



TO: Development Services Customers  
SUBJECT: **INFORMATION BULLETIN 151**  
Residential Deck Permits  
DATE: October 1, 2008  
*Revised February 23, 2012/August 1, 2014*  
CREATED BY: Plan Review Division

---

**Purpose:**

As a customer service initiative, the Development Services Department (DSD) has developed this **revised** information bulletin to describe the process and the minimum requirements for obtaining residential deck permits. This bulletin has been updated to incorporate the department's new format for Information Bulletins.

**Scope:**

Per the 2012 International Residential Code (IRC) as currently adopted by the City, a building permit is required for all residential decks that do not meet all four conditions listed below:

1. The deck does not exceed 200 sq. ft. in area;
2. The deck is not more than 30 inches above grade at any point;
3. The deck is not attached to a dwelling; and
4. The deck does not serve the exit door of the dwelling required by 2012 IRC Section R311.4.

If your proposed residential deck meets all four of the criteria listed above, you are not required to obtain a building permit from DSD. Please note that exemption from permit requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of the 2012 IRC or any other City law or ordinance.

For decks that require a building permit (i.e., do not meet all of the four criteria listed above), the permitting process is outlined below.

**I. Decks Built at the Same Time as the One- or Two- Family Dwelling**

If the residential deck is to be constructed as part of and at the same time as the new one- or two-family dwelling, the applicant is to follow the instructions and submittal procedures listed in DSD Information Bulletin (IB) 100. The construction documents

submitted for the one- and two-family dwelling shall include the residential deck design details (i.e., footings, decking, stairs, handrails, guards, joist spans, etc.) to clearly show code compliance and will be reviewed as part of the residential building permit.

## **II. Decks Built to an Existing One- or Two- Family Dwelling**

Where a residential deck is to be built to an existing one- or two-family dwelling, the applicant is to submit the following to DSD:

- a. A completed “[General Repair/Residential Permit Application](#)” signed and dated by the applicant.
- b. For decks less than 1,000 sq.ft. and only one (1) story in height, the application is to include a detailed site plan drawn to scale showing the size of the lot, the location of the existing structure(s), easements and the proposed residential deck. The construction details (i.e., footings, decking, stairs, handrails, guards, joist spans, etc.) will be verified during the required inspections by the DSD inspector.
- c. For decks 1,000 sq.ft. or greater or more than one (1) story in height, the applicant is to submit two (2) complete set of construction documents for the residential deck. The detailed plans must clearly show that the proposed work will conform to the provisions of COSA’s applicable building code(s). The plans shall be to scale and shall include, at a minimum, the following.
  1. A detailed site plan drawn to scale showing the size of the lot, the location of all existing structure(s), easements and the proposed deck
  2. Floor framing plan(s) including post foundation layout and dimensions, size and spacing of joists, size of beams and size and depth of footings
  3. Connections of all structural members
  4. Guardrail, handrail and stair details
  5. Electrical wiring and equipment (if applicable)

## **III. Structural Design**

When designing and constructing a residential deck, the applicant may choose one of two options for structural code compliance.

- a. The first option is to follow the prescriptive design criteria given in the City’s adopted building codes (2012 IRC and 2012 International Building Code – each with [adopted amendments](#)). When using this option, it is up to the applicant and/or homeowner to clearly demonstrate that the proposed deck meets the applicable design requirements of the City’s code. At a minimum, the following information shall be provided to the DSD inspector upon foundation inspection (II.b) or with the permit application (II.c).
  1. Evidence of the soil’s structural characteristics (e.g., load bearing values, expansive soil classification)
  2. Minimum width and depth of footings

3. Where footings are located on or adjacent to slopes steeper than 1 unit vertical in 3 units horizontal, demonstrate compliance with 2012 IRC Section R403.1.7
  4. Species and grade of deck materials
- b. The second option is to have the deck, including the foundation/footings, framing and decking, designed by a Texas licensed professional engineer.
1. For decks less than 1000 sq.ft. and only one (1) story in height (II.b), the applicant and/or homeowner shall submit a letter at the time of foundation inspection certifying that the engineer has inspected the foundation during the construction and has found it to be capable of accommodating all load according the City's codes and of transmitting the resulting loads to the supporting soil (See 2012 IRC Section R401.2). The letter shall be signed and sealed by the engineer.
  2. For decks 1000 sq.ft. or more and/or more than one (1) story in height (II.c), the applicant shall submit construction documents with the permit application that are signed and sealed by the engineer and clearly detail the deck design. The applicant and/or homeowner shall also submit a letter at the time of foundation inspection similar to Item III.b.1 above.

#### **IV. General Design Notes**

- Decks must be designed to support a minimum live load 40 psf (2012 IRC Table R301.5). If the intended use of the deck warrants a higher live load, the higher value shall be used for design purposes.
- A flight of stairs shall not have a vertical rise larger than 12-feet between floor levels or landings. (R311.7.3)
- Minimum clear width of stairways is 36 inches (R311.7.1)
- Maximum riser height for stairs shall be 7-¾ inches (R311.7.5.1)
- Minimum tread depth of steps shall be 10 inches (R311.7.5.2)
- Handrails shall be provided on at least one side of each continuous run of treads or flight with four (4) or more risers (R311.7.8)
- Handrail height shall be between 34 and 38 inches (R311.7.8.1)
- Guardrails shall be installed along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side (R312.1.1).
- Minimum height of required guardrails is 36 inches measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of treads (R312.1.2).
- Guard openings shall not allow passage of a sphere 4 inches or more in diameter (R312.1.3)

If you have any questions on this process, please contact the Plan Review Staff at **(210) 207-8297**.

**Summary:**

This Information Bulletin is for informational purposes only.

**Prepared by:** Florence Gutierrez, Plans Examiner Supervisor

**Reviewed by:** Richard Chamberlin PE, Development Services Engineer

**Authorized by:** Terry Kannawin, Assistant Director