



www.shapingenergies.com

Shaping Energies, LLC

Open Cell Spray Foam

Open cell spray foam is generally used to insulate your exterior wood framed walls; it has tremendous air sealing and expansion qualities. We also use open cell foam for insulating your rim joist or box sill (and sill plate). You get less R-value per inch with open cell foam (R3.7 per inch for open cell) than closed cell foam, but the material cost is also lower so you can get more inches of foam - and consequently more R-value in the overall assembly while spending less money - if you insulate the exterior walls with open cell spray foam and fill the wall cavity. You can also install open cell spray foam at your vaulted ceiling (or closed cavity ceiling) or at your attic deck in your open cavity attic. Installing open cell foam in your exterior walls is generally only an option with new construction unless you are tearing the walls apart for a retrofit job. Likewise, installing open cell foam at your vaulted ceiling is primarily an option for retrofit jobs unless you are turning your unconditioned attic into conditioned living space, in which case you plan to sheetrock at the underside of the roof rafters after insulating. Finally, we also use open cell foam to air seal open cavity attic areas.

Open cell spray foam is very useful for air sealing attics; its extraordinary expansion qualities allow it to build a layer of foam at the top-plates and proactively seal where the exterior and interior walls meet with the attic. The top-plates – and other penetrations to the attic area – constitute a substantial source of energy loss in many homes and often account for more than 35% of the draftiness of the entire house! If you are interested in air sealing your attic call us to discuss this measure further as all homes are unique. Call us at: 802-266-0999.

Benefits of insulating exterior walls with open cell foam:

- Reduce heat loss to outside
- Reduce air movement in the walls
- Reduce the possibility of moisture in the air migrating condensing on the interior side of the sheathing at the exterior side of the wall cavity; this reduces the possibility of mold forming in this same location.
- Reduces sound transfer (noise) from outside.

Benefits of insulating with open cell foam at vaulted ceilings and attic decks:

- Reduce heat loss through the ceiling.
- Reduce snow melting and ice forming on the roof.
- Reduce roof damage and the need for a new roof.
- Reduce the possibility of water backing up into the roof from ice forming and getting into the walls and damaging the walls (and the wall insulation) and causing mold issues when gone undetected or improperly handled.
- Reduce the possibility of condensation at the interior side of the ceiling because the temperature change across the ceiling is past the wet bulb threshold and dew point.
- Reduce the need for attic ventilation (primarily additional attic ventilation). The amount of attic ventilation that you are supposed to have is governed by a couple of simple rules, and you never need more, period.

Call or email us for a free estimate, or fill out the form at www.shapingenergies.com/open-cell-spray-foam.html to receive an instant quote and schedule your project instantly when you submit the form. You can view our schedule and availability at the right side of the screen. We will contact you within 24 hours to verify your project details.

Note: You can download the MSD sheets that contain all of the technical information regarding the open cell spray foam product Shaping Energies installs at <http://www.shapingenergies.com/resources.html>