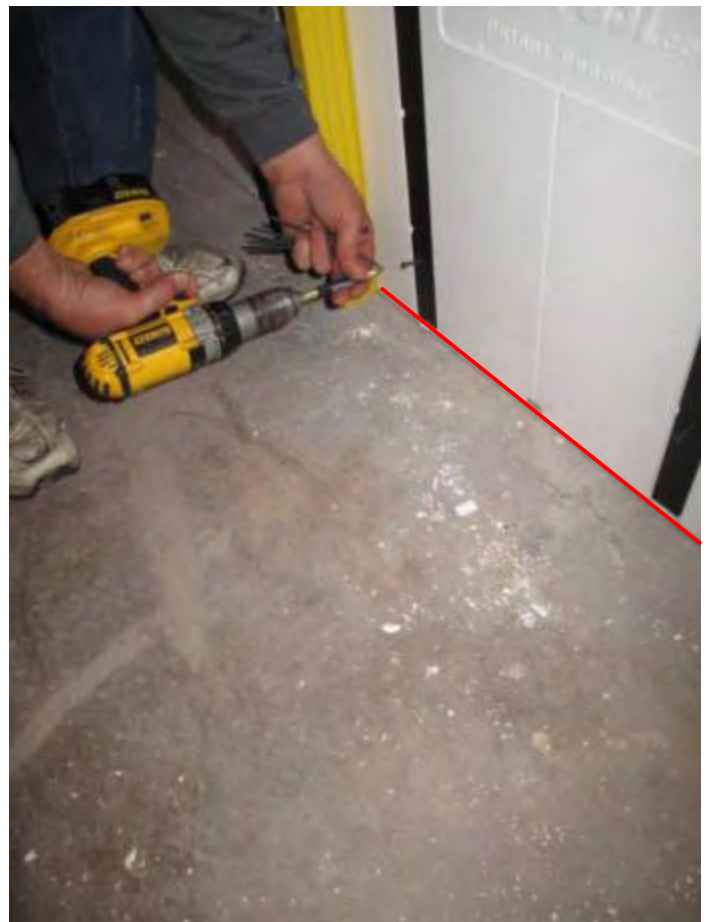
Use the chalk line on the floor as a guide to straighten your wall.

“Dry stack” or pre-cut and fit the panels onto the wall.

Label the panels starting with:

Row 1 panel 1 or 1-1 so on.
2-3 would reference row 2 panel 3.

Use 4” deck or drywall screws. Screw through the panel’s stud until fastener comes in contact with solid wall. Then slowly screw the fastener in so that the panels are ratcheted out until you meet the chalk line on the floor.



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Slowly turn the screw in until the wall is level with the chalk line. Repeat until the entire base of the wall has been trued to the line.



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Work your way up the wall. Follow the level using it as a guide and install additional “shim screws” directly above the previous “shim screws” where needed to level out the wall.





Now deconstruct your wall. Remove all the panels and stack in them in reverse order. (Do not remove the set screws from your panel as they serve as a guide for the amount and type of adhesive that you will apply to your panel.)

Where the set screw protrudes less than 3/8" from the back of the panel, apply the PL Premium to the dovetailed stud. Where the set screw protrudes more than 3/8" from the back of the panel, apply a generous bead spray foam adhesive. The spray foam adhesive is only used in areas that have a gap of 3/8" or more.





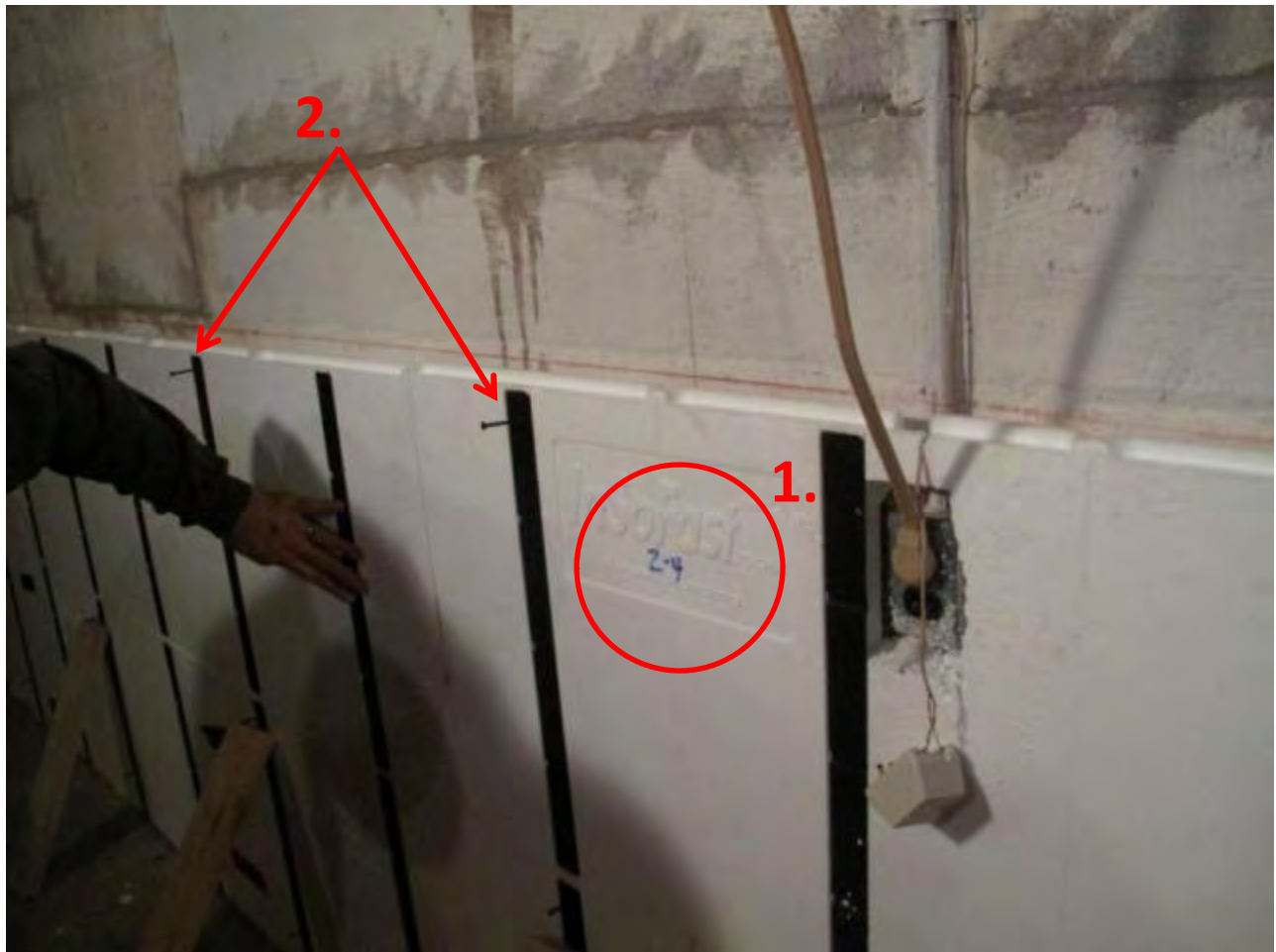
Now you are ready to reassemble your plumb and level wall. Apply a bead of spray foam adhesive to the floor. This will lock the panel in place along that bottom edge.

When placing the panels, make sure that the adhesive bonds to the panel to the wall surface. Have temporary bracing available to hold the panel in place until the glue sets. This can be as elaborate as a swing into place a 2x4 that is shimmed tightly to the floor or as simple as a heavy box that you slide up to the panel.



Continue installing panels

1. Note the row # 2 and panel # 4 written by the InSoFast logo.
2. The “shim screws” will hold the panel away the proper distance.





Note that small 2x4s leaning up against the panels keep the panels tight or “braced” to the wall.

Duct tape is applied to keep the panel tightly locked together at the seams until the adhesive cures and firmly locks the panels to the wall.





Although it is hard to see, the 4" set screw is holding the panel away from the wall keeping the InSoFast panel plumb.



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Note the 2 different adhesives being used to provide proper glue contact to secure the panel to the wall.

The snapped chalk line helps to assure accuracy of the insulated wall assembly.





***We are now placing the panel we cut and carved to fit over the bulge in the wall. Place a continuous bead of glue over the area where the stud was removed.**



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Final check for plumb and level walls.



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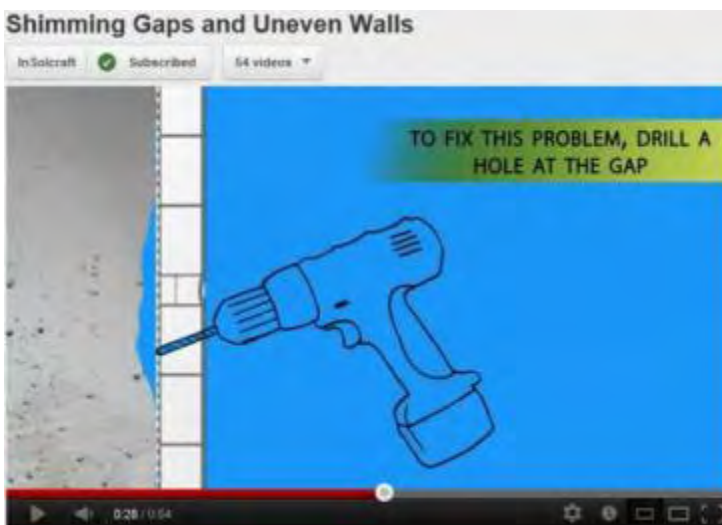




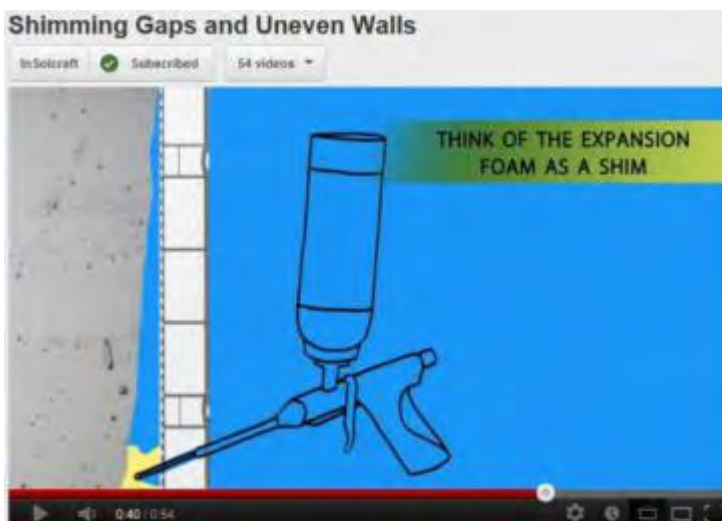
1. Inspect your walls for those loose studs. You will be able to hear the difference.



[Shimming Gaps and Uneven Walls](#)



2. An additional measure you can employ is to drill or poke a hole into the InSoFast where it sounds hollow.



3. Polyurethane spray foam is added after the stud's adhesive sets.



[Adhesive Information](#)

Once the spray foam cures you can add additional mechanical fastener at your discretion.



1. Inspect your walls for those loose studs. You will be able to hear the difference.



[InSoFast Mechanical Fasteners Guide Video](#)



2. We have several options to secure the wall. There are 3 recessed attachment points on each stud face.

At times mechanical fastening may be required. Use 3" Tapcon® screws.



3. Gripcon® nails. The nail installation is easier than the screw installation.

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4. Here we will demonstrate installing a Perma-grip® nail. Use a Standard Hammer drill or Rotary Hammer drill to pilot a hole into the concrete wall.



5. Make sure you drill $\frac{1}{4}$ " deeper than the nail is long.



6. Use a hammer to drive the nail into the wall. Don't overdrive the nail. Tap the Perma-grip® fastener until securely seated.