

Tech Tips: SPF Picture Framing Technique

Copyright: May 3, 2010

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Use a "Picture Framing" Technique. Applying residential insulation systems can be best done in a "picture framing" motion in which the applicator surrounds the outside of the stud cavity allowing the foam to rise along the stud face (see Fig. 1). To do this, spray diagonally at the juncture of the stud and the substrate, bringing the SPF out along the stud about 2/3 of your spray pattern width. About ten feet of wall can be done at a time.

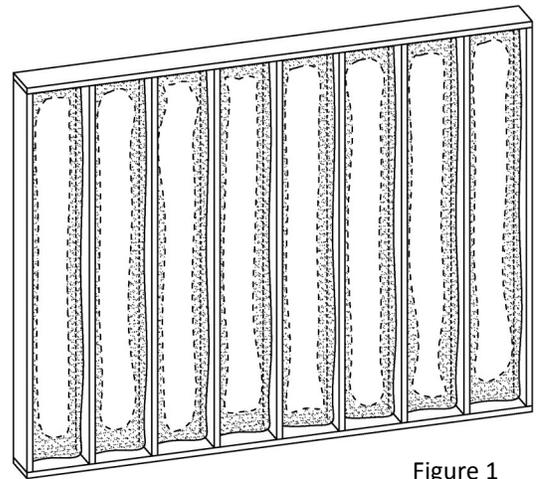


Figure 1

After picture framing a specified area return back to the start point to fill in the center of the cavity, using the maximum pass recommended by the manufacturer. Additional lifts or passes are to be done after the initial lift or pass has had adequate time to cool down (about 15-20 minutes for two inch pass). The picture framing technique will ensure that insulation seals cracks and crevices without resulting in fold-over along the stud face or air-pockets or voids which will affect the insulations performance.

Caution: If there is a space or gap between the stud and the exterior substrate, take care not to spray too much foam into the crack. The expanding foam can push out the stud resulting in a bowed wall. Check your work regularly with a sharp rigid wire probe to insure that you are applying the correct thickness.

Cathedral ceilings, unvented attics and flat ceilings are sprayed in the same manner as the walls. Building scientists have determined that foam can be applied directly to the underside of the roof substrate provided a minimum 38 R-Value is installed. If the designer, local code official or shingle manufacturer requires venting, make sure vents or chutes are installed prior to application. Ceilings are generally sprayed thicker than walls, so you may want to picture frame more than once as you build to full thickness.



For flat ceilings, if recessed light fixtures are installed, do not spray polyurethane foam directly to the fixture; follow the fixture manufacturer's recommendations for insulation and/or venting the fixture. Some fixture types require that a gypsum board box be built around them prior to application.

Caution: Be careful when spraying above the fixtures. The expanding foam can force the fixture down.