## **Certification: Residential Plans Examiner**

## Exam ID: R3

## Scope:

A residential plans examiner reviews plans and construction documents for one-and-two family dwellings and their accessory structures for compliance with the local codes and standards as adopted by their jurisdiction. Evidence of the plan review is documented indicating deficiencies that must be corrected, or that the plan is available to be issued. Should plan changes need to be made, the residential plans examiner verifies that the submitted documentation is complete and clearly illustrates the work proposed, prior to permit issuance.

•	60 multiple-choice questions 2-hour limit Open book	
01	Administrative	5%
0101	<u>Permits</u> Determine if a permit is required and if the submittal is complete and meets the scope of the One and Two Family Dwelling Code.	3%
0102	<u>Correspondence</u>	2%
	Communicate with the applicant any need for further information, alerting them of deficiencies in their submittal or of their approval to start work; mark the official approved sets of drawings after approval.	
02	Site	10%
0201	<u>Site Plan</u> Verify from the site plan that the building or structure location is in compliance with the requirements of the local ordinances, fire separation regulations, fire access, flood-hazard areas, setbacks, encroaching on any legal easement, wetland, right of way, or neighboring property.	8%
0202	<u>Final Grade</u> Verify that final grade will provide the required slope away from the footing or foundation wall and will not adversely affect neighboring property.	2%
03	Architectural and Life Safety	25%
0301	Room Sizes Verify adequate room sizes, ceiling heights, heat, light, and ventilation are provided.	3%
0302	<u>Means of Egress</u> Verify adequate means of egress, with proper widths, stairs, guards, rails, and openings.	8%
0303	<u>Fire Protection</u> Verify fire protection through rated walls, draft stopping, smoke detectors, and sprinklers.	5%
0304	<u>Glazing</u> Verify safety requirements for glazing and foam plastic elements.	3%
0305	Exterior Verify that exterior veneers and siding have correct anchorage, support, and backing. Verify that a weather- resistant barrier is correctly specified for all walls and around all wall openings. Verify that exterior sheathing materials are correctly sized and specified. Verify that plaster, stucco, and metal lath have correct thickness and fasteners.	3%

0306	<u>Specialty</u> Verify unique requirement compliance for specialty, detached, and accessory structures such as pools, spas, fireplaces, and storage buildings.	3%
04	Structural	25%
0401	<u>Design Loads</u> Verify designer used the correct design loads.	2%
0402	<u>Footings</u> Verify that footings are designed to correct depth, size and setbacks and that footings will extend below the frost line. Verify footing drains for basements and crawl spaces for compliance with the code. Identify soil type and verify that bearing capacity is adequate.	3%
0403	<u>Foundation Walls</u> Verify that foundation 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 located in accordance with building code requirements. Verify that foundation dampproofing and waterproofing are to be provided.	5%
0404	<u>Structural Elements</u> Verify that structural elements are correctly designed to support loads and maintain load path continuity. Structural elements can include beams, girders, trusses, headers, joists, rafters, columns, piers, walls, and bracing, as well as others not listed.	7%
0405	Lateral Bracing Verify lateral bracing is adequate to meet required load conditions such as wind and seismic loads.	5%
0406	<u>Construction Design</u> Verify construction design for wall systems built below the lowest finished floor in flood zones.	1%
0406	Pre-manufactured Construction Verify pre-manufactured construction elements are to be utilized in accordance with their listing.	2%
05	Energy Efficiency	5%
0501	Energy Verify energy saving provisions for the building envelope, mechanical equipment, and appliances comply with the code and are indicated on the plans.	5%
06	Mechanical	10%
0601	<u>Mechanical Equipment and Appliances</u> Verify adequate protection, support, space, and clearance are provided for mechanical equipment and appliances.	2%
0602	Room Volume Verify adequate room volume for combustion air or alternate provisions.	2%
0603	Venting and Venting Termination Verify proper application of venting and venting termination.	2%
0604	<u>Fuel Gas Pipe Sizes</u> Verify proper fuel gas pipe size to provide adequate gas to appliances and equipment.	2%

0605 <u>Fuel-Burning Equipment</u>

Verify that special systems utilizing fuel burning equipment, such as interior open-flame grills, pool and sauna heaters, hydronic heating systems, and decorative appliances comply with code requirements, the manufacturer's instructions, and listing of the equipment and have proper access and clearances.

07	Plumbing	10%
0701	<u>Fixtures</u> Verify minimum required fixtures are provided in proper location with correct clearances.	3%
0702	<u>Clearances and Support</u> Verify adequate clearances and support are provided for piping and piping termination.	1%
0703	Potable Water System Verify potable water system is provided and protected.	3%
0704	Sanitary Disposal Verify sanitary disposal system is provided and protected.	3%
08	Electrical	10%
0801	Load Calculation Verify adequate service is being provided for the building as per the load calculation.	2%
0802	<u>Circuits and Disconnects</u> Verify required circuits and disconnects are provided.	1%
0803	<u>Grounding and Grounding Electrode Sytems</u> Verify the method and location of the grounding and grounding electrode systems	2%
0804	Outlets, Switches, Luminaires, and Receptacles Verify that outlets, switches, luminaires and receptacles, including GFCI and AFCI protection, are installed in required locations.	2%
0805	Electrical Panel Verify electrical panel location and working space clearances.	1%
0806	Bonding Verify bonding of metallic housings and elements.	1%
0807	<u>Conductor and Conduit Size and Support</u> Verify proper conductor and conduit sizing and support.	1%