

# Old and New Insulations & R-Values

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Seaweed in the Maritimes and Sawdust in the rest of Canada were common insulation materials in the old days. If they are still light and fluffy, they are still insulating your home, although not the best of insulating materials. That is why we often just add new insulation right over the top of these old ones, in an attic it is just not worth the mess of cleaning the old stuff out. Where we have a lot of room, like in an attic, we generally use the cheapest material available, and just put in more of it. When we have a space problem, then we spend more money for fancier insulations that give us more R value per inch. As a general guide: Wood, Sawdust and Seaweed give about R-1.2 per inch. Fiberglas, Rockwool and BeadBoard (expanded polystyrene) give about R-3.5 per inch. Blue and Pink extruded polystyrene give about R-5 per inch. Orange polyurethane (sprayed or in aluminum faced sheets) give about R-7.5 per inch. Sheets of plastic bubbles with aluminum facing gives much less R value than advertised and contrary to advertising has not been tested by the government for use under concrete slabs. The insulating value of reflective foils is a complex question, but we can say that generally they are much more use in an air conditioning climate than in a heating climate.

**Keywords:**

R-Value, Heat Loss, Insulation