Georgia's Energy Code Compliance Testing D.E.T Verifying

The Georgia State Minimum Standard Energy Code 2015 is based on the International Energy Conservation Code 2015 (IECC 2015) with 2024 amendments and supplement. D.E.T Verifying(Duct and Envelope Tightness) Verifying is required in new constructions and retrofits projects to meet energy efficiency and local code compliances. This is a pass or fail test that evaluates both the ductwork and the building envelope for air tightness, ensuring that any leakage is within acceptable limits or targeted goals. By performing a D.E.T Verifying Test, builders and homeowners can identify potential problem areas that may compromise the building's energy efficiency comfort and indoor air quality. The test not only aids in compliance with state regulations but also enhances the overall comfort and longevity of the building by preventing unwanted air infiltration and energy loss. If the building does not pass the test, TruResults Home Services collaborates with stakeholders to implement solutions that will help achieve a passing score and ultimately, a more efficient and comfortable living space.

Importance of Early Testing

TruResults Home Services, emphasizes the importance of conducting these tests before the completion of drywall and insulation. Early testing allows for adjustments and air sealing, preventing costly and labor-intensive corrections at later stages. **D.E.T. (Duct and Envelope Tightness) Verifying** is a pass or fail test designed to meet these standards. If a test fails, TruResults works with homeowners, builders, and contractors to achieve a passing score.

Failing a test could delay obtaining a Certificate of Occupancy and inflate project costs. Blower door testing is a key component in achieving airtightness in building standards which is crucial for meeting and exceeding energy efficiency standards.

By identifying and repairing air leaks, builders can ensure compliance with local and state regulations, enhancing the building's comfort, efficiency, health, and structural integrity.

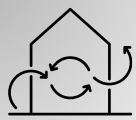
Hidden Dangers of Air Leakage

Air leakage can lead to issues like condensation, humidity, and moisture, which can manifest as stains on walls and ceilings, mold growth, and even cause structural damage overtime. While these issues might not affect the appearance of a home, they do impact its structural integrity and the well-being of its occupants. Moisture intrusion from air leaks can promote the growth of mold and mildew, triggering allergies and respiratory issues for those living in the space. Additionally, uncontrolled humidity, can lead to discomfort and increase the workload on HVAC systems, driving up energy costs. Addressing air leakage early helps maintain a healthy, efficient, and comfortable indoor environment while protecting the investment in the property. *Air leaks can be hidden monster that can't be found without testing. Often it show up as: d**ripping, puddling, stains, rot and component deterioration***

Quality Control

The value of your HVAC & duct system rely on the quality of the installation. Also you can't forget about the building envelope, the insulation, roof system, and every other system of the home. In every new build, future homeowners and investors have a due diligence to verify their home's performance. *If a home has home performance issues new or old, resolving issues go beyond a typical specialist contractor service call. Healing a home of comfort pains takes a whole house approach to gain knowledge utilizing our Performance inspections and Audits.*

Duct Testing & HVAC Airflow Testing: Mechanical quality control and HVAC system Commissioning. Quality Inspection, *duct testing, airflow flow hood testing, flow grid static pressure test, fog leak detection, filter design check, duct adjustments register sealing, and minimum duct sealing*



Blower Door Envelope Exam: Home Physical is to push the building envelope to determining its performance and its failures. *Quality inspection, blower door testing, zonal pressure test, fog leakage test, pressure pan exam, infrared scan, exhaust fan flow, ventilation needs, *combustion safety, *CAZ testing.(Gas Appliances Only*)*

Blower Door Testing

Building performance issues often remain unseen until the final stages of construction. A blower door test measures the overall air leakage across all six sides of the house, revealing hidden issues. This test is essential for detecting leaks, potential performance problems, and understanding how the building will function. Evaluating the building envelope is key to ensuring the integrity needed to meet the building's goals of airtightness, comfort, energy efficiency, functionality, and longevity.

- **New Construction**
- **Renovations**
- **Quality Control**
- **Home Physical**
- **Home Buying**
- **Energy Audits**

Blower Door Test: Measures envelope leakage, which should be 5% or less. Less than 3% mechanical ventilation is required. *Blower door testing is essential for ensuring your building's airtightness, which is a key factor in energy efficiency standards, comfort, and a healthy home*.

Pass Blower Door Test: *Provides actionable insights for improvements. By identifying air leaks and areas of heat loss, this test helps you make informed decisions about sealing and insulation improvements. These insights not only contribute to a more sustainable living environment but also lead to potential cost savings on energy bills.*

Failed Blower Door Test: *If a building fails, it usually means there are significant air leaks. Common culprits include gaps around windows, doors, plumbing, and electrical penetrations. Fixing these leaks and retesting can help achieve a passing result. We offer a air sealing package to assist with meeting goals.*

Duct Tightness Testing

Duct testing helps improve energy efficiency, indoor air quality, system performance, and comfort while also contributing to the longevity of your HVAC system. Duct testing measures unintentional leaks in the duct system. HVAC systems are designed to regulate indoor air for comfort, including temperature control and air filtration. A properly designed and well-sealed duct system will provide great comfort and optimize your system performance. However, if it's not sealed properly, it can allow pollutants in the airstream, waste energy, and inflate your energy bills. This is why air duct leakage testing is crucial. This test can be done at various construction stages or post-construction.

- **Energy Efficiency**: Reduces energy waste and lowers bills.
- **Indoor Air Quality**: Prevents pollutants from entering the duct stream.
- **System Performance and Comfort**: Ensures optimal HVAC system operation.
- **Longevity of HVAC Systems**: Design, airflow, proper installation, and minimizing duct leakage.

This testing can be conducted at various construction stages or after construction is complete.

Duct Leakage Testing: *Ducts should always be tested by a 3rd party contractor. It just that the duct system is that critical to let any efficiency slip away. Most HVAC contractors will not make more work for themselves.*

Duct Test Status: *(Duct leakage 6% or less) Ducts* Air leaks in ductwork imports and exports things continuously, until something bad happens. Duct testing before a new construction home is complete is a perfect opportunity to compliance test.

Failed Duct Test: *We offer duct sealing to assist with a passing score.* Our process starts with advanced duct tightness testing to pinpoint leaks and potential problem areas. Based on this data, we create a targeted duct sealing plan to address the identified issues.