Footing Inspection Checklist

Task: Inspect Footings				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Inspect Footing Environment Section R401, R403 Table R401.4.1	1. Determine if the soil has a minimum bearing capacity of 1,500 psf or if the footing is designed to engineering standards.			
	2. If the complete soils report is not available, then determine the load-bearing values from Table R401.4.1.			
	3. If expansive, compressible or shifting soils are present, then determine if such soils are: • Removed to a depth and width that ensures stable moisture content and not used for backfill.			
	4. Determine if the soil in the area of the footings is undisturbed (not filled).			
	5. Verify that the soil in the area of the footings is consistent (no soft spots, color changes or exposed strata).			
	6. Check the footing area for standing water.			
	7. Check for debris within the footing area.			
2. Inspect Minimum Footing Width and Thickness Section R403 Figure R403.1(1) Tables R402.2, R403.1	1. Measure and determine the actual footing width and thickness.			
	2. Compare actual dimensions with those on the approved construction documents.			
	3. Using Tables R403.1(1) through R403.1(3), verify that the actual footing width and thickness is in compliance with the code.			
	4. Determine if the actual depth of the footing is not less than the footing projection (P).			
	5. Determine if the concrete strength meets approved construction documents and the minimum requirements in Table R402.2.			
3. Inspect Footing Placement Sections R403, R403.1.4 Figure R403.1(1)	1. Determine if the bottom of all exterior footings extend at least 12 inches below undisturbed ground surface.			
	2. Determine if the bottom of the footing is below the frost line, unless otherwise protected.			

oting Inspection Checklist (continued)

Task: Inspect Footings				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
Inspect Footing Continuity, Surface and Step ection R403, 403.1.5 igure R403.1(1)	1. Determine if footings are continuous.			
	2. Determine if the top surface of the footing is level and that the bottom surface does not exceed a 1:10 slope			
	3. If the bottom surface of the footing would otherwise exceed a 1:10 slope, then verify that the footing is stepped correctly.			

Foundation Inspection Checklist

Task: Inspect Foundation				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Inspect Foundation Construction Section R404.1 Figure R403.1(1) Section R403.1.6	1. Determine: • Foundation walls are centered on footings. • Footing projection (P) is a minimum of 2 inches on each side. • Footing projection does not exceed the footing thickness (T).			
	2. Determine that, if anchor bolts are used, they are: • Set at least 7 inches into concrete or masonry foundation. • Not more than 6 feet on center. • Not more than 12 inches from the ends of each plate or less than seven bolt diameters from each end of the plate section. • Placed in middle third of width of sill plate. • At least ½ inch in diameter. • Attached to plate with washer and nut tightened down to plate. • If in SDC C, D_0, D_1 or D_2, then anchor bolts are located in all interior bearing walls and interior braced wall lines.			
	3. If other foundation anchorage is used, determine if: • It is an approved type. • It is installed per the manufacturer's installation instructions. • If straps are used, they are spaced to provide equivalent anchorage to $^1/_2$-inch anchor bolts in accordance with the manufacturer's installation instructions.			
	4. Confirm that concrete meets or exceeds the strength requirements in Table R402.2.			

Foundation Inspection Checklist (continued)

Task: Inspect Foundation				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
2. Inspect Minimum Foundation Wall Thickness and Maximum Unbalanced Backfill Height Section R404.1.1	1. Measure the foundation wall thickness.			
	2. Determine the height of unbalanced backfill (distance from the floor to the finished grade).			
	3. Identify the type of construction material and type of lateral support.			
	4. Identify and/or determine the soil classification of the backfill material.			
	5. Check for No. 4 horizontal reinforcing bars in all concrete foundation walls (Section R404.1.3.2 and Table R404.1.2(1): • If wall is not more than 8 feet in height, one No. 4 bar within 12 inches of the top and one No. 4 bar near mid-height of foundation wall. • If wall is more than 8 feet in height, one No. 4 bar within 12 inches of the top and one No. 4 bar near one-third points of foundation wall.			
	6. If walls are subject to hydrostatic pressure from ground water **or** support more than 4 feet of unbalanced backfill and do not have permanent lateral support at top and bottom, then design is required in accordance with engineering practice.			
	7. If foundation walls are plain masonry, confirm minimum wall thickness and maximum height of unbalanced backfill with Table R404.1.1(1).			
	8. Plain masonry foundation walls located in SDC D_0, D_1 or D_2, must: • Not exceed 8 feet in height. • Not support more than 4 feet of unbalanced backfill. • Be a minimum 8 inches nominal in thickness. • Have one #3 vertical bar at 4 feet on center. • Have two #4 horizontal bars within the top 12 inches. (Section R404.1.4.1). • Concrete foundation walls without vertical reinforcing and located in SDC D_0, D_1 or D_2 must: • Not exceed 8 feet in height. • Not support more than 4 feet of unbalanced backfill. • Be a minimum of 6 inches thick for up to a 4½-foot-tall wall or 7½ inches thick, if taller. (Section R404.1.4.2).			

Foundation Inspection Checklist (continued)

Task: Inspect Foundations				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
2. Inspect Minimum Foundation Wall Thickness and Maximum Unbalanced Backfill Height Section R404.1.1	9. If foundation walls are concrete with reinforcing, use Tables R404.1.2(2) through R404.1.2(8) or masonry with reinforcing, use Tables R404.1.1(2), R404.1.1(3) or R404.1.1(4) to confirm that minimum wall thickness, maximum height of unbalanced backfill, reinforcement and engineered design comply with the code tables or the approved construction documents. • Confirm that wall thickness meets or exceeds the minimum wall thickness. • Confirm the height of unbalanced backfill does not exceed the allowable height. • Confirm that the vertical reinforcement size and spacing minimums are met. • Refer to Table R404.1.2(9) for minimum spacing for alternate bar sizes and alternative grades of steel.			
	10. Additional requirements for Seismic Design Category D_0, D_1 or D_2 (Section R404.1.4): Masonry foundation walls located in SDC D_0, D_1 or D_2 and supporting more than 4 feet of unbalanced backfill or exceeding 8 feet in height must: • Have two No. 4 horizontal bars located in the upper 12 inches of the wall. • Have vertical reinforcing per Table R404.1.1(2), R404.1.1(3) or R404.1.1(4). (Section R404.1.4.1). Concrete foundation walls located in SDC D_0, D_1 or D_2 and supporting more than 4 feet of unbalanced backfill or exceeding 8 feet in height or less than 7.5 inches in thickness must: • Have vertical reinforcement per Tables R404.1.2(2) through R404.1.2(8). • Have not less than No. 4 vertical bars spaced at 48 inches if Tables R404.1.2(2) through R404.1.2(8) do not require vertical reinforcement. (Section R404.1.4.2).			

2

Foundation Inspection Checklist (continued)

Task: Inspect Foundation				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
3. Inspect Foundation Drainage Section R405.1	1. Determine if drain tiles or pipe are installed at or below the area to be protected.			
	2. Determine if drain tiles or pipe discharge into an approved drainage system.			
	3. Determine if drain tiles or pipe are installed on at least 2 inches of gravel that is larger than pipe perforations or tile joints.			
	4. Determine if drain tiles or pipe are covered by at least 6 inches of gravel.			
	5. If drain tile has open joints, verify that joints are covered with strips of building paper.			
	6. Verify that perforated pipe is surrounded with a filter membrane or that a filter membrane covers the gravel over the pipe.			
4. Inspect Basement Dampproofing or Waterproofing Sections R406.1, R406.2	1. If masonry foundation walls enclose habitable or usable space, then verify that they are covered with 3/8-inch-thick parging of Portland cement from footing to finished grade.			
	2. If masonry or concrete foundation walls enclose habitable or usable space, verify that dampproofing of approved bituminous material is applied from footing to finished grade over concrete or parged masonry walls.			
	3. If a high water table or other severe soil-water conditions exist, then verify that approved waterproofing membrane was applied from the footing to the finished grade over concrete or parged masonry foundation walls. Membrane joints must be lapped and sealed.			

Concrete Slab-On-Ground Inspection Checklist

Task: Inspect Footings				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
1. Inspect Subgrade Vapor Retarder Sections R506.2, R506.2.1, R506.2.2, R506.2.3	1. Determine if vegetation, top soil and foreign material have been removed from within the foundation walls where the slab is to be placed.			
	2. If the areas have been filled, verify that the fill is free of vegetation and foreign material and is compacted.			
	3. If the fill has been added, verify that (except where approved) the fill depth does not exceed 24 inches for sand or gravel or 8 inches for earth.			
	4. If the slab is below grade, determine if the base material is placed on prepared subgrade.			
	5. Determine if the required base material is 4 inches thick and consists of clean, graded sand; gravel; crushed stone or crushed slag.			
	6. Determine if a vapor retarder is provided except for slabs located in a garage, utility building, unheated accessory structure, driveway/walk/patio or other flatwork where it is not likely to be enclosed and heated later, or where vapor retarder omission is approved by the building official based on local conditions.			
	7. If a vapor retarder is required, determine if it is an approved vapor retarder with joints lapped not less than 6 inches and placed at the bottom of the slab.			
2. Inspect Slab Construction Table R402.2 Figure R403.1(1)	1. Determine if the slab is a minimum of 3½ inches thick.			
	2. Determine if the concrete's compressive strength at 28 days is at least 2,500 psi, unless weather exposure set by Table R402.2 requires greater compressive strength.			

Floor and Ceiling Framing Inspection Checklist (continued)

Task: Inspect Floor and Ceiling Framing				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
5. Inspect Floor and Ceiling Headers Sections R502.4, R502.10, R802.9 Figure R502.2	1. Determine if the joists parallel to bearing walls above are of an adequate size to support the load.			
	2. Check to see if bearing partitions framed perpendicular to joists are not offset more than the joist depth.			
	3. Verify that full-depth solid blocking is installed no more than 4 feet on center if joists have been separated to accommodate piping or vents.			
	4. For headers at floor and ceiling openings such as occur at stairs and attic and crawl space access locations, determine if the span is 4 feet or less. If so, the header may be a single member the same size as the joist.			
	5. Determine if the header span is greater than 4 feet. If so, the header is to be at least doubled.			
	6. Determine if approved joist hangers are used to connect the header and the trimmer joists.			
	7. Determine if the trimmer joists at the opening are single members. If so, the single header must be within 3 feet of the trimmer joist bearing.			
	8. Determine if the trimmer joists are doubled when the header is more than 3 feet from the trimmer joist bearing.			
	9. Determine if approved joist hangers are used to support the tail joists at the header.			

Floor and Ceiling Framing Inspection Checklist (continued)

Task: Inspect Floor and Ceiling Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
6. Inspect Joist Lateral Support and Bridging Sections R502.7, R502.7.1, R802.8, R802.8.1	1. Determine if the ends of the joists are laterally supported by full-depth 2-inch-thick solid blocking, a header, band or rim joist or an adjoining stud.			
	2. If in Seismic Design Category D_0, D_1 or D_2, determine that the joists over an intermediate support have lateral restraint by one of the methods in Step 1.			
	3. Determine that joists exceeding 2 inches by 12 inches are supported laterally by solid blocking, diagonal bridging or a 1-inch by 3-inch strip nailed to the bottom of joists at intervals not exceeding 8 feet.			

Note: Designers may specify a "heavier" nailing schedule or more substantial materials than are called for in the minimum code requirements. Refer to the approved construction documents during all inspections.

Floor and Ceiling Framing Inspection Checklist

Task: Inspect Floor and Ceiling Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
1. Inspect Allowable Spans and Materials Sections R502.1-R502.3, R802.1, R802.2, R802.4	1. Locate the grade mark on the joist to determine grade, species and moisture content.			
	2. Measure and determine size, clear span and spacing of the joists.			
	3. Compare findings with design specifications/drawings. Note any discrepancies.			
	4.1 Based on Table R502.3.1(1) or R502.3.1(2), determine the allowable span for the required live load and dead load. 4.2 Verify that the actual joist is equal to or greater than the specified joist.			
	5. Repeat Step 1 for girders and headers.			
	6. Repeat Step 2 for girders and headers.			
	7. Repeat Step 3 for girders and headers.			
	8. Repeat Step 5 for girders and headers, except use Table R602.7(1) and R602.7(2).			
2. Inspect Joists, Beams and Girder Bearing Sections R502.6, R802.6	1. Determine if the length of the bearing point is at least $1^1/_2$ inches if the supporting element is wood or metal.			
	2. Determine if the length of the bearing point is at least 3 inches if the supporting element is masonry.			
	3. Determine if the joist is nailed to an adjacent stud and supported by a 1 x 4 ribbon strip.			
	4. Determine if there is at least a 3-inch overlap or the opposing joists are tied together in an approved manner when butt joined whenever joists are framed from opposite sides over a beam or girder.			
	5. Determine if the joists are supported by approved and properly installed joist hangers or ledger strips at least 2 inches by 2 inches where joists are framed into the side of a wood beam or girder.			

Floor and Ceiling Framing Inspection Checklist (continued)

Task: Inspect Floor and Ceiling Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
3. Inspect Cutting, Notching and Bored Holes Section R502.8 Figure R502.8 Section R802.7	1. Verify that there are no notches in the middle 1/3 of any solid lumber joist or beam span.			
	2. Verify that notches on the ends of the joists and beams do not exceed $^1/_4$ the depth of the member.			
	3. Verify that notches between the ends and middle $^1/_3$ of the span do not exceed $^1/_6$ the depth of the member.			
	4. Verify that notches are not longer than $^1/_3$ of the depth of the member			
	5. Verify that the tension side of any member that is 4 inches or greater in nominal thickness is not notched, except at the ends of the member.			
	6. Check that there are no bored holes within 2 inches of the top or bottom of the joist or beam.			
	7. Confirm that the diameter of bored holes does not exceed $^1/_3$ of the depth of the joist or beam.			
	8. Check that there are no holes within 2 inches of another hole or notch in the same member.			
4. Inspect Floor Framing Construction Sections R502.9, R802.3, Table R602.3(1)	1. Determine if the joists are toe nailed to the sills, plates or girders with at least 3-10d nails.			
	2. If posts are used to support beams and girders, determine if positive connections are installed.			

Wall Framing Inspection Checklist

Task: Inspect Wall Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
1. Inspect Bearing Walls Sections R602, R602.1, R602.2, R602.3, R602.3.1, R602.3.2, R602.3.3, R602.4.1, R602.8, Figure R602.3(1) Figure R602.3(2) Tables R602.3(1), R602.3(5)	1. Examine the bearing studs to determine grade and species.			
	2. Determine the nominal size and spacing of studs.			
	3. Compare bearing studs (size, spacing, grade and species) to the requirements indicated on approved plans.			
	4. Compare actual studs (size, spacing, grade) to Table R602.3(5).			
	5. Determine that stud length is less than 10 feet. If so go to Step 6. If stud length is greater than 10 feet, in most cases, design is required.			
	6. If exterior walls have a top plate that is doubled, the plates must overlap at corners and intersections with bearing walls. The top plate end joints must have a 24-inch minimum offset.			
	7. If a single top plate is used, check that it is tied with a 3-inch by 6-inch by 0.036-inch-thick galvanized steel plate nailed to each wall with 6-8d nails and rafters or joists are centered within 1 inch of supporting studs.			
	8. Locate the position of bearing points of floor joists and floor or roof trusses relative to supporting studs below when studs are spaced at 24 inches on center and rafters or trusses are spaced greater than 16 inches on center: • The joists or trusses must be located within 5 inches of a stud, or solid blocking equal in size to the stud must be installed if doubled top plates of two-2x6's or two-3x4's or a third top plate.			
	9. Examine foundation studs in cripple walls to check that the studs are the same size dimensional lumber as studs above the foundation. Check other requirements for cripple walls based foundation stud length.			
	10. Determine if top and bottom plates are end nailed to studs per Table R602.3(1).			
	11. Determine if studs are toe nailed to top and bottom plates per Table R602.3(1)			
	12. Determine if double studs are face nailed per Table R602.3(1).			
	13. Determine if built-up corner studs are face nailed per Table R602.3(1).			

Wall Framing Inspection Checklist (continued)

Task: Inspect Wall Framing				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
2. Inspect Cutting, Notching and Bored Holes Sections R602.6, R602.6.1	1. If notches in top plates exceed 50 percent, verify that the top plate is reinforced with a galvanized metal tie not less than 0.054 inch thick (16 gage) and 1.5 inches wide fastened across the cut plate with 8-10d nails on each end. The metal tie shall extend a minimum of 6 inches past each end of the openings.			
	2. Inspect bearing or exterior wall studs to verify that notches do not exceed 25 percent of the stud width.			
	3. Inspect interior nonbearing partitions to verify that notches in studs do not exceed 40 percent of the stud width.			
	4. Inspect bearing or exterior wall studs for bored holes and check that the diameter of the hole does not exceed 40 percent unless it complies with Steps 5 and 6.			
	5. If the diameter of the hole in a bearing or exterior wall is greater than 40 percent but does not exceed 60 percent, then the bored stud must be doubled.			
	6. If there are bored studs that are doubled and diameter of the hole in a bearing or exterior wall is greater than 40 percent, determine that there are not more than two successive doubled bored studs			
	7. Determine that bored holes are at least 5/8 inch from the edge of the stud.			
	8. Determine that bored holes are not in the same cross section as notches.			

Wall Framing Inspection Checklist (continued)

Task: Inspect Wall Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
3. Inspect Wall Headers Section R602.7 Tables R602.7(1), R602.7(2)	1. Determine the grade of the headers from the grade mark on the lumber. Note ground snow load and building width.			
	2. Measure the clear span of the header, then determine the depth of the header and what the header is supporting.			
	3. Locate the maximum header span from Table R602.7(1) for exterior headers or Table R602.7(2) for interior headers.			
	4. Compare actual header and span to table maximum span and note if in compliance.			
	5. If sizes and spans are correct, but the grade is different than that specified on drawings or specifications, then determine if the grade used is equivalent or better than that required.			
4. Inspect Wall Bracing Section R602.10 Tables R602.10.4, R602.10.4	1. Specific construction details are based on the bracing method chosen. This lesson focuses on the construction details of let-in bracing (LIB), intermittent bracing method. Determine if each 1-inch by 4-inch brace is: • Placed at an angle from horizontal between 45 and 60 degrees. • Let into both top and bottom plates and adjoining studs. • Correctly fastened. — With 2-8d common nails or 3-8d ($2^1/_2$"x 0.113" dia.) nails. — To each plate and intervening stud.			
	2. If metal bracing is used, then verify that the metal braces are installed in accordance with the manufacturer's specifications or installation instructions.			

Wall Framing Inspection Checklist (continued)

Task: Inspect Wall Framing				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
5. Inspect Fireblocking Sections R602.8, R302.11.1, R302.11.1.1, R302.11.2	1. In all locations in steps below except Step 5, determine if the fireblocking is one of the following: • 2-inch nominal lumber. • Two thicknesses of 1-inch nominal lumber with broken lap joints. • One thickness of $^{23}/_{32}$-inch wood structural panels with joints, backed by $^{23}/_{32}$-inch wood structural panels. • One thickness of $^{3}/_{4}$-inch particleboard with joints backed by $^{3}/_{4}$-inch particleboard. • $^{1}/_{2}$-inch gypsum board. • $^{1}/_{4}$-inch cement-based millboard. • Mineral wool or fiberglass batts (full cross section and 16 inches high). • Cellulose insulation installed as tested for the specific application.			
	2. Examine all concealed spaces of stud walls and partitions (including furred spaces) to determine if fireblocking is provided vertically at ceiling and floor levels and horizontally at 10-foot intervals.			
	3. Examine all interconnections between concealed vertical and horizontal framing (soffits, dropped and cove ceilings) to determine if fireblocking is provided.			
	4. Examine all concealed spaces between stair stringers at the top and bottom of the run to determine if fireblocking material is in place.			
	5. Examine all openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor level to determine if an approved fireblocking material is provided.			

Roof Framing Inspection Checklist

Task: Inspect Roof Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
1. Inspect Rafter Materials and Allowable Spans Sections R802.1, R802.5 Tables R802.5.1(1) through R802.5.1(8)	1. Locate the grade mark on the rafter to determine species and grade.			
	2. Measure and determine size, span and spacing of the rafter.			
	3. Compare findings with design specifications/drawings.			
	4. If sizes and spans are correct but the species and grade are different than indicated on approved specifications/drawings, then determine if the species and grade used are equivalent to or better than that specified by locating the maximum span in the table and verifying that it meets the actual span. Use Tables R802.5.1(1) through R802.5.1(8).			
	5. If the size or the clear span of the rafter is different from that specified, note actual size and span.			
2. Inspect Rafter Cutting, Notching and Bored Holes Sections R802.7, R802.7.1	1. Examine lumber 4 inches or thicker to verify that there are no notches on the tension side except at either end.			
	2. Examine rafters to verify that there are no notches in the middle $^1/_3$ of the span, and notches located in the top or bottom of the rafters do not exceed $^1/_6$ the rafter depth. Verify that notches are not longer than $^1/_3$ of rafter depth.			
	3. Examine end notches to determine that they do not exceed $^1/_4$ the depth of the rafter.			
	4. Examine rafters to determine that there is no bored hole within 2 inches of top or bottom of rafter or within 2 inches of another hole or notch.			
	5. Examine bored hole (more than 2 inches from the top or bottom of the rafter) to determine that the hole diameter does not exceed $^1/_3$ the depth of the rafter.			
	6. If there are notches on cantilevered rafters, verify that the remaining portion of rafter is not less than $3^1/_2$ inches actual dimension and the length of cantilever is not more than 24 inches.			

Roof Framing Inspection Checklist (continued)

Task: Inspect Roof Framing				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
3. Inspect Roof Framing Construction Sections R802.3, R802.5 Table R802.5.1(9) Section R802.6 Section R802.8 Section R802.9	1. Examine rafters that parallel ceiling joists to verify that joists are nailed to each rafter to form a continuous tie between exterior walls.			
	2. Examine joists nailed to parallel rafters to verify that each joist is face nailed to each rafter in accordance with Table R802.5.1(9) and that lapped joists are nailed together or that butted joists are tied together with plate to resist rafter thrust.			
	3. Examine rafters that are not parallel ceiling joists to determine method of rafter tie. If rafter tie is used, verify that: • Rafter tie is a minimum of 2" x 4." • Rafter tie is face nailed to rafter in accordance with the requirement of Table R802.5.1(9).			
	4. Where ceiling joists or rafter ties are not provided, the ridge of the rafters shall be supported by a wall or girder designed in accordance with accepted engineering practice.			
	5. Determine that roof rafters are toe nailed to plate in accordance with Table R602.3(1) with two toe nails on one side and one toe nail on the other side. Where the uplift force exceeds 200 pounds, the connection must be determined in accordance with Table R802.11.			
	6. Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space in accordance with Table R602.3(1). Collar ties shall be a minimum of 1 inch by 4 inches (nominal), spaced not more than 4 feet on center.			
	7. Examine ridge board to determine that thickness is at least 1 inch nominal and that depth is not less than the cut end of the rafter.			
	8. Determine that roof connected to the ridge board in accordance with Table R602.3(1). If no ridge board, rafters must be framed together with a gusset plate.			

Roof Framing Inspection Checklist (continued)

Task: Inspect Roof Framing				
Subtask	**Inspection Step**	**Code Compliance**		**Comments/ Location**
		Yes	**No**	
3. Inspect Roof Framing Construction Sections R802.3, R802.5 Table R802.5.1(9) Sections R802.6 Section R802.8 Section R802.9	9. If there are hip and valley rafters, determine that thickness is not less than 2 inches nominal and that depth is not less than the cut end of the roof rafter. If not, go to Step 12.			
	10. Determine if all hip and valley rafters are supported at the ridge by a brace to a bearing partition or are designed to carry and distribute the specific load at that point.			
	11. Determine if roof rafters are nailed to hip and valley rafters in accordance with Table R602.3(1).			
	12. If roof pitch is less than 3:12, determine if all roof framing members that support rafters and ceiling joists (e.g., ridge beam, hips and valleys) are designed as beams.			
	13. Determine if the end of each rafter has at least $1^1/_2$ inches of bearing on wood or 3 inches of bearing on masonry.			
	14. Determine if rafters having a depth to thickness ratio exceeding 5:1 have lateral support at bearing points to prevent rotation.			
	15. If the header in the roof opening is 4 feet or less, verify that it is a single member the same size as the rafter, and that the trimmer rafters are doubled.			
	16. If the header in the roof opening is greater than 4 feet, determine if the header and trimmer rafters are doubled			
	17. All headers and rafters at roof openings require joist hangers or other means of support.			

Roof Framing Inspection Checklist (continued)

Task: Inspect Roof Framing				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
4. Inspect Roof Truss and Tie-down Sections R802.10, R802.11 Table R802.11	1. Verify that the wood roof trusses have been designed in accordance with accepted engineering practice. The design and manufacture of metal-plate-connected wood trusses must comply with the Truss Plate Institute's *National Design Standard for Metal Plate Connected Wood Truss Construction* (ANSI/TPI 1). If required by jurisdiction statutes, verify that the truss design drawings have been prepared by a registered design professional.			
	2. Determine if the roof truss design drawings have been received and approved by the building official. Verify that the roof truss design drawings include the code-prescribed information.			
	3. Determine if roof truss construction and installation conform to the approved truss design drawings. Confirm that metal truss plate connectors are completely pressed on and positioned according to ANSI/TPI 1.			
	4. Determine if permanent bracing has been installed in accordance with the truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with the SBCA *Building Component Safety Information (BCSI) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.*			
	5. Check that no roof truss member has been cut, notched, drilled, spliced or altered in any way without the approval of a registered design professional. Confirm that the trusses have not been damaged during transport, storage and installation.			
	6. Determine if the trusses are bearing at the proper bearing points marked on truss design drawings. Review concentrated loads such as occur at bearing points of multiple-member girder trusses. Confirm that all loads are adequately transferred to the foundation. Verify that the bearing area and any additional supports such as hangers and squash blocks conform to the truss design drawings and the construction documents.			

Safety Inspection Checklist

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
1. Inspect for Light and Ventilation Section R303.1 Section R303.2 Section R303.3 Section R303.4 Section R303.7 Section R303.8	1. For natural lighting, determine if habitable rooms have the required glazing of 8 percent of the floor area and bathrooms have 3 square feet of glazing. The code also permits artificial lighting provided the ventilation requirements and the emergency escape and rescue opening requirements are satisfied.			
	2. For natural ventilation, determine if habitable rooms have the required openable area to the outdoors of 4 percent of the floor area and bathrooms have 1 ½ square feet of openable area. The code also permits a whole-house mechanical ventilation system and local exhaust for bathrooms in accordance with Section M1507 provided the emergency escape and rescue opening requirements are satisfied.			
	3. Determine if the adjoining room meets the natural light and ventilation requirements for combined floor areas of a room and alcove.			
	4. For natural light and ventilation, determine if the required glazing opens directly onto a yard or court located on the same lot as the building, or onto a street or public alley.			
	5. If the required glazing opens into a roofed porch, determine that the porch is at least 65 percent open on the long side, has a ceiling height of at least 7 feet and abuts a street, yard or court.			
	6. Determine if required artificial illumination is provided at interior and exterior stairways in the prescribed locations. For interior stairways with six or more risers, a wall switch is required at each floor level to control the lighting. The switch is not required where remote, central or automatic controls are in place per the exception in Section R303.7.			
	7. Determine if the dwelling unit has been tested with a blower door at a pressure of 0.2 inch w.c (50 Pa). If so, and the air infiltration rate of the dwelling unit is less than 5 air changes per hour, a whole-house mechanical ventilation system is required. This is a separate requirement from the minimum light and ventilation provisions for habitable rooms. (Section R303.4)			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
2. Inspect Emergency Escape and Rescue Openings Section R310.1 Section R310.1.1 Section R310.2 Section R310.2.1 Section R310.4	1. Examine every sleeping room, basement and habitable attic for at least one operable window or door that opens to the outside without the use of keys or separate tools or special knowledge.			
	2. If the opening is a window, determine if it is a grade floor opening (see definition).			
	3. If the window is not a grade floor opening, check for: • Maximum 44 inches from the floor to the bottom of the clear opening. • Minimum net clear height of 24 inches. • Minimum net clear width of 20 inches. • Minimum net clear opening of 5.7 square feet.			
	4. If the window is a grade floor opening, check for: • Maximum height of 44 inches from the finished floor to the bottom of the clear opening. • Minimum net clear height of 24 inches. • Minimum net clear width of 20 inches. • Minimum net clear opening of 5 square feet.			
	5. If the opening is a door, check that: • The door opens directly to the exterior. • It is openable from the inside without the use of a key, tool or special knowledge. • It has a required full clear opening of at least 5.7 square feet.			
	6. If emergency escape and rescue window has bars, grills or screens, verify that they are releasable or removable from the inside without the use of a key, tool or force greater than normal operation of the escape and rescue opening.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
2. Inspect Emergency Escape and Rescue Openings Section R310.1 Section R310.1.1 Section R310.2 Section R310.2.1 Section R310.4	7. If window well is required for escape and rescue window, check for: • Large enough well to allow window to be in full open position. • Minimum net clear area of 9 square feet. • Minimum horizontal depth and width of 36 inches. • Approved drainage to the foundation drainage system. • If well depth is over 44 inches, provide ladder. See Step 8.			
	8. If window well depth exceeds 44 inches, check for: • Permanently affixed ladder or steps. • Minimum inside width of 12 inches on ladder or steps. • 3-inch minimum projection from wall to rungs. • Maximum vertical spacing of 18 inches o.c. for rungs or steps. • Ladder being the full height of the window well.			
	9. If an emergency escape window is installed beneath a deck or porch, check for: • Location must permit the window to fully open. • Provides a path with 36 inches minimum headroom • Path goes to a yard or court.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
3. Inspect Glazing in Hazardous Locations Section R308.3 Section R308.4 Section R308.6	1. Determine if glazing installed in doors and within a 24-inch arc of doors in a closed position is safety glazing. Glazing adjacent to a door where the bottom exposed edge of the glazing is 60 inches or more above the walking surface does not require safety glazing. See exceptions to Sections R308.4.1 and R308.4.2.			
	2. Determine if glazing meeting all of the following conditions is safety glazing: • Individual pane exceeds 9 square feet; • Bottom edge of glazing is less than 18 inches above floor; • Top edge of glazing is more than 36 inches above floor; and • Glazing is within 36 inches of walking surfaces. If glazing is protected with a horizontal rail installed 34 to 38 inches above the floor, safety glazing is not required.			
	3. Determine if any glazing used in guards or railings is safety glazing.			
	4. Determine if glazing in walls, enclosures or fences containing or facing tubs, showers or swimming pools that is less than 60 inches above any standing or walking surface is safety glazing. Glazing that is more than 60 inches, measured horizontally, from the water's edge of a tub or swimming pool, or from the edge of a shower does not require safety glazing.			
	5. Determine if glazing less than 36 inches above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps is safety glazing. Safety glazing is not required if the glazing is protected with a handrail serving the stair or intermediate landing. At the bottom landing of a stairway, determine if glazing less than 36 inches above the landing and within 60 inches of the bottom tread is safety glazing.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
3. Inspect Glazing in Hazardous Locations Section R308.3 Section R308.4 Section R308.6	6. Determine if safety glazing has a manufacturer's designation specifying the type of glass and the safety glazing standard. The designation must be etched, embossed, or be a label. See exceptions in Section R308.1. Safety glazing in all doors and glazing in enclosures for tubs or showers must be tested in accordance with CPSC 16 CFR 1201. Safety glazing in other locations must be tested in accordance with CPSC 16 CFR 1201 or ANSI Z97.1, Class A or B. See Tables R308.3.1(1) and R308.3.1(2).			
	7. Check skylights and sloped glazing for approved materials: • Laminated glass with a minimum 0.015-inch polyvinyl butyral interlayer for up to 16 square feet and highest point not over 12 feet (minimum 0.030-inch for larger size and higher heights). • Fully-tempered glass. • Heat-strengthened glass. • Wired glass. • Approved rigid plastics			
	8. Check the skylights and sloped glazing to determine if screens are required			
	9. Determine if the skylights require curbs by examining roof pitch: If roof pitch is less than 3:12, check for a minimum 4-inch curb mounted above the plane of the roof.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
	1. Determine if there is a means of egress path from all parts of the dwelling, including vertical egress by means of stairs or ramps, to the outdoors without requiring travel through a garage. One egress door is required with a minimum net opening width of 32 inches.			
	2. Determine if landings at exterior doors meet the dimension requirements of the code. The width of landings must be at least as wide as the door and a minimum 36 inches in the direction of travel. The landing on the exterior side can be a maximum of $7^{3}/_{4}$ inches below the top of the threshold provided the door does not swing over the landing. See exception for two risers without a landing at exterior doors other than the required egress door. Storm and screen doors are permitted to swing over all exterior stairs and landings. A 36-inch landing is not required outside doors to small viewing balconies.			
4. Inspect Stairs and Landings Section R311.1 Section R311.2 Section R311.3 Section R311.4 Section R311.7 Section R311.7.6	3. Determine if stairs meet the dimension requirements of the code. Verify the following: • maximum riser height of $7^{3}/_{4}$ inches. • greatest riser height does not exceed smallest by more than $^{3}/_{8}$ inch. • open risers do not permit passage of a 4-inch-diameter sphere (unless total stair rise is 30 inches or less). • minimum tread depth of 10 inches. • greatest tread depth does not exceed smallest by more than $^{3}/_{8}$ inch. • tread nosing of $^{3}/_{4}$ inch to $1^{1}/_{4}$ inches on stairways with solid risers. • minimum headroom of 6 feet 8 inches above plane of tread nosings. • width of not less than 36 inches above handrail height.			
	4. Determine if winders meet the dimension requirements of the code. Winders must have a 10-inch tread depth at the walk line and a minimum 6-inch tread depth at the narrow point.			
	5. Determine if there is a floor or landing with a minimum 36-inch dimension in the direction of travel at the top and bottom of stairways. For an interior flight of stairs, including stairs in an enclosed garage, a landing is not required at the top, provided a door does not swing over the stairs.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
	1. If a stairway has four or more risers, determine if the stairway has a handrail on at least one side.			
	2. Determine if the handrail is at least 34 inches but not more than 38 inches in height (measured vertically from the nosing of the treads). Note the exception for transitions in Section R311.7.8.1.			
	3. Verify that the handgrip portion of the handrail complies as a Type I or Type II handrail: • Type I handrails have a circular cross section between $1^1/_4$ inches to 2 inches or other shapes with a perimeter dimension of 4 to $6^1/_4$ inches and maximum thickness of $2^1/_4$ inches. • Type II handrails have other profiles with finger recess areas on both sides and limit the maximum width to $2^3/_4$ inches.			
	4. Verify that the handgrip portion of the handrail has a minimum radius of a 1/8 inch on edges.			
5. Inspect for Fall Protection Section R311.7.8 Section R312.1 Section R312.2	5. Verify that the handrail has a space of at least 1½ inches between the wall and the handrail.			
	6. Verify that the handrail is continuous the full length of the stairs, except for: • A handrail interrupted by a newel post at a turn. • The use of volute or turnout at the lowest tread.			
	7. Verify that the handrail ends are returned or terminate in newel posts or safety terminals.			
	8. Determine if guards have been 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.			
	9. Verify that required guards are at least 36 inches in height at open-sided walking surfaces and above fixed seats, and at least 34 inches in height on open sides of stairs.			
	10. For other than the open sides of stairs, verify that a 4-inch sphere cannot pass through the openings in guards from the walking surface to the top of the guard.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
5. Inspect for Fall Protection Section R311.7.8 Section R312.1 Section R312.2	11. Determine if a triangular opening is formed by the bottom of a guard resting on the treads of a stair. If so, verify that the opening size is limited so a 6-inch sphere cannot pass through.			
	12. Verify that guards on the open sides of the stairs do not have openings that allow passage of a sphere $4^{3}/_{8}$ inches in diameter.			
	13. Determine if any window openings are located more than 72 inches above finished grade or surface below. If so, verify that the window opening is at least 24 inches above the finished floor unless the window is provided with a window fall prevention device or a window opening control device that complies with ASTM F2090. Either type of device complying with the referenced standard is approved for use on an emergency escape and rescue window.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
6a. Inspect Preconcealment of Sprinkler System Section 2904.1.1 Section 2904.2.4.1 Section 2904.2.4.2 Section 2904.2.2 Table 2904.2.2 Section 2904.6 Tables P2904.6.2(4) through P2904.6.2(9) Section 2904.6.1 Section 2904.3.1.1 Section 2904.8.1 Section 2503.7	1. Sprinklers are located where required by code throughout structure except where omitted by exception within the code.			
	2. No sprinkler is required to cover more than 400 square feet.			
	3. Sprinklers are not obstructed by architectural elements, electrical fixtures or			
	4. Verify heads are rated for location and ensure distance to elements generating			
	5. Verify pipe sizes are according to design and minimum code requirements.			
	6. Verify pipe sizes are according to design and minimum code requirement.			
	7. Nonmetallic sprinkler pipes are protected from potential damage from construction.			
	8. Pipe is supported according to the pipe manufacturer or sprinkler manufacturer requirements.			
	9. Piping system is tested under a water pressure not less than the working pressure or, if not plastic, by an air test of 50 pounds for not less than 15 minutes.			
6b. Inspect Final Installation of Sprinkler System Section R2904.8.2 Section R2904.7	1. Sprinklers are not altered or painted.			
	2. Pump will turn on upon water flow.			
	3. No pressure-reducing devices other than those considered in the design are in the system.			
	4. Warning signage or tag at main water valve is in place and owner's manual is on site.			

Safety Inspection Checklist (continued)

Task: Inspect Dwelling for Safety				
Subtask	Inspection Step	Code Compliance		Comments/ Location
		Yes	No	
7. Inspect Smoke Alarms Section R314	1. Verify that there is a smoke alarm installed in each sleeping room.			
	2. Verify that there is a smoke alarm installed outside, but in the immediate vicinity of, each separate sleeping area.			
	3. Check for the installation of a smoke alarm on each story of the dwelling.			
	4. Determine if a smoke alarm must be installed on each level of a split level.			
	5. 5. Verify that smoke alarms meet the minimum clearance distances from bathrooms and cooking appliances. • At least 3 feet from the door of a bathroom • Ionization smoke alarms at least 20 feet from cooking appliance • Ionization smoke alarms with an alarm-silencing switch at least 10 feet from cooking appliance • Photoelectric smoke alarms at least 6 feet from cooking appliance			
	6. Confirm that smoke alarms are interconnected to provide an alarm that can be heard in all areas.			
	7. Verify that each smoke alarm is listed in accordance with UL 217 and has been installed per code and the household fire warning equipment provisions of NFPA 72.			
	8. Verify that the smoke alarms receive primary power from the building wiring, have a battery back-up and that wiring is permanent and without a disconnect switch other than a fuse or circuit breaker.			
	9. If a building has undergone an addition or alteration requiring a permit, confirm that smoke alarms have been installed in the entire building located as required for new construction. Smoke alarms are permitted to be battery powered in this case. Interconnection is not required unless the adjacent wall and ceiling coverings are being removed or there is an attic, crawl space or basement access available.			