**Proposed Modification to the Florida Building Code**

**Modification #: TBD**

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**Code: Florida Building Code – Energy Conservation**

**Section #: Form 402-2010**

**Text of Modification [additions underlined; deletions ~~stricken~~]:**

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| **Table 402B ~~MANDATORY~~ THERMAL ENVELOPE APPROACH REQUIREMENTS**  |
| **COMPONENTS** | **SECTION** | **REQUIREMENTS** | **CHECK** |
| Air leakage | 402.4 | To be caulked, gasketed, weatherstripped or otherwise sealed. Recessed lighting IC-rated as meeting ASTM E 283. Windows and doors = 0.30 cfm/sq.ft. Testing or visual inspection required. Fireplaces: gasketed doors & outdoor combustion air. |  |
| ~~Ceilings/knee walls~~ | ~~405.2.1~~ | ~~R-19 space permitting~~ |  |
| Programmable thermostat | 403.1.1 | Where forced-air furnace is primary system, programmable thermostat is required. |  |
| Air distribution system | 403.2 | Ducts ~~in attic or on roofs insulated to R-8; other ducts R\_6.~~ located in conditioned space, insulated to a minimum of R-6 and ~~T~~tested to a Qn <= 0.03 by a Class 1 BERS rater or a Class A, B or Mechanical air-conditioning contractor. |  |
| Water heaters | 403.4 | Heat trap required for vertical pipe risers. Comply with efficiencies in Table 403.4.3.2. Provide switch or clearly marked circuit breaker (electric) or shutoff (gas). Circulating system pipes insulated to = R-2 + accessible manual OFF switch. |  |
| Swimming pool & spas | 403.9 | Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if 70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency = 78% (82% after 4/16/13). Heat pump pool heaters minimum COP= 4.0. |  |
| Cooling/heating equipment | 403.6 | Sizing calculation performed & attached. Minimum efficiencies per Tables 503.2.3. Equipment efficiency verification required. Special occasion cooling or heating capacity requires separate system or variable capacity system.Electric heat >10kW must be divided into two or more stages. |  |
| Lighting equipment | 404.1 | At least 50% of permanently installed lighting fixtures shall be high-efficacy lamps. |  |

**Fiscal Impact Statement [Provide documentation of the costs and benefits of the proposed modifications to the code for each of the following entities. Cost data should be accompanied by a list of assumptions and supporting documentation. Explain expected benefits.]:**

**A. Impact to local entity relative to enforcement of code:**

Speeds up code enforcement by removing inconsistencies submitted on form 402-2010.

**B. Impact to building and property owners relative to cost of compliance with code:**

None, as this mod only clarifies the table that is exclusively submitted with the prescriptive method and simply reduces confusion

**C. Impact to industry relative to cost of compliance with code:**

None, as this mod only removes inconsistencies on form 402-2010.

### Rationale [Provide an explanation of why you would like this Proposed Modification to the Florida Building Code.]:

Conflicts within the updated code. Florida created Form 402-2010 for submitting the residential building thermal envelope approach. It includes an abbreviated list of mandatory measures (Table 402B). Table 402B minimum ceiling R-value (R-19 space permitting) is less than the prescriptive code allows (R-30) which directly contradicts the information on the form leading to confusion. The table also shows duct R-values for attic and roof installations which are prohibited for the prescriptive methods. To clarify intent and for internal consistency, the recommendation is to change the title, remove the ceiling insulation line in this table (it still exists in section 405.2.1), and alter the duct requirement description as shown.

**Please explain how the proposed modification meets the following requirements:**

1. **Has a reasonable and substantial connection with the health, safety, and welfare of the general public:**

Removes confusion in the code which might otherwise lead to constructed code violations (e.g, builder placing ducts in attics and trying to comply using Form 402-2010) that could be costly to alter.

1. **Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction:**

Improves the code by removing contradictory statements on a form submitted for code approval.

1. **Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities:**

The proposed modification does not alter or discriminate against materials, products, methods, or systems of construction.

1. **Does not degrade the effectiveness of the code:**

Specifying performance code thermostat setpoints improves the code since it will require all code calculation software to use the same, appropriate programmable thermostat setbacks.