

PERMIT #: _____

AIR BARRIER and INSULATION CHECKLIST

LOT: _____

BLOCK: _____

In the checklist below, AB and II stand for the air barrier and insulation inspection components to be verified. The local code official will always verify the II components. In the case where the local code official is not able to verify the AB components, they are to be verified by a person independent of the insulation installer. See second page for testing documentation.

COMPONENT	AIR BARRIER (AB) CRITERIA	INSULATION INSTALLATION (II) CRITERIA	Verification Initials ¹		Comments
			AB	II	
General requirements	<ul style="list-style-type: none"> * A continuous air barrier shall be installed in the building envelope. * Breaks or joints in the air barrier shall be sealed. 	<ul style="list-style-type: none"> * Air-permeable insulation shall not be used as a sealing material. 			
Ceiling/attic	<ul style="list-style-type: none"> * The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. * Access openings, drop-down stairs or knee wall doors to unconditioned attic spaces shall be sealed. 	<ul style="list-style-type: none"> * The insulation in any dropped ceiling/soffit shall be aligned with the air barrier. 			
Walls	<ul style="list-style-type: none"> * 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. * Knee walls shall be sealed. 	<ul style="list-style-type: none"> * Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance, R-value, of not less than R-3 per inch. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. 			
Windows, skylights and doors	<ul style="list-style-type: none"> * The space between framing and skylights, and the jambs of windows and doors, shall be sealed. 	--			
Rim joists	<ul style="list-style-type: none"> * Rim joists shall include an exterior air barrier. * The junctions of the rim board to the sill plate and the rim board and the subfloor shall be air sealed. 	<ul style="list-style-type: none"> * Rim joists shall be insulated so that the insulation maintains permanent contact with the exterior rim board. 			
Floors, including cantilevered floors and floors above garages	<ul style="list-style-type: none"> * The air barrier shall be installed at any exposed edge of insulation. 	<ul style="list-style-type: none"> * Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking. Alternatively, floor framing cavity insulation shall be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extending from the bottom to the top of all perimeter floor framing members. 			
Basement crawl space, and slab foundations	<ul style="list-style-type: none"> * Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder/air barrier. * Penetrations through concrete foundation walls and slabs shall be air sealed. * Class 1 vapor retarders shall not be used as an air barrier on below-grade walls. 	<ul style="list-style-type: none"> * Crawl space insulation, where provided instead of floor insulation, shall be installed. * Conditioned basement foundation wall insulation shall be installed. * Slab-on-grade floor insulation shall be installed 			
Shafts, penetrations	<ul style="list-style-type: none"> * Duct and flue shafts and other similar penetrations to exterior or unconditioned space shall be sealed to allow for expansion, contraction and mechanical vibration. 	<ul style="list-style-type: none"> * Insulation shall be fitted tightly around utilities passing through shafts and penetrations in the building thermal envelope to maintain required R-value. 			

COMPONENT	AIR BARRIER (AB) CRITERIA	INSULATION INSTALLATION (II) CRITERIA	Verification Initials ¹		Comments
			AB	II	
	* Utility penetrations of the air barrier shall be caulked, gasketed or otherwise sealed and shall allow for expansion, contraction of materials and mechanical vibration.				
Narrow cavities	* Narrow cavities of 1 inch or less that are not able to be insulated shall be air sealed.	* Batts to be installed in narrow cavities shall be cut to fit or narrow cavities shall be filled with insulation that on installation readily conforms to the available cavity space.			
Garage separation	* Air sealing shall be provided between the garage and conditioned spaces.	* Insulated portions of the garage separation assembly shall be installed			
Recessed lighting	* Recessed light fixtures installed in the building thermal envelope shall be air sealed.	* Recessed light fixtures installed in the building thermal envelope shall be airtight and IC rated, and shall be buried or surrounded with insulation.			
Plumbing, wiring or other obstructions	* All holes created by wiring, plumbing or other obstructions in the air barrier assembly shall be air sealed.	* Insulation shall be installed to fill the available space and surround wiring, plumbing, or other obstructions, unless the required R-value can be met by installing insulation and air barrier systems completely to the exterior side of the obstructions.			
Shower/tub on exterior wall	* The air barrier installed at exterior walls adjacent to showers and tubs shall separate the wall from the shower or tub.	* Exterior walls adjacent to showers and tubs shall be insulated.			
Electrical/phone box on exterior walls	* The air barrier shall be installed behind electrical and communication boxes. Alternatively, air-sealed boxes shall be installed.	--			
HVAC register boots	* HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.	--			
Concealed sprinklers	* Where 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.	--			

1 – In the case that verification is not applicable, "N/A" shall be used as the initials.

CODE OFFICIAL: _____ SIGNATURE: _____ DATE: _____

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NAME & COMPANY: _____ SIGNATURE: _____ DATE: _____

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For new construction other than an addition, documentation of test results verifying air leakage less than 3 air changes per hour when tested per ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 w.g. (50 Pa) shall be submitted with this checklist.

NAME & COMPANY: _____ SIGNATURE: _____ DATE: _____

NJ IECC/2021 Energy Efficiency Certificate for Low-rise Residential Dwellings*		
Address:		Permit #:
<i>Insulation Rating</i> <small>(batt, spray, blown, continuous, other)</small>		<i>R-value</i>
Ceiling/Roof		
Above Grade Wall: framed ; mass		
Floor: over unconditioned space ; slab		
Crawlspace Wall		
Foundation/Basement Wall		
Ductwork (unconditioned spaces)		
<i>Fenestration Rating</i>		<i>U-factor</i> <i>SHGC</i>
Window		
Skylight		
Door		
<i>Heating & Cooling Equipment</i>	<i>Type</i> <small>(Oil, Gas, Electric, other)</small>	<i>Efficiency</i> <small>(AFUE, EER/SEER, HSPF, other)</small>
Furnace		
Heatpump		
Boiler		
Cooling System		
Water Heater		
Other		
<i>Renewables (type of system)</i>		
<i>Additional Energy Efficiency Package/Other Equipment</i>		
<i>Builder or Design Professional Certification</i>		
Name:		Date:
Registration/License Number:		
<i>Comments</i>		
* This is a generic certificate and some items listed above may not be applicable to this specific design when initially constructed; please leave those items blank.		