ENERGY STAR Qualified Homes
Thermal Bypass Inspection Checklist

The Thermal Bypass Inspection Checklist must be completed for homes to earn the ENERGY STAR label. The Checklist requires visual inspection of framing areas where air barriers are commonly missed and inspection of insulation to ensure proper alignment with air barriers, thus serving as an extra check that the air and thermal barriers are continuous and complete. State, local, and regional codes, as well as regional ENERGY STAR program requirements, supersede the items specified in this Checklist.

Guidance on Completing the Thermal Bypass Inspection Checklist:

1. Accredited HERS Providers and certified home energy raters shall use their experience and discretion in verifying that each Inspection Checklist item is installed per the inspection guidelines (e.g., identifying minor defects that the Provider or rater deems acceptable versus identifying major defects that undermine the intent of the Checklist item).

2. Alternative methods of meeting the Checklist requirements may be used if the Provider deems them to be equivalent, or more stringent, than the Inspection Checklist guidelines.

3. In the event an item on the Checklist cannot be verified by the rater, the home cannot be qualified as ENERGY STAR, unless the builder assumes responsibility for verifying, under the direction and oversight of the Provider, that the item has met the requirements of the Checklist. This option is available at the discretion of the Provider or rater but may not be used to verify more than four (4) items on the Inspection Checklist. This responsibility will be formally acknowledged by the builder signing-off on the Checklist for the item(s) that they verified.

4. The Checklist may be completed for a batch of homes using a RESNET-approved sampling protocol when qualifying homes as ENERGY STAR. For example, if the approved sampling protocol requires rating one in seven homes, then the Checklist will be completed for the one home which was rated.

5. In the event that a Provider or rater finds an item that is inconsistent with the Checklist Inspection guidelines, the home cannot be qualified as ENERGY STAR until the item is corrected in a manner that meets the ENERGY STAR requirements. If correction of the item is not possible, the home cannot earn the ENERGY STAR label.

6. The Provider or rater is required to keep a hard copy record of the completed and signed Checklist. The signature of a builder employee is also required if the builder verified compliance with any item on the Checklist.

7. For purposes of this Checklist, an air barrier is defined as any solid material that blocks air flow between a conditioned space and an 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.

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Home Address:_____ City:_____ State:_____

Thermal Bypass	Inspection Guidelines	Rater Verified	Builder Verified
1. Air Barrier and Thermal Barrier Alignment	Insulation is installed in full contact with the air barrier to provide continuous alignment of the insulation with the air barrier	☐	☐
2. Shower / Tub at Exterior Wall	Exterior walls have been enclosed on all six sides	☐	☐
	Exterior walls have been fully insulated	☐	☐
3. Insulated Floor Above Garage	Air barrier is installed at any exposed edges of insulation	☐	☐
	Insulation is installed to maintain permanent contact with the underside of the sub-floor decking	☐	☐
4. Attic Knee Walls	Continuous top and bottom plates are installed with an air barrier on the attic side of insulated walls, including exposed edges of insulation at joists and rafters	☐	☐
	Insulation is in complete alignment with interior wall finish and the attic side air barrier	☐	☐
5. Attic Hatch / Drop-Down Stair	Attic hatch or cover is fully gasketed for an air-tight fit	☐	☐
	Hatch is covered with insulation that is attached and fits snugly in the framed opening (e.g., hatch is required to be within the thermal and air barrier)	☐	☐
6. Cantilevered Floor	Air barrier spans cantilever and any exposed edges of insulation	☐	☐
	Floor framing is completely filled with insulation or insulation is installed to maintain permanent contact with the sub-floor decking	☐	☐
7. Duct Shaft	Openings to unconditioned space are sealed with solid blocking and any remaining gaps are sealed with caulk or foam	☐	☐
8. Flue Shaft	Opening around flue is fully sealed with flashing and any remaining gaps are sealed with fire-rated caulk or sealant	☐	☐
	Combustion clearance between flue and combustible materials (e.g., OSB) are properly closed with UL- approved metal collars	☐	☐
9. Piping Shaft / Penetrations	Opening is fully sealed as required with flashing and any remaining gaps are sealed with caulk or foam	☐	☐
10. Dropped Ceiling / Soffit	Air barrier is fully aligned with insulated framing and any gaps are fully sealed with caulk, foam, or tape	☐	☐
11. Fireplace Wall	Air barrier is fully aligned with insulated framing in framed shaft behind fireplace and any gaps are fully sealed with caulk, foam, or tape	☐	☐
12. Staircase Framing at Exterior Wall / Attic	Air barrier is fully aligned with insulated framing and any gaps are fully sealed with caulk or foam	☐	☐
13. Recessed Lighting	Airtight IC-rated recessed light fixtures are sealed to drywall with gasket, caulk, or foam	☐	☐
14. Porch Roof	Air barrier is installed at the intersection of the porch roof and exterior wall	☐	☐
15. Whole-House Fan Penetration at Attic	An insulated cover is provided that is gasketed or sealed to the opening from either the attic side or ceiling side of the fan	☐	☐
16. Common Walls Between Dwelling Units	Air barrier is installed to seal the gap between a gypsum shaft wall (i.e., common wall) and the structural framing between units in duplex and townhouse construction	☐	☐

Home Energy Rating Provider:_____ Builder Company:_____

Home Energy Rater Company:_____ Builder Employee Signature:_____

Home Energy Rater Signature:_____ Inspection Date:_____

Inspection Date:_____ Re-Inspection Date:_____