

**Tommy Williams Homes** Gainesville, FL

# **Energy Efficiency Features**

- Home Energy Index (HERS) to 72 or below (significantly better than Energy Star which is 85 or below)
- Double Pane, Low-e Vinyl Frame Windows
- R-15 Fiberglass "Spider" Wall Insulation
- R-30 Ceiling Insulation
- ENERGY STAR<sup>®</sup> Certified Including Thermal Bypass Checklist Compliance
- Extensive Use of Compact Fluorescent Bulbs
- Manual J Sized Heating and Cooling System
- High Efficiency Heat Pump (HSPF 9, SEER 15.25)
- Manual D Sized Duct System, Sealed With Mastic At Joints
- Advanced framing for improved insulation coverage

# **Indoor Air Quality Features**

- Outside Air "Run-time" Ventilation System
  - •When furnace or air conditioner is running, creating beneficial positive pressure in the house to minimize intrusion of outside humidity and dust •Filtered outside air is mixed with house air in return plenum Passive System - no moving parts to maintain
  - •Can be disabled if necessary (such as when there's a fire in the area)
- · Ducted exhaust fans in kitchen and bath rooms to remove humid air
- Duct System Air Tightness Tested
- Air Handler in Conditioned Space (away from auto exhaust fumes in garage)
- Air Sealing to Reduce Infiltration (outside air, pollen, dust, soil gases, etc)

# Systems Engineering Protocol by Florida H.E.R.O

- · Simulation analysis to identify cost effective energy efficiency package
- Each design evaluated to identify opportunities for improvements in indoor air quality, durability, and comfort & to ensure specifications are correctly indicated
- ACCA Manual J load calculation to determine heating/cooling equipment size
- ACCA Manual D calculations to determine duct system sizes
- · Scope of work developed for the mechanical contractor
- Each home performance tested and rated using the Home Energy Rating System

## **Tommy Williams Homes** PO Box 368, Archer, FL 32618 (352) 495-3006

http://www.tommywilliamshomes.com/

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# **Technical assistance:**

Building America Industrialized Housing Partnership www.baihp.org at the Florida Solar Energy Center/UCF www.fsec.ucf.edu



U.S. Department of Energy **Energy Efficiency** and Renewable Energy

**Building Technologies Program** Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

**Tommy Williams Communities** Longleaf Village Build out: 275 Completed: 120

(Additional 275 lots allocated to a non-Building America builder)

Belmont Build out: 136 homes Completed: 66 (Additional 55 lots allocated to a non-Building America builder)









# **A Strong Energy Portfolio** for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

# **Research and Development** of Buildings

Our nation's buildings consume more energy than any other sector of the U.S. economy, including transportation and industry. Fortunately, the opportunities to reduce building energy useand the associated environmental impacts—are significant.

DOE's Building Technologies Program works to improve the energy efficiency of our nation's buildings through innovative new technologies and better building practices. The program focuses on two key areas:

## • Emerging Technologies

Research and development of the next generation of energy-efficient components, materials, and equipment

### Technology Integration

Integration of new technologies with innovative building methods to optimize building performance and savings

For more information contact **EERE Information Center** 1-877-EERE-INF (1-877-337-3463) www.eere.energy.gov



### **U.S. Department of Energy Energy Efficiency** and Renewable Energy

An electronic copy of this publication is available on the Building America Web site at www.buildingamerica.gov

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www.energystar.gov

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#### **Building Industry Research Alliance (BIRA)**

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## **Building Science Consortium (BSC)**

Betsy Pettit • Building Science Consortium (BSC) • 70 Main Street • Westford, MA 01886 • 978-589-5100 • fax; 978-589-5103 • e-mail: Betsy@buildingscience.com • www.buildingscience.com

#### **Consortium for Advanced Residential Buildings (CARB)**

Steven Winter • Steven Winter Associates, Inc. • 50 Washington Street • Norwalk, CT 06854 • 203-857-0200 • fax: 203-852-0741 • e-mail: swinter@swinter.com • www.carb-swa.com

### **Davis Energy Group**

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#### **IBACOS Consortium**

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#### **Industrialized Housing Partnership (IHP)**

Subrato Chandra • Florida Solar Energy Center • 1679 Clearlake Road • Cocoa, FL 32922 • 321-638-1412 • fax: 321-638-1439 • e-mail: subrato@fsec.ucf.edu • www.baihp.org • IHP and team member Florida H.E.R.O. provided technical and on-site support for **Tommy Williams Homes** 

#### **National Renewable Energy Laboratory**

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#### **Oak Ridge National Laboratory**

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Produced for the U.S. Department of Energy (DOE) by Florida Solar Energy Center and the National Renewable Energy Laboratory. April 2007