



Success with 2012 NC Energy Conservation
Code in North Carolina:
Checklists for Builders

HVAC INSTALLATION





JOB READY: HVAC INSTALLATION

Success with 2012 NC Energy Conservation Code in North Carolina for Builders

| ✓ | ✗ | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Roof framing allows at least R-30 under attic platforms. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. For walls separating conditioned and unconditioned space, framing that allows for the required R-value, has a top plate, bottom plate and an exterior rigid sheathing is installed. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. For walls that will not have an interior finish and are separating conditioned and unconditioned spaces, wall cavities are insulated and an interior rigid air barrier is installed. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. All dropped ceilings/soffits, shafts and chases are capped with a rigid air barrier and air seal. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5. All floor systems within the conditioned envelope have a band or blocking separating conditioned and unconditioned space. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. Manual J Load calculations or an equivalent method are accurate and complete for the dwelling unit. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. Right sized equipment is selected based on the ACCA Manual S or other approved equipment selection method. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. Ensure work site is clean and construction materials are properly stored before proceeding. |

Builder Verification

| ✓ | ✗ | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Stop work until details are corrected. |
| <input type="checkbox"/> | <input type="checkbox"/> | Proceed without corrections. |

The sub-contractor who signs and completes this form is doing so to the best of his/her knowledge and should not be held legally responsible for work completed by other organizations. The intent of this form is to ensure job sites are ready before beginning work.

Signature

Date



JOB COMPLETE:

HVAC INSTALLATION

Success with 2012 NC Energy Conservation Code in North Carolina for Builders

| ✓ | ✗ | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Seal all duct terminations to drywall and/or subfloor and all HVAC penetrations in the building envelope with foam, caulk or mastic. Use fire-rated sealants where applicable. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Seal all HVAC components at all joints, seams and corners with bucket mastic. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Mechanically fasten all metal ductwork with screws. Attach the inner liner of flexible ducts with nylon/plastic straps and tighten with a manufacturer-approved tool. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. Insulate all ductwork in unconditioned space to R-8 (exception: kitchen exhaust ducts). Mechanically fasten duct insulation with straps. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5. Do not compress insulated flexible ducts more than the thickness of the insulation. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. Support flexible duct (including spot ventilation) at least every 4 feet and do not bend greater than 90°. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. Install outside air ventilation intakes at least 10 feet from any exhaust vent or stack. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. Coordinate bath fan exhaust duct direction with Electrical Contractor. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9. Terminate exhaust ventilation ductwork to the outside and install a screen over the termination. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. For heat pumps, install a heat strip outdoor temperature lockout that prevents supplemental heat operation and set it between 35 and 40 degrees. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. Install a programmable thermostat. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 12. Ensure work site is clean and construction materials are properly stored before proceeding. |

Certification

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Name

Company

Signature