

Home Remodeling Projects and Code
 This seminar will address common home remodeling projects and the requirements of the State building code. Starting with the permit application process and permit exceptions, the items within a remodeling project including code requirements associated with structures, electrical, plumbing, mechanical, ventilation and energy conservation will be presented.

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Chapter 1

IRC
 Scope & Administration

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- R102.4 Referenced Codes & Standards
 - Codes & standards referenced within the Code become part of the Code
 - TO THE EXTENT OF THE REFERENCE
 - Exception for violation of listed equipment instructions
- R102.4.1 Differences
 - Code ‘trumps’ standards
- R102.4.2 This Code ‘trumps’ subordinate Codes
 - Code language also ‘wins’ over other language

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- Overview - Hierarchy of requirements
 - 1) Federal Law
 - 2) Connecticut General Statutes
 - 3) State Regulations – This Code
 - 4) Local Law & Ordinances
 - 5) Referenced Codes to the extent of the reference
 - 6) Standards to the extent of the reference
 - 7) Instructions of listed equipment
 - Note R102.4 exception
 - Violation of product listing not acceptable

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- R102.5 Appendixes
 - Adopted Appendixes
 - E Manufactured Housing – **as CT amended**
 - G Swimming Pools – **as CT amended**
 - H Patio Covers
 - K Sound Transmission
 - O Automatic Vehicular gates
 - P Water pipe Sizing
 - R Wind, seismic, snow – **as CT amended**
 - Other appendixes are not enforceable
 - Appendixes are also amended by CT

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- R102.7 Existing Structures
 - Legally occupied structures
 - Not required to meet this Code
 - Need not be updated to Code



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- R103 Enforcement Agency
 - R103.1 Each municipality will enforce this Code
 - R103.2 Each municipality will appoint a BO
 - Municipalities may 'share' appointee (CGS 29-260)
 - R103.3 Authorization to appoint
 - Qualified people per CGS 29-261
 - Assistants, technical people, inspectors, examiners

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- R103 Enforcement Agency
 - R103.4 Restriction - Conflict of Interest
 - Can't inspect your own work
 - Can't supply materials to buildings in your jurisdiction
 - Can't design or prepare plans for buildings in jurisdiction
 - Can't do anything that conflicts with duties
 - Your appointing authority will provide additional
 - Written policy
 - Specific restrictions
 - Your 'moral compass' should also provide guidance
 - Judgment is not 'for sale'

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- R104 Duties & Powers of the Building Official
 - R104.1 Authorization & Direction
 - Authority to enforce Code
 - Authority to adopt policy & procedures in compliance
 - R104.1.1 State Rule making Authority
 - State controls the Code
 - State controls interpretation of Code
 - State may review local officials interpretations
- CGS 29-252a(h) – State exempt
 - Note required to secure building permits per CGS 29-263
 - Not required to secure CO per CGS 29-265

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- R104 Duties & Powers of the Building Official
 - R104.2 Application for Permits
 - Receive application
 - Review documentation
 - Issue permits
 - R104.3 Notices & orders
 - Communicate orders / notices
 - R104.4 Inspections
 - Execute inspections
 - Evaluate / approve experts
 - Hire SME as approved by appointing authority
 - R104.5 Identification
 - Carry valid ID



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- R104 Duties & Powers of Building Officials
 - R104.6 Right of Entry
 - 9 to 5 for execution of inspection responsibilities
 - Anytime under invite of F.D. / Authentic source
 - Based on Public Safety hazard
 - » Fire deterioration
 - » Wind damage
 - » Vehicle strikes
 - » Structural collapse



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- R104 Duties & Powers of the Building Official
 - R104.7 Department Records
 - Maintain official records
 - Required retention period
 - At least the 'life' of the structure
 - R104.8 Liability
 - Personal liability protection
 - Defense cost borne by municipality



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- R104 Duties & Powers of the Building Official
 - R104.9 Approved materials & equipment
 - Properly installed
 - Items / equipment used for intended purpose
 - Listed and labeled items / equipment
 - Installed per manufacturer’s instructions
 - R104.9.1 Used materials and equipment
 - Concern for materials not meeting current standards
 - Building Official may approve

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- R104 Duties & Powers of the Building Official
 - R104.10 Modifications to Code
 - State Building Inspector responsibility
 - Appeal to Codes & Standards Committee
 - Appeal to superior court
 - Based on:
 - Practical difficulty
 - Unnecessary hardship
 - Unwarranted
 - R104.10.1 Records – related to modification
 - Responsibility of local BO

<http://www.ct.gov/dcs/cwp/view.asp?a=4447&q=498648&dcsNav=l>

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- R104 Duties & Powers of the Building Official
 - R104.10.2 Historic structures exemption
 - State Register of Historic Structures
 - Property must be safe to use
 - Restoration & preservation
 - R104.10.3 Urban homesteading property
 - Qualified property may be exempted
 - Property must be safe for intended use

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- R104 Duties & Powers of the Building Official
 - R104.11 Alternatives – Methods, Materials, Equip.
 - New or better methods are OK
 - R104.11.1 Tests
 - BO may order tests based on R104.11
 - No expense to jurisdiction
 - BO approves agency
 - R104.11.2 Research Reports
 - Reports from valid, recognized agencies acceptable
 - ICC Evaluation service

http://www.icc-es.org/Reports/index.cfm?csi_id=280&view_details

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- Look forward to R105.1 & R105.2 AS AMENDED.
 - Is a permit required for:
 - 1) Construction of a 12' by 20' detached garage?
 - 2) Moving a two story, 12' by 16' accessory structure?
 - 3) A homeowner replacement of a single light switch
 - 4) Installing a 8' high privacy fence
 - 5) Snaking a replacement PEX cold water supply tube through framing cavities
 - 6) Installing a woodstove into an existing chimney
 - 7) Installing a very small (80 ft²) deck at an exterior door from a habitable attic
 - 8) Installation of a 36" deep inflatable swimming pool
 - 9) Converting an existing oil fired heating system to gas fuel

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- R105.1.1 By whom application is made
 - Owner in fee
 - OR
 - Authorized agent of owner in fee
 - With written authorization of owner
 - OR
 - Affidavit of applicant, witness by BO or designee
- CGS sec. 20-338b Contractor application
 - Licensed contractor may sign permit application
 - May further delegate application signature
 - Proper documentation

http://www.cga.ct.gov/2013/pub/chap_393.htm#sec_20-338b

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- R105.2.1 Emergency repairs
 - Application following business day is OK
- R105.2.2 Repairs
 - Simple, common repairs exempted from permit
 - No cutting of walls
 - No cutting of structural supports
 - No change in egress
 - No messing with water, sewer, vent
 - No electrical, gas
 - No mechanical work
- R105.2.3 Public Service Utilities
 - Equipment exempt from permit



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- R105.3 Application for permit
 - Permit application form requirements
 - Scope of work
 - Location of work
 - Use & occupancy of the property
 - Construction documents satisfactory to BO
 - Validation of work
 - Signature
 - Additional data as required



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- R105.3.1 Action on application
 - 30 day 'window' to:
 - Issue a permit or deny a permit
 - Rejection shall be in writing
 - » Reason for rejection stated
 - BO shall issue permit as soon as practicable
- R105.3.1.1 Flood hazards
 - Special handling of flood damaged buildings
- R105.3.1.2 Zoning approval
 - Zoning officer approval required

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- R105.4 Validity of permit
 - Approval to proceed with work
 - NOT a permit to violate Code
- R105.5 Expiration of permit
 - 180 days from issue date
 - BO may grant up to 180 day extension
 - 180 days of work lapse
 - BO may grant up to 180 day extension

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- R105.6 Suspension / Revocation of Permit
 - BO may 'pull' permit for:
 - Issuance in error
 - Incorrect, inaccurate, or incomplete information
 - Violation of this or municipal Codes
- R105.7 Placement of permit
 - On-site for duration
- R105.8 Responsibility
 - All trades must comply with Code
- R105.9 Preliminary inspection
 - BO may examine proposed work site

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- R106.1 Construction documents
 - 2 sets
 - Satisfactory to the BO
 - BO may waive submission of documents.



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- Section R106 Construction documents
 - R106.1.1 Information required
 - Electronic submission OK with BO approval
 - Clear & complete enough to determine compliance
 - BO may require specific details – wall bracing
 - R106.1.2 Manufacturer's Instructions
 - Available on-site at inspection
 - R106.1.3 Flood hazard areas
 - Special considerations based on hazard 'zone'

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- Section R106 Construction documents
 - R106.2 Site or Plot Plan
 - Includes:
 - Size & location of new construction
 - Existing structures
 - Distance to lot lines
 - Location of private sewer system
 - May be waived at BO discretion
 - Refer to R302 before waiving
 - R106.2.1 Private sewage disposal
 - Public Health Code

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- Section R106 Construction documents
 - R106.3 Examination of documents
 - BO will examine or have examined to determine compliance
 - Plans technician
 - Consultant
 - R106.3.1 Approval of documents
 - Marked "REVIEWED FOR CODE COMPLIANCE"
 - 1 Set returned with permit
 - Maintained at job site for BO use
 - 1 set retained by BO

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- Section R106 Construction documents
 - R106.3.2 Previous approvals
 - Permit date determines Code edition
 - With respect to R105.5 requirements
 - R106.3.3 Phased approval
 - OK at permit holder's risk



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- Section R106 Construction documents
 - R106.4 Amended documents
 - Build to approved plans
 - Changes require approval of amended plans
 - R106.5 Retention of documents
 - BO shall return original plans after CO issued
 - Requires written request by owner of plans
 - R106.6 Additional requirements
 - Large complexes may require PE stamp

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- Section R107 Temporary Structures
 - R107.1 General
 - 180 day - temporary use permit
 - Additional 180 days for cause
 - Several exceptions with specific limitations
 - Camp tents, shade tents, small event tents
 - R107.2 Conformance
 - Safety, strength, sanitation must be adequate
 - R107.4 Termination of approval
 - Permit may be pulled for cause

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- Section R107 Temporary Structures
 - R107.3 Temporary Power
 - OK with BO approval
 - NFPA 70 compliant



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- Section R108 Fees
 - R108.1 Payment
 - Payment tied to permits
 - R108.2 Fee Schedule
 - Posted
 - R108.3 Building Permit Validations
 - Required estimate at time of application
 - Final value set by BO
 - R108.4 Related fees
 - Paid as required
 - R108.5 Refunds
 - Locally established policy



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- Section R109.1 Inspections
 - R109.1 Types of Inspections
 - R109.1.1 Foundation Inspection
 - R109.1.2 Plumbing, mechanical, gas, electrical
 - 109.1.3 Floodplain inspections
 - R109.1.4 Frame & masonry inspections
 - R109.1.4.1 Insulation inspection -REMOVE?
 - R109.1.5 Other inspections
 - R109.1.5.1 Fire resistance construction inspection
 - R109.1.5.2 Additional electrical inspections
 - R109.1.6 Final inspection
 - R109.1.6.1 Elevation documentation
 - R109.1.7 Posting of required inspections

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- Section R109.1 Inspections
 - Based on section R109.1; develop a list of required inspections & documentation for each of the following:
 - 1) Electrical service change from 60A to 200A
 - 2) Oil to gas boiler conversion in a flood zone?
 - 3) 20' by 16' kitchen addition to existing structure?
 - 4) 24' by 24' detached garage adjacent to existing single family dwelling.
 - 5) 20 unit townhouse structure overlooking a river
 - 6) Ground source heat pump system

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- Section R109.1 Inspections
 - R109.2 Inspection agencies
 - Inspections may be 'jobbed out'
 - R109.3 Inspection requests
 - Duty of the permit holder or designee
 - Must allow access for inspection
 - R109.4 Approval required
 - Items must be available for inspection
 - Work may not be concealed until BO 'OK' of work
 - R109.5 Notification
 - BO will make written notice of inspection results

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- Section R110 Certificate of Occupancy
 - R110.1 Use & Occupancy Certificate
 - Indication of "substantial compliance"
 - Requires R110.1.1 Zoning approval
 - R110.1.2 Professional Statement
 - 16 units or 24K feet²
 - R110.9 Certificate of Approval
 - Issued when a CO is inappropriate
 - Fences
 - Retaining walls
 - Electrical upgrade



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- Section R110 Certificate of Occupancy
 - R110.4 Temporary Occupancy CO
 - Life safety must be ensured
 - Expires 30 days after completion
 - R110.5 Revocation
 - Procedure and cause for cancellation
 - R110.6 Partial Occupancy CO
 - Permit to use specific portions of a building



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- Section R110 Certificate of Occupancy
 - R110.1.2 Statement of Professional Opinion
 - 16 units / 24K ft² structures
 - R110.7 Pre-fab assemblies
 - Inspection certificate to accompany
 - R110.8 Manufactured housing
 - Appendix E



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- Section R111 Service Utilities
 - R111.1 Connection
 - Requires BO approval
 - R111.2 Temporary Connection to Utilities
 - May be approved by BO
 - R107.3 NFPA70
 - R111.3 BO Authority to disconnect utilities
 - To eliminate a serious hazard
 - Improper or illegal connections
 - Requires written notification

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- Section R112 Means of Appeal
 - Step 1) Written to Local board of appeals
 - Time constraints & procedural requirements
 - CEO of municipality in absence of local board
 - State Building Inspector may review decisions
 - OSBI may review decisions of Local BO / Board
 - Step 2) State Codes & Standards Committee
 - Time constraints
 - Step 3) State Superior Court

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- Section R113 Violations
 - R113.1 Unlawful Acts
 - Code must be followed
 - R113.2 Notice of violation
 - BO may issue orders based on Code violations
 - R113.2.1 Written notice
 - Delivered to:
 - permit holder, owner’s agent, person performing work
 - R113.3 Prosecution of violation
 - BO authorized to request legal assistance
 - R113.4 Violation penalties
 - \$200-1000 fine
 - 6 months jail



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- Section R114 Stop Work Order
 - Based on:
 - Non-Code compliant work
 - Unsafe or dangerous condition
 - Work outside confines of permit
 - Working without a permit
 - R114.1 Notice to Owner
 - Work must immediately stop
 - Written notice to:
 - Property owner, agent, person doing work
 - R114.2 Unlawful continence
 - Loss of dollars & / or possible orange jumpsuit
 - Work to correct the safety issue may be ordered



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- Section R115 Unsafe Structures & Equipment
 - SBC permits BO to make public safety judgment
- Section R116 Emergency Measures
 - Power to vacate or discontinue use
- Section R117 Vacant Buildings
 - Safeguarding
 - Fire protection maintenance



Questions
and/or
comments?
