Existing Buildings

Virginia Rehabilitation Code

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2012 VRC Overview

- Now a mandatory document for rehabilitation, reconstruction, alteration, repair, and change of occupancy of existing buildings
  - Except R5 – Optional
  - I2 and I3 must follow VCC
- Admin provisions previously found in the VCC now located in VRC

2012 VRC Overview

- Retrofit requirements previously in IBC Chapter 34 now in VRC Chapter 17
- Numerous changes regarding the application of Type B Dwelling Units
- Considerable work to seismic and structural requirements

202 Definitions

- Dangerous – new addition to definition
- Substantial Structural Damage – revised definition

Chapter 3 Compliance Methods

- Changed from Prescriptive Compliance Method which is now Chapter 4
  - Now list all compliance methods
  - Combines common requirements previously found in each of the three compliance methods

Chapter 4 Prescriptive Compliance Method

- 401.2 – Adds building systems to scope
- 401.3 – Building Official authority to order elimination of dangerous conditions
### Additions

- **402.2** - Removes the term “substantial damage” from the exemption to comply with flood design
- **402.5** - Smoke detectors in existing buildings with additions Group R and I-1

### Alterations

- **403.6** - Smoke detectors in existing buildings with additions Group R and I-1
  - Previous 403.6, Means of egress capacity factors has been deleted

### Repairs

- **404.2** Substantial structural damage
- **404.3.1** Lateral force-resisting elements Seismic Exceptions
- **404.4** Less than substantial structural damage

### Change of Occupancy

- **407.4** Structural Seismic requirements
  - New use must meet new building requirements unless it is already compliant
  - Exempts Risk Category I and II to III in some instances from compliance

### Change of Occupancy – Historic Buildings

- **410.4** Type B units required when work area is greater than 50% of the aggregate building area
- **410.4.2** – Accessible features not required to accessible route to type B units
Change of Occupancy – Accessibility for Existing Structures

- **410.4.2** Complete change of occupancy
  - Exception: The accessible features listed are not required for an accessible route to Type B units

Alterations

- **410.6** Alterations
  - New guidance for individually owned R2 dwelling units

Accessibility for Existing Structures

- **410.8.8** Type A dwelling or sleeping units
  - Where more than 20 Group R-2 dwelling or sleeping units are being altered or added
  - Number of Type A units apply only to the quantity of the spaces being altered or added

Accessibility for Existing Structures

- **410.8.9** Type B dwelling or sleeping units
  - Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being altered, and
  - Work area is greater than 50 percent of the aggregate area of the building,
    - Type B units apply only to the quantity being altered

Historic buildings

- **410.9** Facilities designated as historic structures that undergo alterations or a change of occupancy, unless technically infeasible
  - New Exception
Repairs

- **606.2.2** Substantial Structural Damage to Vertical Elements Of The Lateral Force-Resisting System
  - Exceptions:
    - New Exceptions from Seismic requirements
    - One- and two-family dwellings not to be evaluated or rehabilitated for load combinations that include earthquake effects

Repairs

- **606.2.2.1** Evaluation
  - New provisions for load combinations that include wind or earthquake

Accessibility

- **705.1** General
  - Exceptions
    - Type B dwelling not required to be provided in existing facilities undergoing less than a Level 3 alteration
    - The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall meet the provisions for Type B dwelling units

Accessibility

- **705.2** Alterations Affecting an Area Containing a Primary Function
  - New Exception
    - 5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units

Structural

- **706.3.2** Roof Diaphragms Resisting Wind Loads in High-Wind Regions
- Important requirement for our coastal and special wind areas with 90 MPH or higher wind design requirements
- If more than 50% of the roof covering is being removed, then the roof diaphragm connections must be evaluated. If the evaluation reveals that they are not capable of resisting at least 75% of the designed wind pressure, they must be replaced or strengthened.
### Fire Protection

- **804.2.2** Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2
  - New exceptions to fire protection

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### Fire Protection

- **804.4.3** Smoke alarms
  - Requires use R and I-1 to be provided with interconnected smoke detection. However, the interconnection is not required to detectors outside of the work area.

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### Structural

- **807.5** Existing Structural Elements Resisting Lateral Loads
  - Provides for alterations affecting lateral loads in a Level II alteration to be evaluated. In addition, if they are found to be greater than 10% deficient, there are new compliance requirements

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### Fire Protection

- **906.2** Type B Dwelling or Sleeping Units
  - Where four or more units in I-1, I-2, R-1, R-2, R-3 or R-4 are being altered or added, Type B units altered/added shall have visible alarms

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### Structural

- **907.4** Existing Structural Elements Resisting Lateral Loads
  - Removes reference to Level I and Level II Alterations

- **907.4.2** Substantial Structural Alteration
  - Change from 1 year to 5 years current or proposed structural modifications for application of this section

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## Structural

- **907.4.3** Limited Structural Alteration
  - Section significantly simplified
- **907.4.4** Wall Anchors for Concrete and Masonry Buildings
  - New wall anchoring requirements in Seismic Design Category D, E or F
- **907.4.5** Bracing for Unreinforced Masonry Parapets
  - New bracing requirements for unreinforced masonry in Seismic Design Category D, E or F

## Special Use and Occupancy

- **1002.1** Compliance with the Building Code
  - 10. Ambulatory care facilities added

## Structural

- **1007.2** Snow and wind loads
  - "Occupancy Category" changed to "Risk Category"

## General Change of Occupancy Provisions

- **1012.5.1.1** Fire wall alternative
  - In other than Groups H, F-1 and S-1
  - Fire barriers and horizontal assemblies are permitted to be used in lieu of fire walls to comply with the area limitation
  - Additional criteria must be met
General Change of Occupancy Provisions

- **1012.8** Accessibility
  - Exception: Type B dwelling/sleeping units required by the IBC are not required in existing buildings and facilities undergoing a *change of occupancy* in conjunction with less than a Level 3 *alteration*

General Change of Occupancy Provisions

- **1012.8.1** Partial change in occupancy
  - Adds Section 906 to provisions that must be complied with for partial change of occupancy

General Change of Occupancy Provisions

- **1012.8.2** Complete change of occupancy
  - New exception:
    - The accessible features listed in this section are not required for an accessible route to Type B units

Additions

- Accessibility
  - **1105.1** Minimum requirements
    - Adds Section 906 to requirements

Additional Energy Conservation

- **1106.1** Minimum requirements
  - *Additions to existing buildings* shall comply with requirements for new construction
## Structural

- **1201.2** Report
  - A historic building undergoing repair, alteration, or change of occupancy
    - At a minimum, the vertical and horizontal elements of the lateral force-resisting system shall be evaluated

## Repairs

- **1202.1** General
  - Limits the use of hazardous material to only where permitted in the new construction code. 1202.2 Unsafe conditions
- **1202.2** Unsafe conditions
  - Gives the code official the authority to order repairs to unsafe conditions in historic buildings

## Repairs

- Chapter 5 compliance deleted
- **1202.4** Replacement
  - Same for Same replacements permitted
  - Replacement glazing in hazardous locations shall comply with new glass requirements
    - Exception: Glass block walls, louvered windows, and jalousies repaired with like materials

## Alterations

- **1204.1** Accessibility requirements
- Adds Section 906 to sections to be complied with

## Accessibility

- Type B dwelling/sleeping units are not required to be provided in historical buildings
### Structural

- **1206.2** Dangerous conditions
  - Building Official authority to order elimination of *dangerous* conditions

### Performance Compliance Method

- **1401.6.2.1** Allowable area formula
  - New formula for allowable area scoring

### Performance Compliance Method

- **[B] 1401.6.14.1** Categories (elevator)
  - Corrected terminology for evaluating and scoring elevator safety

### Performance Compliance Method

- **1401.6.19** Incidental uses
  - New criteria for evaluating and scoring fire protection and life safety in incidental uses

### Chapter 15 Safeguards Against Construction

- **1501.5** Fire safety during construction
  - Fire safety during construction shall comply with the applicable requirements of the *IBC and IFC*