February 23, 2012

Amended Declaratory Statement Request

March 12, 2012

Florida Building Commission
c/o Paula Ford, Agency Clerk
DBPR
2555 Shumard Oak Drive
Tallahassee, FL 32399-2100


In this matter, I am representing The Dow Chemical Company, which offers insulation products in the State of Florida. With the March 15, 2012 implementation date of the 2010 Florida Building Code, Energy Conservation, Dow is seeking clarification of required insulation levels for renovation and alteration of commercial roofs in Chapter 5 Commercial Energy Efficiency, Table 502.1.1.1(2).

Dow has been working with several insulation distributors, including G. Proulx, Fort Lauderdale, FL, BlueLynx, Miami, and All Interior Supply, Orlando, FL and Hialeah FL, firms that are often asked questions regarding insulation requirements of the Florida Energy Code. It is common practice for distributors to request pertinent information from insulation manufacturers as to whether its insulation “meets” the Florida Building Code. Dow is committed to providing complete and accurate information regarding compliance with the Florida Energy Code to its customers, including distributors, home builders, architects and other design professionals. To that end, Dow, along with these distributors, found that there is a discrepancy in insulation values for insulation levels for renovation and alternation of commercial roofs in Table 502.1.1.1(2)

This declaratory statement requests clarification of insulation levels for renovation and alteration of commercial roofs in Table 502.1.1.1(2).

Question:
In Table 502.1.1.1(2), which is the correct insulation level for Roofs, an R-value of 38 or a U-factor of 0.33 which equates to an R-value of 30? If the correct answer is R-38, then the corresponding U-factor should be 0.025.
### TABLE 502.1.1.1 (2)
ENVELOPE PRESCRIPTIVE MEASURES
FOR RENOVATIONS AND ALTERATIONS¹

<table>
<thead>
<tr>
<th>Building Element</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof:</td>
<td></td>
</tr>
<tr>
<td>Absorptance</td>
<td>≤ 0.22</td>
</tr>
<tr>
<td>R-value (U-value)</td>
<td>R-38 (U≤ 0.033)</td>
</tr>
</tbody>
</table>

(Remainder of Table remains as shown in the code)

**Background:**

Table 502.1.1.1(2) applies to prescriptive measures for renovations and alterations. There is a conflict in this Table for Roof insulation levels. Is the correct level R-38 or U-0.033 which equates to an R-value of 30, according to the conversion formula:

\[
\text{R-value} = \frac{1}{\text{U-factor}}
\]

This discrepancy, if left uncorrected, causes confusion for designers, builders, and code enforcement as to what is the proper insulation level for commercial roofs undergoing renovation or alteration. Furthermore, we are concerned that these erroneous values are included in the software used to demonstrate compliance with the *Florida Building Code, Energy Conservation*.

**Question 1:**
In Table 502.1.1.1(2), which is the correct insulation level for Roofs, an R-value of 38 or a U-factor of 0.33 which equates to an R-value of 30? If the correct answer is R-38, then the corresponding U-factor should be 0.025.

**Question 2:**
If the answer to Question 1 is an R-value of 38, what measures will be taken to correct the error, including correction of the values in the compliance software?

Sincerely,

Lorraine A Ross

CC: Mo Madani, CBO, FBC Technical Unit Manager