



Success with 2009 IECC in South Carolina:
Tech Tips for Builders

INSULATION



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TECH TIPS: INSULATION

1. For vented attics, install wind baffles on top of all exterior walls, leaving room for insulation over top plates and ventilation above.



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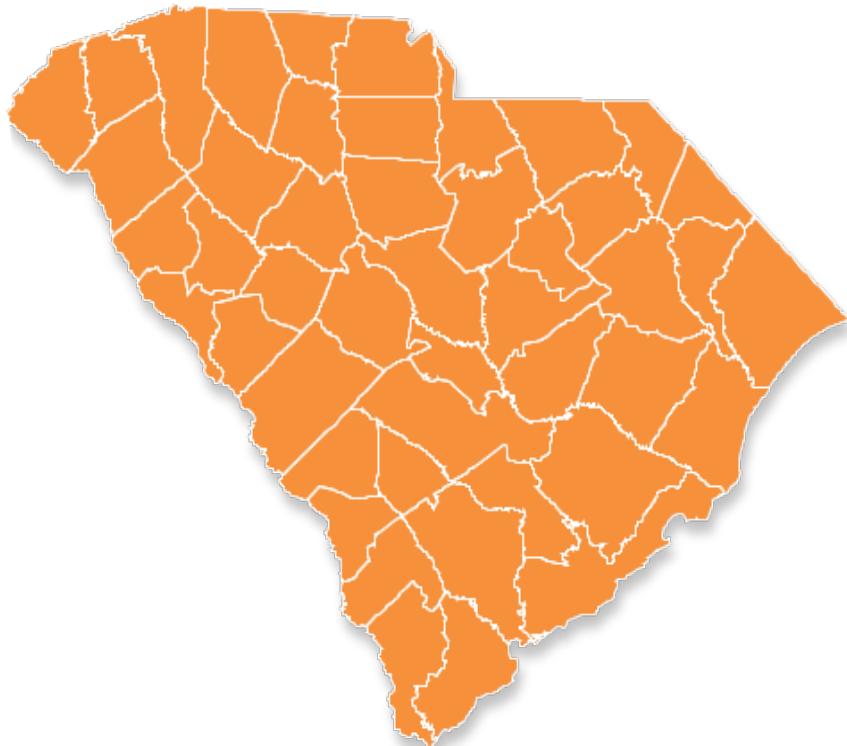


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2. Install insulation to meet the 2009 IECC R-value requirements.^a

CLIMATE ZONE	CEILING	FRAME WALL	MASS WALL ^b	FLOOR	BASEMENT WALL ^c	CRAWL SPACE WALL ^c	SLAB ^e
Zone 3	R-30	R-13	R-5/8	R-19	R-5/13 ^d	R-5/13	0



- a. R-Values are minimums.
- b. The second R-value applies when more than half of the insulation is on the interior of the mass wall.
- c. "R-5/13" means R-5 continuous insulation sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. Basement wall insulation is not required in warm-humid locations defined by Figure 301.1 and Table 301.1 of the 2009 IECC.
- e. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or two feet, whichever is less in Climate Zones 1-3 for heated slabs.

Interactive Map:

<http://energycode.pnl.gov/EnergyCodeReqs/>



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- 3.** Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.

✗ GAPS

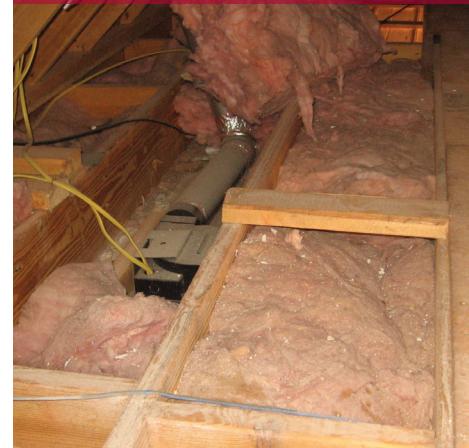


✓ NO GAPS



- 3.** Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.

✗ VOIDS



✓ NO VOIDS



- 3.** Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.

✗ MISALIGNMENT



✓ NO MISALIGNMENT



- 3.** Install insulation to fill the cavity between conditioned and unconditioned space without gaps, voids, misalignments or compression.

✗ COMPRESSION



✓ NO COMPRESSION

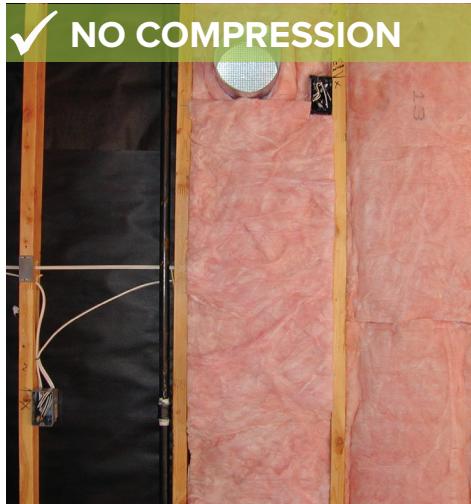




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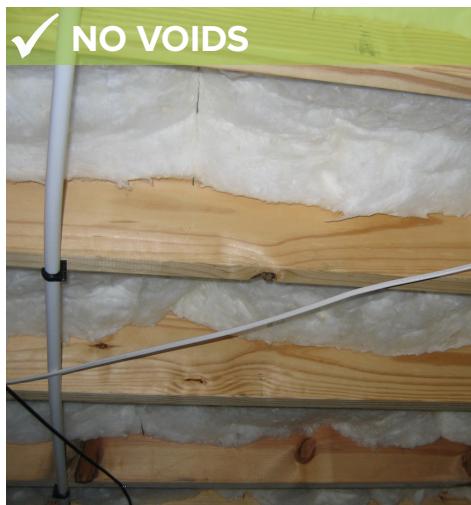
- 4.** Cut and split insulation around blocking, plumbing, HVAC and electrical components.



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- 5.** Install insulation to completely fill floor and/or cantilever framing or to maintain permanent contact with the subfloor.



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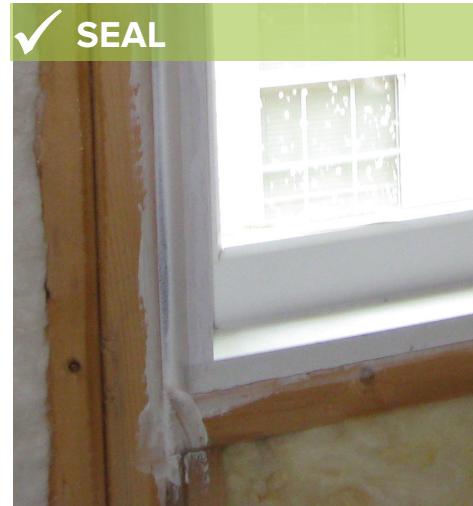
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- 6.** Air seal around windows and doors using backer rod, caulk or low expansion foam.

✗ INSULATION



✓ SEAL



- 7.** Insulate the attic access and install weather stripping around the perimeter.

✗ NO INSULATION



✓ INSULATION



- 7.** Insulate the attic access to the same level as surroundings and install weather stripping around the perimeter.

✗ NO INSULATION



✓ INSULATION



- 8.** For attics with loose fill insulation, install baffles around the attic access opening.

✗ NO BAFFLES



✓ RIGHT INSTALLATION

