

How To Pass An Energy Conservation Inspection In Phenix City

1) Educate and Evaluate:

Know and understand what a **building thermal envelope** is and how to properly identify it on your building.

2) Prepare and Provide:

Prepare your building plan submittals in sufficient detail and provide the necessary documentation for plan review and approval.

3) Communicate and Confirm:

Explain to your framers that it is important to follow the energy conservation requirements and confirm that they know what they are supposed to do.

4) Visit and Verify:

Visit your project often to verify that the work is being done correctly.

- ✓ Ensure that all penetrations, joints, seams, gaps, etc. in the **building thermal envelope** are sealed creating a continuous air barrier between the conditioned spaces inside and the unconditioned spaces outside. The goal is to make the **building thermal envelope** virtually airtight.
- ✓ Make sure that all windows and doors are installed and flashed correctly and have legible NFRC labels confirming that they meet or exceed the prescriptive U-Factor (max 0.50) and SHGC (max 0.30) requirements for Climate Zone 3 in Table 402.1.1 of the IECC or the values listed on the REScheck report if you chose the REScheck option for plan approval.

IECC Table 402.1.1

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
3	0.50	0.65	0.30	30	13	5/8	19	5/13	0	5/13

"5/13" means R-5 continuous insulated sheathing on the interior or exterior of the wall or R-13 cavity insulation at the interior of the wall

- ✓ Confirm that the **building thermal envelope** is insulated to code requirements and that the insulation is installed correctly by being in continuous contact throughout the entire envelope.
- ✓ Ensure that your HVAC contractor has installed a heating and cooling system according to "Manual J" calculations and that the system was approved during the plan review. Also check for the proper sealing and insulation of the duct system. Beginning July 1st, 2013 a duct blaster test will be required unless the air handler and all of the systems duct work is located completely inside conditioned spaces. Also make sure that all mechanical, ventilation, and/or exhaust systems are installed correctly. Additionally, in order to pass the final inspection and receive a Certificate of Occupancy, you will be required to submit a successful blower door test or an Air Barrier and Insulation Inspection Checklist which must be verified by a Phenix City Building Inspector or a qualified third party that is independent of the insulation installer and approved by the Building Official to perform such inspections.
- ✓ If you have a circulating water heater or swimming pool, be certain that the specific requirements for each have been met.
- ✓ See to it that at least half of the light bulbs installed in permanent light fixtures are high-efficacy. The definition of high-efficacy is: Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps or lamps with a minimum capacity to produce: 60 lumens per watt for lamps over 40 watts, 50 lumens per watt for lamps over 15 watts up to 40 watts, or 40 lumens per watt for lamps 15 watts or less.
- ✓ The mandatory Phenix City Energy Code Compliance Certificate is posted on or near the electrical panel or air handler.