

FIELD COPY ATTACHMENT

The released plans for the project must be on site and available to the inspectors at all times. No inspection will be done without the released field plans.

If you have any questions, the professional Building Department staff is available Monday through Friday to answer any technical or procedure question you may have. If you have any doubts, please **ASK**.

Required Inspections – In Order

FOOTING: After excavation of footing, placement of forms (if applicable), installation of reinforcing (if required) and rebar ground wire (if required) prior to pouring concrete. For information on rebar bonding (grounding) please see

http://www.state.nj.us/dca/divisions/codes/publications/pdf_bulletins/b_02-2.pdf

FOUNDATION/BACKFILL: After foundation has been constructed, plastered, dampproofed, braced, footing drain installed, but before soil is backfilled. Footing drains are required on all foundations, including crawl spaces, where the interior floor level is below the exterior grade. The drain must discharge either by gravity to an acceptable location that does not cause a nuisance or into a sump pit. If a sump pit is installed, a sump pump will be required. The sump pump is prohibited from discharging into the sanitary sewer.

A FOUNDATION LOCATION SURVEY MUST BE SUBMITTED AT THIS TIME AND APPROVED BEFORE ANY ADDITIONAL INSPECTIONS CAN BE SCHEDULED. (NEW HOMES ONLY)

SLAB: After slab area has been filled, graded, compacted with vapor barrier and reinforcing installed along with any perimeter rigid foam insulation installed, **prior** to pouring concrete. This includes “rat slabs” in crawl spaces.

ANY SUB-SLAB PLUMBING AND/OR ELECTRIC MUST BE INSPECTED BEFORE SLAB INSPECTION.

OPEN DECK: After sill plate has been bolted down and all floor framing is complete, but before plywood subfloor is installed. Minimum two bolts per sill segment, but no more than 12” from ends of sill seams. A 3”x 3” washer is required on all anchor bolts, if the 3”x 3” washer has a slot instead of a round hole, a standard washer will be required on top of the larger washer.

SHEATHING/STRAPPING: When building is completely sheathed, windows and doors installed. Roofing material must be installed. No tar paper or Tyvek installed on exterior walls. Wall sheathing must extend up and cover both top plates of the wall. All major window manufacturers require a pan or flashing under the window to protect the framing and must direct the water to the exterior. Shear walls must have all sheathing seams attached to solid blocking. If no shear walls are indicated on the plans, the first four feet in each corner and at least 4 feet for each 25 feet of exterior wall will be assumed to be the shear wall and must be solidly blocked. All required strapping must be installed, if the strapping will be concealed, it must be inspected before covering. We check material, sheathing nailing spacing, window and door nailing and flashing. When using an air gun, set to correct pressure as to not drive nail heads below the surface of plywood.

ROUGH INSPECTIONS:

- **Electric:** All wiring, boxes, and permanently installed lighting fixtures (recessed lights) installed and splices and ground connections made. (building must be weathertight at this time)
- **Plumbing:** All water piping, drain and vent piping, and all gas piping installed. Water and gas piping must be pressure tested. Waste piping must be plugged and filled with water. Shower pans and tubs must be plugged and filled with water.
- **Fire:** All hardwire smoke detectors must be wired (smoke detectors must be at least 3' from any HVAC supply grill and any ceiling fan), any flue pipe that will be concealed must be installed and firestopped, and any dryer vent duct that will be concealed must be installed. "B-vent" vent pipe and dryer vent ducts shall not be screwed together. If the dryer vent duct is concealed within the structure, a permanent label must be placed in the room with the dryer indicating the length of the duct.

All rough inspections above must completed and approved prior to scheduling a framing inspection.

- HVAC ducts will be inspected during the framing inspection. All supply ducts in outside walls will need a minimum R-8 insulation between the duct and the exterior sheathing, this may be difficult or impossible in a 2x4 wall. Permits issued after January 1, 2013 ducts in attics, crawl spaces, and unconditioned basements must be pressure tested for leakage by a third party and the report submitted prior to the Certificate of Occupancy.

FRAMING/ TRUSS: After framing has been completed, including non-bearing walls. Exterior must be weathertight. If project has trusses, the truss drawings must be on site along with the field plans. All truss bracing and permanent lateral bracing must be installed along with all uplift connectors.

(ATTACHED FRAMING CHECKLIST MUST BE COMPLETED AND SIGNED AND WILL BE COLLECTED AT THIS TIME)

INSULATION & AIR SEALING: After insulation is installed. The 2009 IECC now requires an air sealing inspection at the time of the insulation inspection or a blower door test when the house is complete. It is up to the permit holder which option they would like to use. If the air sealing inspection is chosen, the inspection may be done by the township inspectors, or a qualified third party and the attached checklist must be completed and submitted to the township. See the air sealing section later in this handout. The blower door test will be done by a qualified third party at the expense of the permit holder and a results report submitted to the township.

FINALS: Final Electric, Final Plumbing, and Final Fire.

BUILDING FINAL: When all construction is complete, all utility meters set, electric, plumbing, and fire protection completed and inspected, and all finish materials completed.

APPLY FOR CERTIFICATE OF OCCUPANCY: After all final inspections are completed and passed and the application for certificate is submitted along with all the required paperwork and prior approvals for the certificate.

CERTIFICATE OF OCCUPANCY REQUIRES A MINIMUM OF FIVE DAYS FOR PREPARATION.

A NEW HOME, ADDITION OR RENOVATION SHALL NOT BE OCCUPIED OR USED UNTIL ALL FINAL INSPECTIONS HAVE BEEN COMPLETED AND A CERTIFICATE OF OCCUPANCY OR APPROVAL HAS BEEN ISSUED. (NO FURNITURE OR OTHER ITEMS MAY BE PLACED INTO THE NEW SPACE)

[AIR SEALING INSPECTION REQUIREMENTS](#)

The 2009 IECC now requires either an air sealing inspection at the time of the insulation inspection or a blower door test when the house is complete. It is up to the permit holder which option they would like to use. If the air sealing inspection is chosen, the inspection may be done by the town inspectors or a qualified third party. The attached checklist must be completed and submitted to the township.

AIR SEAL INSPECTION OPTION

If you choose the township to inspect, we will be inspecting the following items:

1. **Air barrier and thermal barrier:** Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.
2. **Ceiling/Attic:** Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed. Attic access (except unvented attic), knee wall door, or drop down stair is sealed.
3. **Walls:** Corners and headers are insulated. Junction of foundation and sill plate is sealed.
4. **Windows and doors:** Space between window/door jambs and framing is sealed.
5. **Rim Joists:** Rim joists are insulated and include an air barrier.
6. **Floors (including above-garage and cantilevered floors):** Insulation is installed to maintain permanent contact with underside of subfloor decking. Air barrier is installed at any exposed edge of insulation.
7. **Crawl space walls:** Insulation is permanently attached to walls. (If the floor above is insulated, the walls need not be insulated) Exposed earth in unvented crawl spaces is covered with a Class I vapor retarder with overlapping joints taped.
8. **Shafts, penetrations:** Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.
9. **Narrow cavities:** Batts in narrow cavities must be cut to fit, or filled by sprayed or blown insulation.
10. **Garage separation:** Air sealing must be provided between the garage and conditioned spaces.
11. **Recessed lighting:** Recessed lighting fixtures must be air tight, IC rated, and sealed to drywall.
Exception: (fixtures in conditioned space)
12. **Plumbing and wiring:** Insulation must be placed between the exterior sheathing and piping. Batt insulation must be cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.
13. **Shower/tub on exterior wall:** Showers and tubs on exterior walls must have insulation and an air barrier separating them from the exterior wall.
14. **Electrical/phone box on exterior walls:** Air barrier must extend behind boxes or air sealed-type boxes installed.
15. **Common wall:** Air barrier must be installed in common wall between dwelling units.
16. **HVAC register boots:** HVAC register boots that penetrate the building envelope must be sealed to the subfloor or drywall.
17. **Fireplace:** Fireplace walls must include an air barrier. All fireplaces must have outside combustion air ducts and a gasketed door.

If you choose to have a third party inspect your air sealing, they must fill out the applicable sections of the attached Air Seal Checklist and submit it with a copy of their certification or qualifications.

Blower Door Option

If you choose the blower door option, the third party inspector will submit a written report showing the pressure (Minimum 38.5 psf (50 pascals)) and the cubic feet per minute being exhausted.

To find a blower door contractor you may try the Building Performance Institute's web site: www.bpi.org or New Jersey Clean Energy web site: www.njcleanenergy.com

For more information on air sealing requirements please go to:

http://www.state.nj.us/dca/divisions/codes/publications/pdf_bulletins/b_11_1.pdf

Air Duct Tightness Testing

Effective January 1,2013 All ducts outside the conditioned space must be pressure tested by a certified company independent of the installer and a test report submitted to the Building department. This test may be completed at the time of framing or after completion. The criteria for passing is a maximum loss of 6cfm at time of framing and a maximum of 8cfm loss at time of final. The duct losses must be shown in the report.

Modular Homes

Modular homes have the same two options for compliance. If the inspection option is chosen, the attached checklist must be filled out by the in plant inspector at the modular factory, for the applicable factory completed items, and submitted to the Building department. The township inspector will inspect all site completed items. Blower door test option will be the same as above.