

By Senator Altman

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1                   A bill to be entitled  
2           An act relating to energy conservation standards;  
3           amending s. 553.955, F.S.; providing definitions  
4           relating to roofing standards and hardscape standards;  
5           amending s. 553.957, F.S.; including roofs and  
6           hardscapes within those products that are covered by  
7           specific energy conservation standards; amending s.  
8           553.963, F.S.; establishing standards for roof and  
9           roofing materials; providing exemptions; establishing  
10          standards for hardscapes and materials related to  
11          hardscapes; providing an effective date.

12  
13 Be It Enacted by the Legislature of the State of Florida:

14  
15           Section 1. Section 553.955, Florida Statutes, is amended to  
16           read:

17           553.955 Definitions.—For purposes of this part:

18           (1) "AV" means the adjusted volume for refrigerators,  
19           refrigerator-freezers, and freezers, as defined in the  
20           applicable test procedure.

21           (2) "Ballast" or "fluorescent lamp ballast" means a device  
22           to operate a fluorescent lamp by providing a starting voltage  
23           and current and limiting the current during normal operation. It  
24           must also be designed to:

25           (a) Operate at nominal input voltages of 120 or 227 volts.

26           (b) Operate with an input frequency of 60 hertz.

27           (3) "Ballast efficiency factor" means the ratio of relative  
28           light output, expressed as a percent, to the power input,  
29           expressed in watts under test conditions.

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30        (4) "Ballasted roof" means a roof having a minimum of 15  
31 pounds per square foot of ballast to weigh down a roofing  
32 membrane over a substrate to resist wind uplift, and includes,  
33 but is not limited to, river rock aggregate and pavers.

34        (5)~~(4)~~ "Code" means the Florida Energy Efficiency Code for  
35 Building Construction.

36        (6) "Cool roof" means a roof that reflects the sun's heat  
37 and emits absorbed radiation back into the atmosphere within the  
38 standards in this part.

39        (7)~~(5)~~ "Date of sale" means the day when the product is  
40 physically delivered to the buyer.

41        (8)~~(6)~~ "Department" means the Department of Community  
42 Affairs.

43        (9)~~(7)~~ "Distributor" means any person or business entity  
44 which distributes a privately labeled product on a national  
45 basis for which the specifications for manufacture, testing, and  
46 certification are established and attested to by the  
47 distributor, rather than the manufacturer.

48        (10)~~(8)~~ "Energy conservation standard" means:

49        (a) A performance standard which prescribes a minimum level  
50 of energy efficiency or a maximum quantity of energy use for a  
51 covered product, determined in accordance with applicable test  
52 procedures;

53        (b) A design requirement for the products specified in s.  
54 553.957; or

55        (c) A testing and rating requirement for the products  
56 specified in s. 553.957; and

57  
58 includes any other requirements which the department may

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59 prescribe.

60 (11)~~(9)~~ "F40T12 lamp" means a tubular fluorescent lamp  
61 which is a nominal 40 watts, with a 48-inch tube, 1.5 inches in  
62 diameter. These lamps conform to American National Standards  
63 Institute standard C.78.1-1978.

64 (12)~~(10)~~ "F96T12 lamp" means a tubular fluorescent lamp  
65 which is a nominal 75 watts, with a 96-inch tube, 1.5 inches in  
66 diameter. These lamps conform to American National Standards  
67 Institute standard C.78.3-1978.

68 (13) "Hardscape" means the nonliving portions of a  
69 building's landscaping, including, but not limited to, roads,  
70 sidewalks, courtyards, and parking lots.

71 (14) "Heat island effect" means an elevated temperature  
72 over an urban area, compared to rural areas, which is typically  
73 caused by the increased presence of dark, heat-absorbing  
74 materials.

75 (15) "Low-sloped roof" means a roof having slopes of a rise  
76 of 0 units in a horizontal length, up to and including a roof  
77 having slopes of a rise of 2 units in a horizontal length of 12  
78 units.

79 (16)~~(11)~~ "Luminaire" means a complete lighting unit  
80 consisting of a fluorescent lamp or lamps, together with parts  
81 designed to distribute the light, to position and protect such  
82 lamps, and to connect such lamps to the power supply.

83 (17)~~(12)~~ "Manufacturer" means any person or business entity  
84 engaged in the original production or assembly of a product.

85 (18)~~(13)~~ "New product" means a product that is sold,  
86 offered for sale, or installed for the first time and  
87 specifically includes floor models and demonstration units.

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88        ~~(19)-(14)~~ "Nominal input voltage" means an input voltage  
89 within plus 5 percent or minus 5 percent of a specified value.

90        ~~(20)-(15)~~ "Nominal lamp watts" means the wattage at which a  
91 fluorescent lamp is designed to operate.

92        ~~(21)-(16)~~ "Occupancy" means an occupied building or part of  
93 a building.

94        ~~(22)-(17)~~ "Operation" means the ability to start the lamp at  
95 least 8 times out of 10 with a minimum of 1 minute between  
96 attempts when tested under test conditions.

97        (23) "Pervious pavement system" means a porous surface  
98 system having a stabilized base that allows water from  
99 precipitation and other sources to pass directly through,  
100 thereby reducing runoff from the site, allowing groundwater  
101 recharge, and naturally cooling the surface through evaporation  
102 from pavement voids beneath.

103        ~~(24)-(18)~~ "Power input" means the rate of energy consumption  
104 in watts of a ballast and fluorescent lamp or lamps.

105        ~~(25)-(19)~~ "Relative light output" means the test ballast  
106 light output divided by a reference ballast light output using  
107 the same reference lamp and expressing the value as a percent.

108        (26) "Solar reflectance value" means the fraction of solar  
109 energy reflected by a material.

110        (27) "Steep-sloped roof" means a roof having slopes of  
111 greater than 2 units in a horizontal length of 12 units.

112        ~~(28)-(20)~~ With respect to refrigerators, freezers, and  
113 refrigerator-freezers:

114        (a) "Automatic defrost system" means a defrost system in  
115 which the defrosting action for all refrigerated surfaces is  
116 initiated and terminated automatically.

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117 (b) "Freezer" means a cabinet designed as a unit for the  
118 storage of food at temperatures of about 0 °F, having the  
119 ability to freeze food, and having a source of refrigeration  
120 requiring an energy input.

121 (c) "Refrigerator" means a cabinet designed for the  
122 refrigerated storage of food at temperatures above 32 °F, and  
123 having a source of refrigeration requiring an energy input. It  
124 may include a compartment for the freezing and storage of food  
125 at temperatures below 32 °F, but does not provide a separate low  
126 temperature compartment designed for the freezing of and the  
127 long-term storage of food at temperatures below 8 °F. It has  
128 only one exterior door, but it may have interior doors on  
129 compartments.

130 (d) "Refrigerator-freezer" means a cabinet which consists  
131 of two or more compartments with at least one of the  
132 compartments designed for the refrigerated storage of foods at  
133 temperatures above 32 °F, and with at least one of the  
134 compartments designed for the freezing of and the storage of  
135 frozen foods at temperatures of 8 °F or below. The source of  
136 refrigeration requires energy input.

137 (29)~~(21)~~ Definitions used in the code shall also apply to  
138 terms used in this part.

139 Section 2. Present paragraph (d) of subsection (1) of  
140 section 553.957, Florida Statutes, is redesignated as paragraph  
141 (f), and a new paragraph (d) and paragraph (e) are added to that  
142 subsection, to read:

143 553.957 Products covered by this part.—

144 (1) The provisions of this part apply to the testing,  
145 certification, and enforcement of energy conservation standards

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146 for the following types of new products sold in the state:

147 (d) Roofs and roofing materials.

148 (e) Hardscapes and materials associated with hardscapes.

149 Section 3. Present subsection (4) of section 553.963,  
150 Florida Statutes, is renumbered as subsection (6), and a new  
151 subsection (4) and subsection (5) are added to that section, to  
152 read:

153 553.963 Energy conservation standards.—

154 (4) STANDARDS FOR NONRESIDENTIAL ROOFS.—

155 (a) The following are exempt from the standards for roofs:

- 156 1. Repair or replacement of less than 50 percent of the  
157 area of a roof in existence on July 1, 2011;  
158 2. The substructure of a roof covered by the rooftop deck;  
159 3. Vegetation associated with an extensive or intensive  
160 green roof, as defined by the United States Environmental  
161 Protection Agency, to reduce the heat island effect;  
162 4. A rooftop deck covering a maximum of one-third of the  
163 total rooftop area; or  
164 5. Any area used for photovoltaic and solar equipment.

165 (b) Roof exteriors must have a minimum solar reflectance  
166 value in conformity with this section, certified by:

- 167 1. ASTM E903 or ASTM E1918;  
168 2. A test using a portable reflectometer at near ambient  
169 conditions;  
170 3. The Cool Roof Rating Council; or  
171 4. The United States Department of Energy's Energy Star  
172 Program.

173 (c) Low-sloped roofs must be in compliance with the  
174 following standards:

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175 1. Low-sloped roofs constructed as part of a new building  
176 must be composed of roofing products having an initial minimum  
177 solar reflectance value of 0.72 or a 3-year installed  
178 reflectance value of 0.5, as determined by the Cool Roof Rating  
179 Council or Energy Star Program.

180 2. If more than 50 percent of the total gross roof area is  
181 covered with vegetation associated with an extensive or  
182 intensive green roof, as defined by the United States  
183 Environmental Protection Agency, to reduce the heat island  
184 effect, the remainder of the roof must have a minimum solar  
185 reflectance value of 0.30.

186 3. Ballasted roofs constructed as part of a new building  
187 must have a minimum solar reflectance value of 0.30.

188 (d) Steep-sloped roofs must have an initial minimum solar  
189 reflectance value of 0.15.

190 (e) Roofs having multiple slopes must be in compliance with  
191 the requirements applicable to the slope that covers the largest  
192 area of the building footprint.

193 (5) STANDARDS FOR NONRESIDENTIAL HARDSCAPES.—

194 (a) Roof exterior surfaces and building materials used to  
195 comply with this section must have a minimum solar reflectance  
196 value, certified by:

197 1. ASTM E903 or ASTM E1918;

198 2. A test using a portable reflectometer at near ambient  
199 conditions;

200 3. The Cool Roof Rating Council; or

201 4. The United States Department of Energy's Energy Star  
202 Program.

203 (b) Paved surfaces and paving materials used to comply with

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- 204 this section must have a minimum solar reflectance value,  
205 certified by:
- 206 1. ASTM E903 or ASTM E1918;
  - 207 2. A test using a portable reflectometer at near ambient  
208 conditions; or
  - 209 3. One of the following solar reflectance values for paving  
210 materials:
    - 211 a. Typical new gray concrete, 0.35;
    - 212 b. Typical weathered concrete, 0.20;
    - 213 c. Typical new white concrete, 0.70;
    - 214 d. Typical weathered white concrete, 0.40;
    - 215 e. New asphalt, 0.05; or
    - 216 f. Weathered asphalt, 0.10.
- 217 (c) At least 50 percent of the hardscape area at sites that  
218 have new construction must comply with one of the following  
219 requirements:
- 220 1. Shade for solar panels or roofing materials that have a  
221 minimum solar reflectance value of 0.30;
  - 222 2. Shade from trees within 5 years after occupancy;
  - 223 3. Paving materials that have a minimum solar reflectance  
224 value of 0.30;
  - 225 4. A pervious pavement system; or
  - 226 5. At least 50 percent of the parking spaces must be under  
227 cover, underground, under deck, under roof, or under building.  
228 Any roof used to shade or cover parking must have a minimum  
229 solar reflectance value of 0.30.
- 230 Section 4. This act shall take effect July 1, 2011.