City of Scott City

Residential Footing and Foundation Inspection Checklist

This inspection checklist reflects the code requirements of the 2015 International Residential Code (IRC)

Please verify the following before calling for a Footing & Foundation Inspection.

Permits and Plans

- ☐ Job address is posted in a visible location. (IRC R319.1)
- ☐ Permit and approved plans are on site and accessible to the inspector (IRC R106.3.1 and R105.7)
- ☐ Plans have been reviewed for any special inspection requirements. (IRC R401.4)
- ☐ Check approved plans for building height and setback restrictions

Location on Property

- ☐ The footings and foundation are not located within the setback.

Footings

- ☐ A safe and clear walking path to the site and formwork is provided.
- ☐ The footings are constructed per the approved plans. (R403)
- ☐ All loose soil, mud or water is removed from the bottom of the footing. Debris, water and/or ice removed from spaces occupied by concrete. Footings shall be supported on undisturbed natural soils or engineered fill. (IRC R403.1)
- ☐ Steel reinforcement is properly placed and is the correct grade (grade 40 minimum). (IRC R403.1.3.5.1, R403.1.3.5.3)
    - Steel reinforcement in concrete cast against the earth shall have a minimum cover of 3”
    - Minimum cover for reinforcement in concrete cast in removable forms that will be exposed to the earth or weather shall be 1.5” for No. 5 bars and smaller and 2” for No. 6 bars and larger.
    - For concrete cast in removable forms that will not be exposed to the earth or weather, and for cast concrete in stay-in-place forms, minimum cover shall be ¾”.
- ☐ Where spliced are required in the reinforcement, lap splices are in accordance with Table R608.5.4 (1) and Figure R608.5.4 (1). (IRC R403.1.3.5.4)
- ☐ Top surface of footings are level. Bottom surface does not slope more than one vertical unit in ten horizontal units (footings shall be stepped if slope is greater than 1 in 10). (IRC R403.1.5)
- ☐ Footings project at least 2” beyond the face of the foundation at least 2” but not more than the thickness of the footing. (IRC R403.1.1)

***Disclaimer**: This is a checklist to be used for preparation of an inspection. It is a summary of applicable codes and does not cover all codes or possible conditions. Please refer to the applicable codes for more information. Code books can be viewed at City Hall.*
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- ☐ Footings for masonry chimneys are constructed of steel reinforced concrete or solid masonry not less than 12” thick and extends at least 6” beyond the face of the foundation or support walls on all sides. Footing is on undisturbed soil below frost depth. (IRC R1003.2)

Foundation

- ☐ Steel reinforcement of at least Grade 40 is used. The center of the vertical reinforcement in basement walls is determined per IRC Tables R404.1.2(2) through R4041.2(7) and is located on the centerline of the wall. (IRC R404.1.3.3.7)
- ☐ Thickness of the concrete foundation walls is equal to or greater than the thickness of the wall in the story above. (IRC R404.1.5.2)
- ☐ Foundation walls extend at least 4” above grade where masonry veneer is used and 6” above grade elsewhere. (IRC R404.1.6)
- ☐ Anchor bolts are a minimum of ½” diameter and are spaced a maximum of 6” on center. (IRC R403.1.6)
- ☐ Anchor bolts extend at least 7” into the concrete. (IRC R403.1.6)
- ☐ Anchor bolts are located in the middle third of the width of the plate. (IRC R403.1.6)
- ☐ Minimum of two bolts are provided per plate section with one bolt located not more than 12” or less than seven bolt diameters from the end of the plate section. (IRC R403.1.6 see exceptions)
- ☐ Surface drainage away from foundation walls provides a fall of at least 6-inches in the first 10-feet. (IRC R401.3 see exceptions)
- ☐ Within the building footprint, the space between grade and the bottom of the joists is a minimum of 18” or the lumber is treated wood or wood of natural resistance to decay. (IRC R317.1)
- ☐ Within the building footprint, the space between grad and the bottom of beams is a minimum of 12” or the lumber is treated wood or wood of natural resistance to decay. (IRC R317.1)
- ☐ Waterproofing/Dampproofing of foundation exterior walls is applied. (IRC R406.1)
- ☐ Crawlspace vents, incorporated into foundation walls are appropriately sized and located per IRC R408.1. Unvented crawspaces are allowed provided they meet the requirements of IRC R408.3.
- ☐ Backfill is not placed against the wall until the wall has sufficient strength and has been anchored to the floor above or has been sufficiently braced to prevent damage by the backfill. (exception for walls less than 4’). (IRC R404.1.7)