

Certification: Residential Building Inspector



Exam ID: B1

Scope:

A Residential Building Inspector will be responsible for performing inspections of structures to determine compliance with the various Building Codes and Standards adopted by his / her jurisdiction. At this level of certification, the Inspector shall be able to inspect one-and-two family dwellings, townhomes not more than three stories in height, and accessory structures.

- 60 multiple-choice questions
- 2-hour limit
- Open book

01 Code Administration

- 0101 Project Administration 4%
Verify that project information is provided and is adequate. Verify that the project is designed by approved persons when required, and has required approvals. Verify that products not detailed in the building code are approved by the building official and installed according to their listing. Verify that the required approved plans and specifications are available when required and retained by the building official for the period required. 2%
- 0102 Public Information and Legal 2%
For new and existing structures, answer questions about the need for permits and inspections, general code compliance of designs, procedures, and materials. Communicate, issue, and maintain inspection reports, correction notices, stop work orders, and data for the issuance of the certificate of occupancy.

02 Building Planning 8%

- 0201 Unit Separation 3%
Verify that the unit separation is in compliance with the code and tested assembly requirements. Verify that unit separation walls and floor/ceiling assemblies are located where required and have correct fire-resistance.
- 0202 Building Location 3%
Inspect the construction site to see that the building or structure location is in compliance with the requirements of the local ordinances, fire separation regulations, and the site plan. Verify that final grade will provide the required slope away from the footing or foundation wall. Verify finish floor elevation in flood-hazard areas for compliance with local and federal requirements.
- 0203 Room and Opening Dimensions 2%
Verify that the actual and allowable floor area calculations are correct. Inspect for compliance that the room dimensions and openings are minimum for light and ventilation.

03	Footings and Foundations	16%
0301	<u>Footings</u> Verify that the building site's soil load-bearing capacity and stability complies with approved plans or reports. Verify that footings are laid out with correct depth, size, and setbacks, and that footings extend below the frost line. Inspect footing drains for basements and crawl spaces for compliance with the code. Verify that materials used in footings and foundations are in compliance with approved plans and code requirements.	5%
0302	<u>Stepped Footings and Special Foundations</u> Verify that stepped footings and specialized foundations are used as per the approved plans or code.	3%
0303	<u>Columns and Piers</u> Verify that columns and piers are correctly supported and anchored, and that wood members are protected against termites and decay.	3%
0304	<u>Site Preparations, Foundation, and Basement Walls</u> Verify that the area within the foundation walls is properly prepared. Verify that foundation stem walls are correctly sized and have sufficient height above grade. Verify that foundation wall materials, reinforcement, anchor bolts, and fasteners are correct type, size, and grade and are placed in accordance with building code requirements. Verify that foundation dampproofing and waterproofing is installed where required. Verify maximum unbalanced fill height. Verify that foundation and basement walls are properly braced prior to backfill.	5%
04	Floor Construction	14%
0401	<u>Lumber Quality - Floors</u> Verify that wood materials are in compliance with the markings, standards, and the material characteristics. Verify that the cutting, notching, and borings are within the limitations permitted by code, and that wood members are protected against termites and decay where required.	3%
0402	<u>Floor Joist Framing</u> Inspect floor joist framing for proper spans, bearing, and connections. Verify that the pre-engineered floor framing is in accordance with the approved drawings and manufacturer's specifications.	3%
0403	<u>Concrete Slab Inspection</u> Verify that concrete slabs are placed in compliance with standards and material characteristics, and that proper precautions are used in adverse weather conditions.	2%
0404	<u>Subflooring and Decking</u> Verify that subflooring and decking has required thickness, span, and grade and meets installation specifications. Verify compliance of floor design and fasteners.	2%
0405	<u>Crawl Spaces</u> Verify that crawlspaces have required clearance, ventilation, insulation, screening, and access openings.	2%

0406	<u>Draftstops</u> Verify that draftstops are provided where required.	2%
05 Wall Construction and Coverings		27%
0501	<u>Lumber Quality - Walls</u> Verify that wood materials used in walls are in compliance with the markings, standards, and the material characteristics. Verify that cutting, notching, and borings are within the limitations permitted by code, and that wood members are protected against termites and decay where required.	4%
0502	<u>Wood Framing - Walls</u> Inspect wood wall framing for proper spacing, bearing, and connections. Verify that pre-engineered wall systems are in accordance with the approved drawings and manufacturer's specifications.	4%
0503	<u>Header Spans</u> Inspect header spans for proper span, bearing, and connections.	2%
0504	<u>Steel Framing</u> Verify that steel framing is in compliance with the markings, standards, and the material characteristics.	2%
0505	<u>Fireblocking</u> Verify that fireblocking is provided where required.	2%
0506	<u>Masonry Materials and Placement</u> Verify that masonry materials are in compliance with markings, standards, and the material characteristics. Inspect bonding, mortar type, mortar joint thickness, height, size, lintels, and distance between lateral supports for masonry walls. Verify that masonry is grouted where required. Verify that weather conditions are suitable for masonry construction and that proper precautions are used for adverse weather conditions. Inspect masonry reinforcement for size, length of lap splices, clearances between bars, clearances to masonry units and outside face of walls, alignment, cleanouts, and presence of loose rust, oil, or millscale.	2%
0508	<u>Concrete Wall Inspection</u> Verify that concrete walls are in compliance with standards and material characteristics, and that proper precautions are used for adverse weather conditions. Verify that prefabricated walls and wall forms are installed in accordance with manufacturer's instructions and approved plans.	2%
0509	<u>Braced Wall Panels</u> Verify that walls are braced to prevent lateral displacement and that loads are transferred to the foundation.	2%

0510	<u>Interior Coverings</u> Verify that wall and ceiling coverings are correct type and thickness and are correctly supported and fastened. Inspect walls, floor, and ceiling finishes in bathtub and shower spaces for compliance with the code.	2%
0512	<u>Exterior Sheathing, Veneers, and Weather-Resistant Coverings</u> Verify that exterior sheathing, veneers, and weather-resistant siding materials are correctly sized, identified, and installed; protected against termites and decay; and have appropriate clearances to finish grade. Verify that exterior veneers and weather-resistive siding have correct anchorage, support, and backing. Verify that a weather-resistant barrier is correctly installed for all walls and around all wall openings.	3%
0513	<u>Exterior Plaster, Stucco, and Lath</u> Verify that plaster, stucco, and metal lath have correct thickness and fasteners, and are correctly installed.	2%
06	Roof/Ceiling Construction	14%
0601	<u>Roof/Ceiling Insulation and Vapor Barriers</u> Verify that insulation is of permitted materials, is provided where required, and is correctly installed. Verify that vapor and moisture barriers are correctly installed.	2%
0602	<u>Attics/Ceiling</u> Verify that attic and ceiling area construction has proper ventilation, screens, and access.	2%
0603	<u>Roof Framing</u> Inspect roof rafters, collar beams, and ceiling joists for compliance with span, grade, type, connections, bearing, and quality requirements. Verify that trusses are in accordance with the drawings and properly spaced, braced, and supported.	4%
0604	<u>Roof Sheathing</u> Inspect roof sheathing for proper thickness, grade, support, and fastening.	2%
0605	<u>Roofs and Roof Coverings and Reroofing</u> Verify correct classification of roof coverings, roof slope, installation, flashings, and details, and method of roof drainage. Verify that residences that are reroofed comply with code, design, and installation standards.	2%
0607	<u>Fireplaces and Chimneys</u> Verify that fireplaces, flues, and chimneys are correctly designed and have required clearances from combustible construction.	2%
07	Public Safety and Special Construction	17%
0701	<u>Means of Egress</u> Inspect for compliance with the means of egress requirements for the building, including emergency egress for sleeping areas. Verify that doors and windows intended for use as emergency egress have correct clear opening areas, width, and heights.	4%

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| 0702 | <u>Exit Stairways and Ramps</u> | 3% |
| | Verify that stairways and ramps have correct width, rise, run, slope, landings, headroom, height, guardrails, and handrails. | |
| 0703 | <u>Exterior Construction</u> | 3% |
| | Verify that exterior stairs, ramps, porches, decks, and balconies which are open to the weather are constructed to support designed loads; are of suitable materials; and have required slope and width, tread, riser, headroom, guardrails, and handrail dimensions. | |
| 0704 | <u>Smoke Detectors</u> | 2% |
| | Inspect smoke detectors for compliance with proper installation, power supply, and locations. | |
| 0705 | <u>Flamespread of Insulation and Finishes</u> | 2% |
| | Verify that interior wall and ceiling finishes, insulation, and foam plastics comply with flame spread and smoke density requirements. | |
| 0706 | <u>Safety Glazing</u> | 3% |
| | Verify that safety glazing is installed and labeled where required. | |