

# Insulation, Air Barrier and Air Sealing Inspection Checklist

2018 VRC/VECC Inspection Guide

Address: \_\_\_\_\_ Permit #: \_\_\_\_\_  
 Inspector: \_\_\_\_\_ Date: \_\_\_\_\_  
 Builder: \_\_\_\_\_

Complete	Air Sealing: Component/Inspection Point	N/A	Notes:
	All gaps, cracks, seams, and penetrations between conditioned and unconditioned space (i.e. gaps around lighting fixtures, HVAC duct boots, electric wiring, plumbing pipes, and flues) shall be sealed with sealants alone (e.g., caulk, foam, aerosol sealant) or, for larger gaps, with rigid blocking material (e.g. backer rod) sealed in place with sealants, per sealant manufacturer's instructions. Fibrous insulation is NOT an air barrier and shall not be used for air sealing		
	The space between window/door jambs and framing, and skylights and framing shall be sealed. Fibrous insulation is not an air barrier and shall not be used for air sealing		
	The junction of the foundation and sill plate shall be sealed		
	The junction of the top plate and the top of exterior walls shall be sealed		
	Seams where drywall attaches to the top plate at all interior and exterior walls shall be sealed from the attic side with a caulk, spray foam, or sprayer-applied sealant		
	Larger gaps and openings (such as uncovered dropped soffits and openings under knee walls or at the tops of balloon-framed gable walls) shall be closed off using a solid material such as rigid foam or OSB that is sealed at the edges with caulk, sealant, or mastic		
	Gaps around masonry chimneys or gas appliance vents shall be sealed with high-temperature-rated caulk or foam in accordance with building code requirements		
	A continuous gasket, such as weather stripping, shall be installed around all exterior door openings		
	Recessed lighting fixtures installed in the building thermal envelope shall be air tight and IC rated		
	Air sealing shall be provided between the garage and conditioned spaces		

Notes: \_\_\_\_\_

Complete	Wall Insulation, Air Barrier and Air Sealing	N/A	Notes:
	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier		
	Insulation installed to be in full contact with the air barrier (the drywall to the inside and the sheathing or weather resistant barrier to the outside). If air-permeable insulation is not encapsulated by an air barrier on all six sides, it WILL NOT insulate properly		
	Insulation is installed to fill 100 percent of cavity		
	If batts are installed, the batt is cut to fit around all plumbing, heating and electrical penetrations and other obstacles. It is split to go behind and in front of wires and plumbing. This is done in such a way as to fill all cavity spaces and gaps, while <i>not</i> compressing the insulation		
	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that, on installation, readily conforms to the available cavity space		
	Walls are framed to allow the corner to be insulated or continuous insulation is/will be installed		
	Exterior walls adjacent to showers and tubs shall be insulated		
	The air barrier installed at exterior walls adjacent showers and tubs shall separate the tub/shower from the exterior wall and be air sealed		
	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed		
	Crawl space walls: Where provided instead of floor insulation, insulation shall be permanently attached to crawlspace walls		
	Rim joists: Rim joists shall be insulated		

	When utilized: exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier		
Notes:			
Complete	<b>Attic Insulation, Air Barrier and Air Sealing</b>	N/A	Notes:
	Before installing fibrous attic floor insulation, baffles shall be installed at all attic eaves adjoining vented soffits to prevent air flow through the insulation and to provide a path for ventilation air from the soffit vents to the ridge vents. The baffles shall extend at least 6 inches above the height of the attic insulation		
	Attic insulation extends all of the way to the exterior edge of the top plate of the wall below without compression. Roof-framing details, such as raised-heel trusses or oversized trusses, must allow for this		
	R-15 or R-13+1 insulation shall be installed at attic knee walls, skylight shaft walls, vertical portions of all dropped ceilings, and any other vertical wall adjoining conditioned space		
	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed		
	All joints, cracks, and penetrations in the wall air barrier shall be fully sealed with caulk, foam, or equivalent		
	Attic insulation shall be installed at all flat and sloped surfaces adjoining the conditioned space with no gaps, voids, or compression and at levels that meet or exceed prescriptive levels specified by the 2018 Virginia Energy Conservation Code		
	All blown-in or sprayed fiberglass or cellulose attic insulation shall be uniform and conform to manufacturer-specified density with attic rulers to verify full depth		
	Attic hinged vertical doors insulated to a minimum of R-5, drop-down stairs insulated with a minimum of R-5 rigid insulation on 75% of the panel, and hatches to a level equivalent to the surrounding surfaces. All shall be weatherstripped (not caulked) to provide a continuous air seal when closed.		
	All non-ICAT recessed light fixtures shall be boxed with a solid material, such as drywall or rigid foam, that is sealed at all seams with a sealant such as caulk, mastic, or spray foam		
	Sprinklers: When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		
Complete	<b>Floor Insulation, Air Barrier and Air Sealing</b>		
	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members		
	Air barrier shall be installed at any exposed edge of insulation		
	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped		
Notes:			