



ENERGY STAR Qualified Homes

Thermal Bypass Inspection Checklist

Home Address: _____		City: _____		State: _____	
Thermal Bypass	Inspection Guidelines ¹	Must Correct	Builder Approved ²	Verifier Approved	N/A
1. Overall Air Barrier and Thermal Barrier Alignment	Insulation installed in full contact with sealed interior and exterior air barrier except for alternate to interior air barrier under item 2, <i>Walls Adjoining Exterior Walls or Unconditioned Spaces</i>				
	All Climate Zones				
	1.1 Overall alignment of insulation throughout home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.2 Garage band joist air barrier in place ³	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1.3 Attic eave baffles in place where vents/leakage exist ⁴	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate Zones 4 and Higher				
	1.4 Slab edge insulation properly installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Best Practices Encouraged, but Not Required					
	1.5 Air barrier in place at all band joists ⁵	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Walls Adjoining Exterior Walls or Unconditioned Spaces	<ul style="list-style-type: none"> Fully insulated wall aligned with air barrier at both interior and exterior, OR; Alternate for Climate Zones 1 through 3, sealed exterior air barrier aligned with fully supported RESNET Grade 1 insulation Continuous top and bottom plates in place or sealed blocking used 				
	2.1 Walls insulated behind showers and tubs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.2 Walls insulated behind fireplaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.3 Attic slopes and walls insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.4 Attic knee walls insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.5 Skylight shaft walls insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.6 Wall adjoining porch roof insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.7 Staircase walls insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2.8 Double walls insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Floors between Conditioned and Exterior Spaces	<ul style="list-style-type: none"> Air barrier installed at any exposed fibrous insulation edges Insulation installed to maintain permanent contact with sub-floor above, including necessary supports ⁶ Blanket insulation verified to have no gaps, voids, or compression Blown-in insulation verified to have proper density with firm packing 				
	3.1 Floor insulated above garage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3.2 Cantilevered floors insulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Shafts	Openings to unconditioned space fully sealed with solid blocking or flashing and any remaining gaps sealed with caulk or foam (fire-rated collars and caulking installed where required)				
	4.1 Duct shafts sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.2 Piping shafts and penetrations sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4.3 Flue shafts sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Attic / Ceiling Interface	<ul style="list-style-type: none"> All surfaces and dropped ceilings include a full interior-side air barrier aligned with insulation All penetrations and gaps fully sealed with caulk, foam, or tape and any flashing as required 				
	5.1 Sheetrock to top plate at all attic/wall interfaces fully sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.2 Attic access panels and drop down stairs sealed ⁷	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.3 Dropped ceilings and soffits sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.4 Airtight recessed lighting fixtures installed ⁸	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5.5 Whole-house fans include insulated and gasketed cover ⁹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Common Walls Between Dwelling Units	Gap between drywall shaft wall (i.e., common wall) and the structural framing between units fully sealed at all exterior boundary conditions				
	6.1 Common wall between dwelling units sealed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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Verifier: _____ Verifier Inspection Date: _____ Verifier Initials: _____

Builder Employee: _____ Builder Inspection Date: _____ Builder Initials: _____



ENERGY STAR Qualified Homes Thermal Bypass Inspection Notes

1. For purposes of this checklist, an air barrier is defined as any solid material that blocks air flow between conditioned space and unconditioned space, including necessary sealing to block excessive air flow at edges and seams. Additional information on proper air sealing of thermal bypasses can be found on the Building America Web site (www.eere.energy.gov/buildings/building_america) and in the EEBA Builder's Guides (www.eeba.org). These references include guidance on identifying and sealing air barriers as well as details on many of the items included in the checklist.
2. At the discretion of the verifier, the builder may verify no more than four items specified in this checklist. When exercised, the builder's responsibility will be formally acknowledged by the builder signing off on the checklist for the item(s) that they verified.
3. Air barriers must be installed at bays adjoining conditioned space.
4. Wind baffles shall be installed in every bay at eaves for attics with ceiling insulation.
5. An air barrier at all band joists is recommended but not required in Climate Zones 4 and higher.
6. Examples of necessary supports include staves for blankets or netting for blown-in insulation.
7. Attic access panels and attic drop-down stairs must be fully gasketed and insulated.
8. Recessed lighting fixtures must be ICAT labeled and sealed to the drywall.
9. Whole-house fans must have insulated covers gasketed to the opening.

