

1                   A bill to be entitled  
 2           An act relating to energy conservation standards; amending  
 3           s. 553.955, F.S.; defining the terms "ballasted roof,"  
 4           "cool roof," "hardscape," "heat island effect," "low-  
 5           sloped roof," "pervious pavement system," "solar  
 6           reflectance," and "steep-sloped roof"; amending s.  
 7           553.957, F.S.; expanding the list of products covered  
 8           under certain energy conservation standards to include  
 9           nonresidential roofs, hardscapes, and related materials;  
 10          amending s. 553.963, F.S.; providing energy conservation  
 11          standards for nonresidential roofs, hardscapes, and  
 12          related materials; providing exemptions; conforming a  
 13          cross-reference; providing an effective date.

14  
 15   Be It Enacted by the Legislature of the State of Florida:

16  
 17          Section 1.   Section 553.955, Florida Statutes, is amended  
 18          to read:

19          553.955   Definitions.—For purposes of this part:

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

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

- 27                  (a)   Operate at nominal input voltages of 120 or 227 volts.  
 28                  (b)   Operate with an input frequency of 60 hertz.

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

32           (4) "Ballasted roof" means a roof with a minimum of 15  
 33 pounds per square foot of ballast for the purpose of weighing  
 34 down a roofing membrane over a substrate to resist wind uplift.  
 35 For purposes of this subsection, ballast includes, but is not  
 36 limited to, river rock aggregate and pavers.

37           ~~(5)-(4)~~ "Code" means the Florida Energy Efficiency Code for  
 38 Building Construction.

39           (6) "Cool roof" means a roof that reflects the sun's heat  
 40 and emits absorbed radiation back into the atmosphere within the  
 41 standards set forth in this part.

42           ~~(7)-(5)~~ "Date of sale" means the day when the product is  
 43 physically delivered to the buyer.

44           ~~(8)-(6)~~ "Department" means the Department of Community  
 45 Affairs.

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

51           ~~(10)-(8)~~ "Energy conservation standard" means:

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

56           (b) A design requirement for the products specified in s.

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57 553.957; or

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

60

61 includes any other requirements which the department may  
62 prescribe.

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

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

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

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

77 (15) "Low-sloped roof" means a roof with a slope of a rise  
78 of zero units in a horizontal length up to, and including, roofs  
79 with slopes of a rise of 2 units in a horizontal length of 12  
80 units.

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

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85        ~~(17)-(12)~~ "Manufacturer" means any person or business  
86        entity engaged in the original production or assembly of a  
87        product.

88        ~~(18)-(13)~~ "New product" means a product that is sold,  
89        offered for sale, or installed for the first time and  
90        specifically includes floor models and demonstration units.

91        ~~(19)-(14)~~ "Nominal input voltage" means an input voltage  
92        within plus 5 percent or minus 5 percent of a specified value.

93        ~~(20)-(15)~~ "Nominal lamp watts" means the wattage at which a  
94        fluorescent lamp is designed to operate.

95        ~~(21)-(16)~~ "Occupancy" means an occupied building or part of  
96        a building.

97        ~~(22)-(17)~~ "Operation" means the ability to start the lamp  
98        at least 8 times out of 10 with a minimum of 1 minute between  
99        attempts when tested under test conditions.

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

106        ~~(24)-(18)~~ "Power input" means the rate of energy  
107        consumption in watts of a ballast and fluorescent lamp or lamps.

108        ~~(25)-(19)~~ "Relative light output" means the test ballast  
109        light output divided by a reference ballast light output using  
110        the same reference lamp and expressing the value as a percent.

111        (26) "Solar reflectance" means the fraction of solar  
112        energy reflected by a material.

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113        (27) "Steep-sloped roof" means a roof with a slope of  
114 greater than 2 units in a horizontal length of 12 units.

115        (28)~~(20)~~ With respect to refrigerators, freezers, and  
116 refrigerator-freezers:

117        (a) "Automatic defrost system" means a defrost system in  
118 which the defrosting action for all refrigerated surfaces is  
119 initiated and terminated automatically.

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

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

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

140        (29)~~(21)~~ Definitions used in the code shall also apply to

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141 terms used in this part.

142 Section 2. Subsection (1) of section 553.957, Florida  
 143 Statutes, is amended to read:

144 553.957 Products covered by this part.—

145 (1) The provisions of this part apply to the testing,  
 146 certification, and enforcement of energy conservation standards  
 147 for the following types of new products sold in the state:

148 (a) Refrigerators, refrigerator-freezers, and freezers  
 149 which can be operated by alternating current electricity,  
 150 excluding:

- 151 1. Any type designed to be used without doors; and
- 152 2. Any type which does not include a compressor and  
 153 condenser unit as an integral part of the cabinet assembly.

154 (b) Lighting equipment.

155 (c) Showerheads.

156 (d) Nonresidential roofs and roofing materials.

157 (e) Nonresidential hardscapes and related materials.

158 (f) ~~(d)~~ Any other type of consumer product which the  
 159 department classifies as a covered product as specified in this  
 160 part.

161 Section 3. Subsection (4) of section 553.963, Florida  
 162 Statutes, is renumbered as subsection (6) and amended, and new  
 163 subsections (4) and (5) are added to that section, to read:

164 553.963 Energy conservation standards.—

165 (4) STANDARDS FOR NONRESIDENTIAL ROOFS.—

166 (a) This subsection does not apply to:

- 167 1. The repair or replacement of less than 50 percent by  
 168 area of a roof in existence before July 1, 2011.

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169        2. The portion of the roof acting as a substructure for  
170 and covered by a rooftop deck.

171        3. Vegetation associated with an extensive or intensive  
172 green roof as defined by the United States Environmental  
173 Protection Agency for the purpose of reducing the heat island  
174 effect.

175        4. A rooftop deck covering a maximum of one-third of the  
176 rooftop total gross.

177        5. Any area utilized by photovoltaic and solar equipment.

178        (b) All roof exterior surfaces and roofing materials shall  
179 have a minimum solar reflectance as certified by one of the  
180 following:

181            1. ASTM E903 or ASTM E1918.

182            2. A test with a portable reflectometer at near ambient  
183 conditions.

184            3. The Cool Roof Rating Council.

185            4. The United States Department of Energy's Energy Star  
186 program.

187        (c) Low-sloped roofs constructed as part of a new building  
188 shall use roofing products with an initial minimum reflectance  
189 value of 0.72 or a 3-year installed reflectance value of 0.5 as  
190 determined by the Cool Roof Rating Council or the United States  
191 Department of Energy's Energy Star program. If greater than 50  
192 percent of the total gross area is covered with vegetation  
193 associated with an extensive or intensive green roof as defined  
194 by the United States Environmental Protection Agency for the  
195 purpose of reducing the heat island effect, the remainder of the  
196 roof shall have a minimum solar reflectance value of 0.30.

197 (d) Ballasted roofs constructed as part of a new building  
 198 shall have a minimum solar reflectance value of 0.30.

199 (e) Steep-sloped roofs shall have an initial minimum solar  
 200 reflectance value of 0.15.

201 (f) Roofs with multiple slopes shall be subject to those  
 202 standards applicable to the slope that covers the largest area  
 203 of the building's footprint.

204 (5) STANDARDS FOR NONRESIDENTIAL HARDSCAPES.-

205 (a) All hardscape surfaces and related materials shall  
 206 have a minimum solar reflectance as certified by ASTM E903 or  
 207 ASTM E1918 or a test with a portable reflectometer at near  
 208 ambient conditions.

209 (b) One of the following default solar reflectance values  
 210 for paving materials may be used:

- |     |  |             |
|-----|--|-------------|
| 211 | <u>1. Typical new gray concrete</u>        | <u>0.35</u> |
| 212 | <u>2. Typical weathered concrete</u>       | <u>0.20</u> |
| 213 | <u>3. Typical new white concrete</u>       | <u>0.70</u> |
| 214 | <u>4. Typical weathered white concrete</u> | <u>0.40</u> |
| 215 | <u>5. New asphalt</u>                      | <u>0.05</u> |
| 216 | <u>6. Weathered asphalt</u>                | <u>0.10</u> |

217 (c) A minimum of 50 percent of the hardscape area of a  
 218 site with new construction shall comply with one of the  
 219 following:

- 220 1. Shade for solar panels or roofing materials with a  
 221 minimum solar reflectance of 0.30.
- 222 2. Shade from trees within 5 years of occupancy.
- 223 3. Paving materials with a minimum solar reflectance of  
 224 0.30.



- 225        4. A pervious pavement system.  
 226        5. A minimum of 50 percent of parking spaces placed 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 of 0.30.

230        ~~(6)-(4)~~ STANDARDS FOR OTHER COVERED PRODUCTS.—

231        (a) The department may prescribe an energy conservation  
 232 standard for any type or class of covered products of a type  
 233 specified in s. 553.957, except where precluded by federal law,  
 234 if the department determines that:

- 235        1. The average per occupancy energy use within this state  
 236 resulting from performance of products of such type or class  
 237 exceeded 80 kilowatt hours or its Btu equivalent for any 12  
 238 calendar-month period ending before such determination; and  
 239        2. Substantial improvement in the energy efficiency of  
 240 products of such type or class is technologically feasible.

241        (b) The department may prescribe an energy conservation  
 242 testing and rating standard for any type or class of covered  
 243 products of a type specified in s. 553.957 if the department  
 244 determines that the certifications to the state and uniform  
 245 product labeling required by this part will improve the  
 246 enforceability of the code.

247        (c) Any new or amended standard for covered products of a  
 248 type specified in s. 553.957(1) ~~(f)-(d)~~ shall not apply to  
 249 products manufactured within 2 years after the publication of a  
 250 final rule establishing such standard.

251        Section 4. This act shall take effect July 1, 2011.