



**Residential Deck Information**

The following is a **GENERAL** listing of building code information for a STANDARD deck (without a roof, hot tub, enclosure, etc.) constructed within the City of Spring Hill. It is for information purposes only and is not to be construed to be the Spring Hill City Building Code in its entirety. Nor does this information provide design specifications, which may be unique to the building site conditions.

<b>DESIGN CRITERIA</b>	<ul style="list-style-type: none"> <li>Minimum design live load for a standard deck is 40 pounds per square foot</li> </ul>	R301.5
<b>FOOTING SIZE</b>	<ul style="list-style-type: none"> <li>Minimum - 8" thick; 16" diameter or square, centered under the posts <a href="#">see illustration on last page</a></li> </ul>	Spring Hill Standard
<b>FOOTING DEPTH</b>	<ul style="list-style-type: none"> <li>Minimum 12" from finished grade to the bottom of the footing on natural soil</li> </ul>	Table R301.2 (1)
<b>LUMBER</b>	<ul style="list-style-type: none"> <li>Decay-resistant and termite-resistant wood</li> </ul>	R319.1.2
<b>BAND BOARD &amp; CONNECTION OF THE DECK TO THE HOUSE</b>	<ul style="list-style-type: none"> <li>Minimum size of ledger band - same size as joist</li> <li>1/2 " or larger carriage bolts, lags or expansion bolts</li> <li>The deck is required to be constructed freestanding if the bolted connection of the ledger band is not visible for inspection from inside the house, or if it is connected to a pre-engineered floor system, or to cantilevered joists, or to brick veneer</li> </ul>	502.2.2 Spring Hill Standard 502.2.2
<b>Floor Joist</b>	<ul style="list-style-type: none"> <li>Maximum clear span based on R502.3.1 (2) – 40lb live load, 10 lb dead load</li> <li>Minimum 1 1/2" bearing at ends of joists - use joist hangers or 2x2 ledger</li> <li>Maximum cantilever – 2 feet</li> </ul>	R502.3.1 (2)  502.6.2  Spring Hill Standard
<b>BEAMS</b>	<ul style="list-style-type: none"> <li>Minimum 3" bearing</li> <li>Beam-to-post connection, minimum one 1/2" carriage bolts per notched post</li> <li>Maximum cantilever - 2 feet</li> </ul>	R502.6 Spring Hill Standard  Spring Hill Standard
<b>GUARDRAILS</b>	<ul style="list-style-type: none"> <li>Required when floor surface of deck is 30" or more above finished grade</li> <li>Height - 36" minimum, intermediate 4x4 posts, spaced 8 feet on center maximum</li> <li>Pickets (horizontal or vertical) spaced to prevent passage of a 4" sphere</li> </ul>	R312.1  Spring Hill Standard  R312.2
<b>STAIRWAY</b>	<ul style="list-style-type: none"> <li>Design load - 40 psf or concentrated load of 300 lb</li> <li>Closed risers are required when 30" or more above grade, or 3 risers</li> <li>Tread length minimum = 10"</li> <li>Riser height maximum = 7 3/4" +/- 3/8" top to bottom of steps</li> </ul>	Table R301.5 R311.5.3.3  R311.5.3.2 R311.5.3.1

	<ul style="list-style-type: none"> <li>Landing at top and bottom, artificial light for treads</li> </ul>	R311.5.4, R303.6
<b>HANDRAIL</b>	<ul style="list-style-type: none"> <li>Required on at least one side of stairs with 4 or more risers or 30" high</li> <li>Located 34" to 38" above the nosing of the tread</li> <li>Graspable shape with a grip size 1 1/4" minimum to 2" maximum</li> </ul>	R312.1  R311.5.6.1 R311.5.6.3
<b>CONNECTORS AND FASTENERS</b>	<ul style="list-style-type: none"> <li>Corrosion-resistant coating or stainless steel. All metal must be compatible with chemicals used to treat the lumber.</li> </ul>	R319.3
<b>REQUIRED INSPECTIONS</b>	<ul style="list-style-type: none"> <li>FOOTING - Prior to the placement of concrete</li> <li>LOW DECK FRAMING (If deck is less than 36" from grade)</li> <li>FINAL</li> </ul>	

These tables are taken from existing tables in the 2006 International Residential Code. Other materials, configurations or engineered designs may be utilized that fall within the guidelines of this code.

**TABLE 1: JOIST SPAN CHART**

Spacing of Joists o.c.

JOIST SIZE	12"	16"	19.2"	24"
2" x 6"	10'-9"	9'-9"	9'-2"	8'-6"
2" x 8"	14'-2"	10'-12"	12'-1"	11'-0"
2" x 10"	18'-0"	1'-16"	14'-8"	13'-1"
2" x 12"	21'-9"	1'-18"	17'-2"	15'-5"

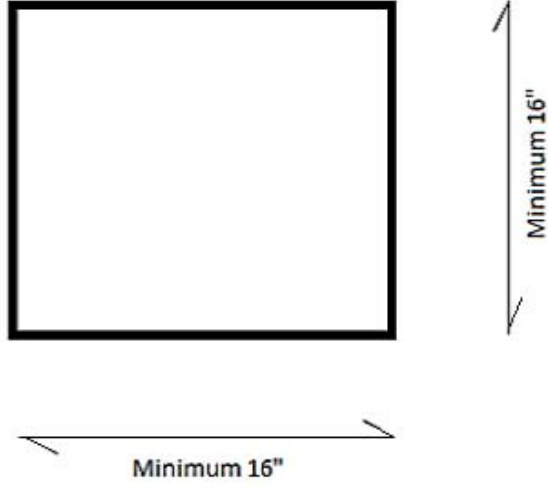
*Note: Above span length are clear span dimensions between bearing points. (Based on No. 2 pine)*

**TABLE 2: DECK POST SIZING**

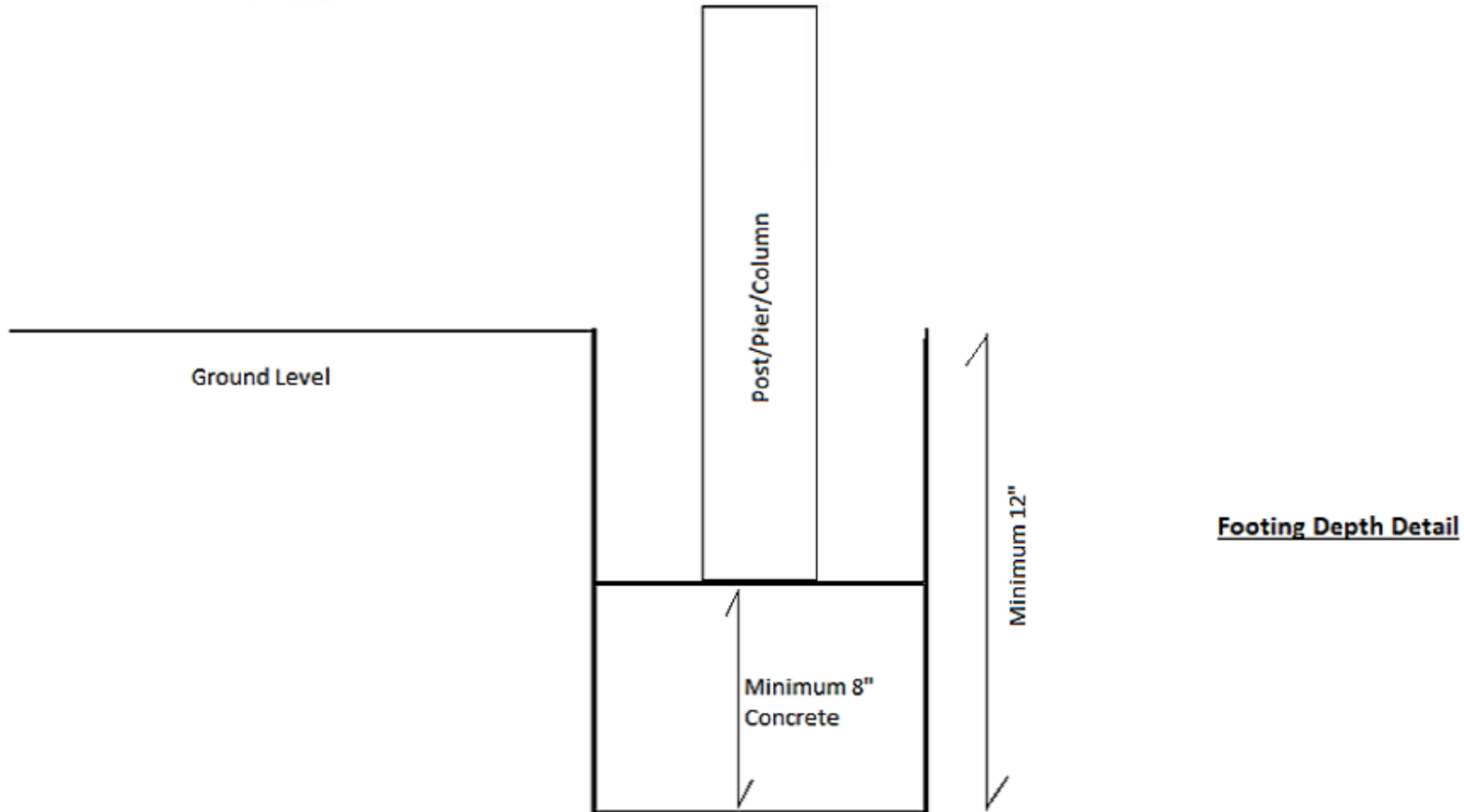
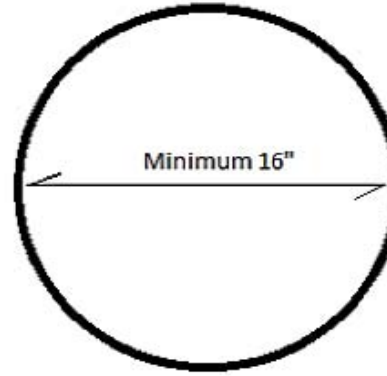
POST HEIGHT	WOOD POST	
	SIZE	ROUND METAL (Sch. 40)
0" to 8'-0"	4" x 4"	3" Dia.
8' to 12'	6" x 6"	3" Dia.

*Note: Call the Codes office if your posts are greater than 12 feet in height or have provide an engineered design.*

**Square Footing Detail**



**Round Footing Detail**



**Footing Depth Detail**