

1                                   A bill to be entitled  
 2           An act relating to thermal efficiency standards;  
 3           amending s. 403.814, F.S.; requiring that the  
 4           Department of Environmental Protection and the  
 5           applicable water management district grant a general  
 6           permit for the construction, alteration, and  
 7           maintenance of certain surface water management  
 8           systems; authorizing the construction of certain  
 9           surface water management systems to proceed without  
 10          further action by the department or the water  
 11          management district; reordering and amending s.  
 12          553.902, F.S.; providing definitions for the terms  
 13          "ballasted roof," "hardscape," "heat island effect,"  
 14          "low-sloped roof," "solar reflectance" or  
 15          "reflectance," and "steeped-sloped roof"; creating s.  
 16          553.9045, F.S.; providing standards for a thermal-  
 17          efficient roof; requiring that roof exterior surfaces  
 18          and roofing material of a thermal-efficient roof have  
 19          a minimum solar reflectance; providing testing  
 20          standards; providing exceptions; creating s. 553.9046,  
 21          F.S.; defining thermal-efficient hardscapes; providing  
 22          default reflectance values for certain paving  
 23          materials; providing an effective date.

24  
 25   Be It Enacted by the Legislature of the State of Florida:

26  
 27           Section 1. Subsection (12) is added to section 403.814,  
 28   Florida Statutes, to read:

HB 747

2012

29 403.814 General permits; delegation.—

30 (12) The department and the applicable water management  
31 district shall grant a general permit for the construction,  
32 alteration, and maintenance of a surface water management system  
33 serving a total project area of up to 10 acres. The  
34 construction, alteration, and maintenance of such a system may  
35 proceed without any further agency action by the department or  
36 water management district if:

37 (a) The total project area is less than 15 acres;

38 (b) The total project area involves less than 2 acres of  
39 impervious surface or no more than 5 acres of impervious surface  
40 if that surface is a thermal-efficient hardscape as provided in  
41 s. 553.9046;

42 (c) The activities do not impact wetlands or other surface  
43 waters;

44 (d) The activities are not conducted in, on, or over  
45 wetlands or other surface waters;

46 (e) The drainage facilities do not include pipes having  
47 diameters greater than 24 inches, or the hydraulic equivalent,  
48 and do not use a pump in any manner;

49 (f) The project is not part of a larger common plan,  
50 development, or sale;

51 (g) The project does not cause:

52 1. Adverse water quantity impacts or flooding to receiving  
53 water and adjacent lands;

54 2. Adverse impacts to existing surface water storage and  
55 conveyance capabilities;

56 3. A violation of state water quality standards; or

57 4. Adverse impacts to the maintenance of surface or ground  
 58 water levels or surface water flows established pursuant to s.  
 59 373.042 or to a work of the district conducted pursuant to s.  
 60 373.086; and

61 (h) The design plans for the surface water management  
 62 system are signed and sealed by a Florida-registered  
 63 professional who attests that the system will perform and  
 64 function as proposed and that it has been designed in accordance  
 65 with appropriate, generally accepted performance standards and  
 66 scientific principles.

67 Section 2. Section 553.902, Florida Statutes, is reordered  
 68 and amended to read:

69 553.902 Definitions.—As used in this part, the term ~~For~~  
 70 ~~the purposes of this part:~~

71 (3)(1) "Exempted building" means:

72 (a) A ~~Any~~ building or portion thereof whose peak design  
 73 rate of energy usage for all purposes is less than 1 watt (3.4  
 74 Btu per hour) per square foot of floor area for all purposes.

75 (b) A ~~Any~~ building that ~~which~~ is neither heated nor cooled  
 76 by a mechanical system designed to control or modify the indoor  
 77 temperature and powered by electricity or fossil fuels.

78 (c) A ~~Any~~ building for which federal mandatory standards  
 79 preempt state energy codes.

80 (d) An ~~Any~~ historical building as described in s.  
 81 267.021(3).

82  
 83 The Florida Building Commission may recommend to the Legislature  
 84 additional types of buildings which should be exempted from

85 compliance with the Florida Energy Efficiency Code for Building  
 86 Construction.

87 ~~(7)-(2)~~ "HVAC" means a system of heating, ventilating, and  
 88 air-conditioning.

89 ~~(10)-(3)~~ "Renovated building" means a residential or  
 90 nonresidential building undergoing alteration that varies or  
 91 changes insulation, HVAC systems, water heating systems, or  
 92 exterior envelope conditions, ~~if provided~~ the estimated cost of  
 93 renovation exceeds 30 percent of the assessed value of the  
 94 structure.

95 ~~(8)-(4)~~ "Local enforcement agency" means the agency of  
 96 local government which has the authority to make inspections of  
 97 buildings and to enforce the Florida Building Code. It includes  
 98 any agency within the definition of s. 553.71(5).

99 ~~(4)-(5)~~ "Exterior envelope physical characteristics" means  
 100 the physical nature of those elements of a building which  
 101 enclose conditioned spaces through which energy may be  
 102 transferred to or from the exterior.

103 ~~(2)-(6)~~ "Energy performance level" means the indicator of  
 104 the energy-related performance of a building, including, but not  
 105 limited to, the levels of insulation, the amount and type of  
 106 glass, and the HVAC and water heating system efficiencies.

107 (1) "Ballasted roof" means a roof having a minimum of 15  
 108 pounds per square foot of ballast for the purpose of weighing  
 109 down a roofing membrane over a substrate to resist wind uplift.  
 110 For purposes of this subsection, ballast includes, but is not  
 111 limited to, river rock aggregate and pavers.

112 (5) "Hardscape" means the impervious, nonliving portions

HB 747

2012

113 of a property's landscaping, including, but not limited to,  
114 roads, sidewalks, courtyards, and parking lots.

115 (6) "Heat island effect" means an elevated temperature  
116 over an urban area compared to rural areas, typically caused by  
117 the increased presence of dark, heat-absorbing materials.

118 (9) "Low-sloped roof" means a roof having a slope of rise  
119 of 0 units in a horizontal length, up to and including, a roof  
120 having a slope of rise of 2 units in a horizontal length of 12  
121 units.

122 (11) "Solar reflectance" or "reflectance" means the amount  
123 of solar energy reflected by a material.

124 (12) "Steep-sloped roof" means a roof having a slope of  
125 rise greater than 2 units in a horizontal length of 12 units.

126 Section 3. Section 553.9045, Florida Statutes, is created  
127 to read:

128 553.9045 Thermal-efficient roofs.—

129 (1) Standards for a thermal-efficient roof:

130 (a) A low-sloped roof must have a minimum initial  
131 reflectance of 0.72 or a 3-year installed reflectance of 0.5 as  
132 determined by the Cool Roof Rating Council or the Energy Star  
133 program of the United States Environmental Protection Agency and  
134 the United States Department of Energy. If more than 50 percent  
135 of the total gross area of the roof is covered with vegetation  
136 associated with an extensive or intensive green roof as defined  
137 by the United States Environmental Protection Agency for the  
138 purpose of reducing the heat island effect, the remainder of the  
139 roof must have a minimum reflectance of 0.30.

140 (b) A ballasted roof must have a minimum initial

HB 747

2012

141 reflectance of 0.30.

142 (c) A steep-sloped roof must have a minimum initial  
143 reflectance of 0.15.

144 (d) A roof that has multiple slopes is subject to the  
145 standards applicable to the slope that covers the largest area  
146 of the building's footprint.

147 (2) All roof exterior surfaces and roofing materials of a  
148 thermal-efficient roof must have a minimum reflectance as  
149 certified by one of the following:

150 (a) The American Society for Testing and Materials ASTM  
151 E903 or ASTM E1918 standard.

152 (b) A test using a portable reflectometer at near-ambient  
153 conditions.

154 (c) The Cool Roof Rating Council.

155 (d) The Energy Star program of the United States  
156 Environmental Protection Agency and the United States Department  
157 of Energy.

158 (3) This section does not apply to:

159 (a) The portion of a roof acting as a substructure for and  
160 covered by a rooftop deck.

161 (b) The portion of a roof covered with vegetation  
162 associated with an extensive or intensive green roof as defined  
163 by the United States Environmental Protection Agency for the  
164 purpose of reducing the heat island effect.

165 (c) A rooftop deck covering a maximum of one-third of the  
166 rooftop total gross area.

167 (d) An area of the roof covered by photovoltaic and solar  
168 equipment.

HB 747

2012

169 Section 4. Section 553.9046, Florida Statutes, is created  
170 to read:

171 553.9046 Thermal-efficient hardscapes.—A thermal-efficient  
172 hardscape is the portion of impervious, nonliving improvements  
173 of a property's landscaping, including, but not limited to,  
174 roads, sidewalks, courtyards, and parking lots which has a  
175 minimum initial reflectance of 0.30 as certified by the American  
176 Society for Testing and Materials ASTM E903 or ASTM E1918  
177 standard or a test using a portable reflectometer at near-  
178 ambient conditions. When measuring the minimum initial  
179 reflectance, one of the following reflectance values for paving  
180 materials may be used:

- 181 (1) Typical new gray concrete, 0.35.  
182 (2) Typical weathered concrete, 0.20.  
183 (3) Typical new white concrete, 0.70.  
184 (4) Typical weathered white concrete, 0.40.  
185 (5) New asphalt, 0.05.  
186 (6) Weathered asphalt, 0.10.

187 Section 5. This act shall take effect July 1, 2012.