CITY OF LAKEWOOD
PERMIT PROCESS ASSISTANCE HANDOUT

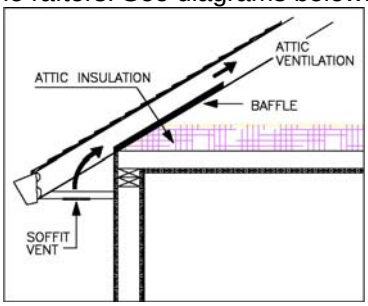
Planning and Public Works - Permits – Civic Center North – 480 S Allison Pkwy – 303.987.7500

Residential Attic Insulation

Attic Insulation is commonly installed using either fiberglass batts or loose blow-in insulation. Both of these must be properly installed in order to be effective.

Approved installation techniques include:

- Insulation must not be in contact with the B-vent from any gas-fired appliance or wood-burning fireplace or wood stove. All insulation should be held back at least 1" from the metal vent.
- When combustion air is drawn from the attic, the combustion air ducts must extend a minimum of 12" above the insulation.
- Insulation should not cover recessed can lights unless the light has a cover installed per the manufacturer's listing over the attic side of the light fixture, or the recessed fixture is IC rated. Look inside the can light to determine if the light is IC rated. The letters "IC" will be on a label affixed to the inside of the light fixture. Where there is no label inside the light fixture, assume the light is not IC rated and install a cover over the fixture that provides at least 3" of clearance on all sides of the light, or install a piece of cylindrical tube extending at least 20" above the fixture and providing at least 3" clearance around the light. The purpose is to keep the insulation from contacting the light and causing the thermal switch to shut off the light, or potentially starting a fire in the attic.
- All soffit vents must remain unobstructed to provide adequate airflow in the attic. Install a baffle made of solid material between the rafters. See diagrams below.



- When using batts or blanket insulation, install the initial layers between the ceiling joists and additional layers perpendicular to the ceiling joists. Install the material so it extends over the exterior wall. Use un-faced batt or blanket insulation.
- Blow-in insulation must be installed so it extends over the top of the exterior wall and is distributed evenly throughout the attic.
- Separate the un-insulated area over porches or unheated garages from the insulated portion of the building with batt insulation hung vertically as a thermal barrier.
- Install a piece of batt insulation on the attic side of the attic access.
- For additional information go to http://www.ornl.gov/sci/roofs+walls/insulation/ins_06.html

Insulation Calculation Worksheet

Calculate the R-value of your **existing** insulation

_____ **X** _____ **=** _____

Thickness in inches R-value/ inch estimated existing R-value

Estimate needed R–value of insulation

R-38 - _____ = _____

Req'd R-value Existing R-value Total R-value needed

Estimate inches of insulation to add to meet R-38 requirement

_____ ÷ _____ = _____

R-value needed R-value / inch Estimated inches needed

R-Value table

Average values from ASHRAE Fundamentals

Insulation type	R-Value per Inch of Thickness
Fiberglass Batt	3.25
Fiberglass Blown	2.2
Rock Wool Batt	3.25
Rock Wool blown	2.2
Cellulose Blown	3.4
Vermiculite	2.1

We are happy you are building in Lakewood and we want to provide whatever information you require. Please call 303.987.7500 with any questions.