



Residential - Preparing for Spray Foam Insulation

The application of spray foam insulation is a unique process and requires greater attention in some respects where other insulation types do not require. This document will list some of the more common focus points found in new home construction of which spray foam insulation will be installed.

1. Non-Vented Attics

Residential attics having spray foam installed do not generally require ventilation. When applying spray foam directly to the roof decking it incorporates the entire attic space into the building envelope. Vented soffits, ridge vents and gable vents are not necessary with an unvented spray foam attic system.

2. HVAC System

It is important to notify your licensed HVAC representative that spray foam insulation will be installed in your new home. When spray foam insulation is being installed, the HVAC system will be calibrated to perform specifically for a spray foam insulated home.

3. Cover Finished Products

Covering finished products with plastic before applying spray foam insulation is important as it prevents damage from overspray. Our installers know to cover many of the items found regularly in construction and do their best to discover other exceptions as well. However, some of the items that are not always discussed or displayed in plan sets include stained concrete floors and decorative wood structures. It is important that these and other items are brought to attention in preliminary discussions and before the installers arrive.

4. Complete Building Envelope

When considering spray foam insulation, a buildings envelope is relatively straight forward. The intent is to create a completely encapsulated and air sealed barrier from the peak of the roof to the base of the floor. Blocking off hollow “dead spaces” over patios and porches will increase air sealing as well as reduce the amount of required spray foam materials. The attic areas where an attached garage and remaining home meet should also be sealed off from each other with spray foam to optimize efficiency. Also, consider where HVAC units and ducting are positioned, and that the entire system lies within the insulated area.

5. Finished Roofline

Before installing spray foam, the roofline must be dried in and leak free. Excessive moisture derived from an unfinished roof may affect the integrity of spray foam insulation and can result in a considerable amount of time, effort, and money to remediate the potential damages caused.

6. Quarantined Work Zone

Applying spray foam insulation requires specific personal protective equipment. It is important to schedule no other tradesman or visits while spray foam insulation is being installed. All individuals entering the work zone must be trained with and wearing approved equipment. Be aware that spray foam overspray will damage glasses, phone screens, cameras and clothing.

7. Secured Fittings

The expanding characteristics of spray foam will move loose and unfastened items. This increases the possibility of items being pushed past flush or cut while detailing the foam to ensure the foam is flush with stud faces. Electrical wiring, audio wiring, media wiring, CAT wiring, pesticide lines, condenser lines, flex duct, and plumbing lines are common items that must be well secured to prevent this from occurring.

8. Clean and Un-Cluttered Work Area

To facilitate a timely and quality install it is important to have the home clean and clear. Excessive trash and building materials can slow the installation process as well as make certain areas of the spray foam installation difficult. There is also an increased chance of items and materials being damaged from foam overspray. Foam installers must work up close to every square foot of spray foam being installing. Many areas also require the use of ladders and scaffolding, which require a clean-and-clear and flat surface to work on.

9. Pre-Install Walkthrough

If you are unfamiliar with spray foam insulation or have questions about the installation process, we encourage a site walk. It is most beneficial to have a walk through during the rough in phase, when plumbing, electrical, and mechanicals are being installed. Doing this will let us look over the relevant topics in detail, and discuss any important items needing to be addressed.