

# BOTETOURT COUNTY DEVELOPMENT SERVICES

## Air Barrier and Insulation Inspection/Installation Requirements Checklist

VRC Table N1102.4.1.1

COMPONENT	CRITERIA
General Requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Joints or breaks in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	Air barrier in any dropped ceiling/soffit is aligned with insulation and any gaps are sealed. Attic access (except unvented attic), knee wall door, or drop down stair is sealed.
Walls	Cavities within corners and headers are insulated and exterior thermal envelope shall be in substantial contact / alignment with air barrier. Junction of foundation and sill plate is sealed. The junction of the top plate and the top of exterior walls shall be sealed.
Windows and doors	Space between window/door jambs and framing is sealed.
Rim joists	Rim joists are insulated and include an air barrier.
Floors (including above garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking or floor framing cavity insulation can be in contact with the top side of the sheathing or be installed on the underside of floor framing; and extend from the bottom to the top of all perimeter floor framing members. Air barrier is installed at any exposed edge of floor.
Crawlspace walls	Insulation is permanently attached to walls. Exposed earth in unvented crawlspaces is covered with Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.
Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation.
Garage separation	Air sealing is provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures are airtight, IC rated and sealed to drywall. Exception—fixtures in conditioned space.
Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.
Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier installed on the interior side separating them from the exterior wall.
Electrical/phone box	Air barrier extends behind boxes or air sealed type boxes are installed.
HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.
Concealed Sprinklers	When required, concealed sprinklers shall be sealed per manufacturers installation instructions. Caulking or other adhesive sealants shall not be used to fill voids between cover plates and walls or ceilings.