

## **Building**

### **2012 IBC & 2012 VCC**

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- 303.1.3 Assembly rooms associated with Group E Occupancies
- 303.3 and 306.2 Commercial kitchens
- 307.1 and Table 307.1(1) Combustible dusts
- 303.6 Use group A-5
- 307.1(1) Consumer fireworks and permissible fireworks
- 308.3 Use group I-1
- 308.3.2 Use Group I-1 Condition 1
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- 508.2.3 Accessory Occupancies
- 509 Incidental Uses
- 701.2 Multiple Use Fire Assemblies
- 703.7 Fire Resistance Assembly Marking
- 705.2 Projections
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- State exemptions to 705.2
- Horizontal Projections Elements – State exception to 706.5.2

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- [1009.3](#) Exit Access Stairways
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- [1404.12](#) Polypropylene Siding (New Section)

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- [1405.18](#) Polypropylene Siding (New Section)
- [1502.1](#) Definitions
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- Figures 1609 A-C Wind Loads (Wind Speed Maps 1609 A-C)
- [1704.2.3](#) Statement of Special Inspections
- [1704.3.3](#) Wind Requirements in the Statement of Special Inspections
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- [2303.1.1.2](#) End-Jointed Lumber
- [2306](#) Allowable Stress Design
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- [2603.5.5](#) Vertical and Lateral Flame Propagation
- [2603.4](#) Thermal Barrier
- [2603.7](#) Interior Finish in Plenums
- [3109.1](#) General
- IBC Chapter 34: Existing Structures
- IBC Chapter 35: Referenced Standards

**BUILDING**  
**2012 IBC & 2012 VCC**

<input type="checkbox"/>	<b>Chapter 2: Definitions – New terms added</b>	
	<ul style="list-style-type: none"><li>• Marina</li><li>• Slip</li></ul>	

<input type="checkbox"/>	<b>Chapter 2: Definitions – New terms added</b>	
	<ul style="list-style-type: none"><li>• Permissible fireworks</li></ul>	

<input type="checkbox"/>	<b>Chapter 2: Definitions – New terms added</b>	
	<ul style="list-style-type: none"><li>• Short term holding area</li></ul>	

<input type="checkbox"/>	<b>Chapter 2: Definitions – New terms added</b>	
	<ul style="list-style-type: none"><li>• Unsafe building or structure</li></ul>	

<input type="checkbox"/>	<b>Chapter 2: Definitions – New terms added</b>	
	<ul style="list-style-type: none"><li>• 24 Hour Basis</li></ul>	

☐	<b>Chapter 2: Definitions – New terms added</b>	
	<ul style="list-style-type: none"> <li>Swimming Pool</li> </ul>	

☐	<b>303.1.3 Assembly Rooms Associated with Group E Occupancies</b>	
	<ul style="list-style-type: none"> <li>A Use Groups contained within Group E Occupancies are considered the same as accessory areas to religious worship</li> </ul>	

☐	<b>303.3 and 306.2 Commercial Kitchens</b>	
	<ul style="list-style-type: none"> <li>Further expanded to clarify some differences that make commercial kitchens capable of two different Use Groups.</li> </ul>	

☐	<b>Table 1604.5 Risk category of buildings and other structures</b>				
	<ul style="list-style-type: none"> <li>“Occupancy category” changed to “Risk category”</li> </ul>	<table border="1"> <thead> <tr> <th style="text-align: center;">RISK CATEGORY</th> <th style="text-align: center;">N</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">I</td> <td>                     Buildings and other structures that represent a low                     <ul style="list-style-type: none"> <li>Agricultural facilities.</li> <li>Certain temporary facilities.</li> <li>Minor storage facilities</li> </ul> </td> </tr> </tbody> </table>	RISK CATEGORY	N	I
RISK CATEGORY	N				
I	Buildings and other structures that represent a low <ul style="list-style-type: none"> <li>Agricultural facilities.</li> <li>Certain temporary facilities.</li> <li>Minor storage facilities</li> </ul>				

☐	<b>303.6 Use Group A-5</b>	
	<ul style="list-style-type: none"> <li>Swimming pools now included in group</li> </ul>	

<input type="checkbox"/>	<p><b>Table 307.1(1) Consumer Fireworks and Permissible Fireworks</b></p>	
	<ul style="list-style-type: none"> <li>• Permissible fireworks brought into VCC from VSFC</li> <li>• Sprinkler quantity increase removed for 1.4G and retained for permissible</li> </ul>	

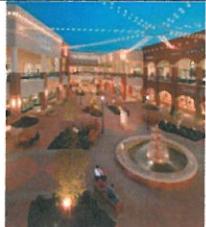
<input type="checkbox"/>	<p><b>308.3 Use Group I-1</b></p>	
	<ul style="list-style-type: none"> <li>• Now has Condition 1 and 2</li> </ul>	

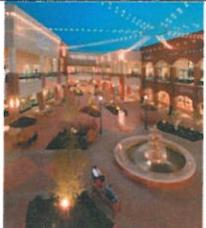
<input type="checkbox"/>	<p><b>308.3 Use Group I-1 Condition 1</b></p>	
	<ul style="list-style-type: none"> <li>• Social Service non-licensed or licensed</li> <li>• Care recipients can self-evacuate</li> <li>• Up to 5 people needing assistance on level of discharge</li> </ul>	

<input type="checkbox"/>	<p><b>308.3.2 Use Group I-1 Condition 2 Licensed</b></p>	
	<ul style="list-style-type: none"> <li>• DSS licensing required</li> <li>• Only one staff member allowed to assist a resident during evacuation</li> <li>• Up to 5 may need assistance in evacuation</li> </ul>	

<input type="checkbox"/>	<p><b>308.4 Use Group I-2</b></p>	
	<ul style="list-style-type: none"> <li>• 24 hour basis taken out of facility definitions and placed in code text</li> <li>• "Child" care replaced with "Foster" care</li> <li>• More than 5 people need assistance in evacuation</li> </ul>	

<input type="checkbox"/>	<b>310.6 Use Group R-4</b>	
	<ul style="list-style-type: none"><li>• Group R-4 now incorporates Condition 1 and Condition 2</li><li>• Similar to new I-1 conditions</li><li>• 5-16 occupants (I-1 over 16)</li></ul>	

<input type="checkbox"/>	<b>402.1 Open Mall Buildings</b>	
	<ul style="list-style-type: none"><li>• "Open mall" added to more sections and reorganized</li><li>• 402.1.2 Open mall building perimeter "line" added to define the area of the open mall</li></ul>	

<input type="checkbox"/>	<b>402.4.3 , 402.5 Open Mall Buildings</b>	
	<ul style="list-style-type: none"><li>• Added opening minimums for roof and floors</li><li>• Added sprinkler protection under circulation balconies</li></ul>	

<input type="checkbox"/>	<b>403.6.1: High Rise Buildings (over 120 ft)</b>	
	Fire service access elevator required <ul style="list-style-type: none"><li>• Increased from 1 to 2 elevators</li><li>• Elevator capacity <math>\geq</math> 3,500 lbs</li></ul>	

<input type="checkbox"/>	<b>412.4.6.2 Hangar Fire Area Calculations</b>	
	<ul style="list-style-type: none"><li>• Now allow ancillary use within same area without being included in area calculations of Section 706</li><li>• Must be separated with 1-hour fire barrier per Section 707</li></ul>	

<input type="checkbox"/>	<p><b>419 Live/Work Units</b></p>	
	<ul style="list-style-type: none"> <li>• Redefined in 2012</li> <li>• Clarifies egress requirements are based on occupancy</li> <li>• Clarifies work space plumbing requirements</li> </ul>	

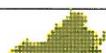
<input type="checkbox"/>	<p><b>424 Children’s Play Structures</b></p>	
	<ul style="list-style-type: none"> <li>• Now stand alone section</li> <li>• Applies to all occupancies</li> <li>• 5 foot egress path required</li> <li>• NFPA 289 added</li> </ul>	

<input type="checkbox"/>	<p><b>408.9 I-3 Smoke Controls (in windowless buildings)</b></p>	
	<ul style="list-style-type: none"> <li>• Renamed Smoke Control</li> <li>• Compartments with operable or breakable windows exempt</li> <li>• Added specific locations</li> <li>• Added performance criteria</li> </ul>	

<input type="checkbox"/>	<p><b>414.6.2 Other Regulations (tanks)</b></p>	
	<ul style="list-style-type: none"> <li>• Provides hierarchy of regulations as it pertains to storage tanks subject to Virginia State Water Control Board</li> </ul>	

<input type="checkbox"/>	<p><b>420 Groups I-1, R-1, R-2, R-3, R-4</b></p>	
	<ul style="list-style-type: none"> <li>• VA added R-4 and I-1 condition 2 to section</li> <li>• Smoke barrier requirement added for I-1 condition 2</li> <li>• Refuge area added for I-1 condition 2</li> <li>• Partially 2015 IBC changes</li> </ul>	

<input type="checkbox"/>	<p><b>408.9 I-3 Smoke Controls (in windowless buildings)</b></p>	
	<ul style="list-style-type: none"> <li>• Required for</li> <li>• Any story with persons receiving care, treatment</li> <li>• Sleeping areas</li> <li>• Any other floor with an occupant load over 50</li> </ul>	

<input type="checkbox"/>	<p><b>420.4 Smoke Barriers in Group I-1 Condition 2</b></p>	
	<ul style="list-style-type: none"> <li>• Smoke barriers per 709 create smoke compartments</li> <li>• 22,500 square foot maximum area</li> <li>• 200 feet maximum travel to smoke barrier door</li> <li>•</li> </ul>	

<input type="checkbox"/>	<p><b>420.4.1</b></p>	
	<p>Refuge area shall be provided in I-1 condition 2</p> <p>Care Recipient: <del>30 sqft</del> 15 sqft Other Occupant: 6 sqft 6 sqft</p>	

<input type="checkbox"/>	<p><b>427.1 Short Term Holding Areas</b></p>	
	<ul style="list-style-type: none"> <li>• Provides for holding areas without requiring I-3 occupancy designation</li> <li>• Must meet I-3 provisions for sally ports, Stair/ramp provisions, locks, security glazing</li> <li>• Allowed in all groups except E</li> </ul>	

<input type="checkbox"/>	<p><b>427.1 Short Term Holding Areas</b></p>	
	<ul style="list-style-type: none"> <li>• Maximum 20 detainees per area, 80 per building</li> <li>• Separate areas with smoke partitions</li> <li>• Fire alarm &amp; detection required</li> <li>• Sprinkler over 12K</li> <li>• 10% area limit</li> </ul>	

<input type="checkbox"/>	<p><b>501.2 Addressing Multiple Buildings in a Complex</b></p> <ul style="list-style-type: none"> <li>Code official <del>must</del><sup>may</sup> require additional address numbers in additional locations</li> </ul>	
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<input type="checkbox"/>	<p><b>504.2 Automatic Sprinkler System Increase</b></p> <p>I-1 condition 2 continued:</p> <ul style="list-style-type: none"> <li>Sprinkler increase for building height is not permitted for I-1 condition 2</li> </ul>	
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<input type="checkbox"/>	<p><b>505.2.2 (formerly 505.3) Mezzanines and Platforms, Means of Egress</b></p> <ul style="list-style-type: none"> <li>505.3 has been changed to 505.2.2</li> <li>Means of Egress has been consolidated in Chapter 10</li> </ul>	
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<input type="checkbox"/>	<p><b>507.1 Unlimited Area Buildings – Accessory Occupancies</b></p> <ul style="list-style-type: none"> <li>Accessory occupancies now allowed in unlimited area buildings</li> </ul>	
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<input type="checkbox"/>	<p><b>508.2.3 Accessory Occupancies</b></p> <ul style="list-style-type: none"> <li>Accessory occupancies are no longer limited to the story restriction (2015 IBC)</li> <li></li> </ul>	
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<input type="checkbox"/>	<b>509 Incidental Uses</b>	
	<ul style="list-style-type: none"> <li>Incidental uses are now unique “ancillary” functions</li> <li>Table 509 protection mandatory</li> <li>Not a standard occupancy, cannot be treated as mixed use</li> <li>10% area limit</li> </ul>	

<input type="checkbox"/>	<b>701.2 Multiple Use Fire Assemblies</b>	
	<ul style="list-style-type: none"> <li>Fire rated assemblies serving more than one function must meet requirements for all functions served</li> </ul>	

<input type="checkbox"/>	<b>703.7 Fire Resistance Assembly Marking</b>	
	<ul style="list-style-type: none"> <li>Only required when there is concealed floor, roof or ceiling space</li> <li>Also required whenever protected openings or penetrations are required</li> </ul>	

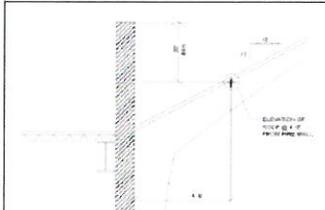
<input type="checkbox"/>	<b>705.2 Projections</b>								
	<ul style="list-style-type: none"> <li>State amendment rescinded</li> <li>ICC language used</li> </ul>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="text-align: left;">FIRE SEPARATION DISTANCE (FSD)</th> <th style="text-align: left;">MINIMUM DISTANCE FROM LINE USED TO DETERMINE FSD</th> </tr> </thead> <tbody> <tr> <td>0 feet to less than 2 feet</td> <td>Projections not permitted</td> </tr> <tr> <td>2 feet to less than 5 feet</td> <td>24 inches</td> </tr> <tr> <td>5 feet or greater</td> <td>40 inches</td> </tr> </tbody> </table>	FIRE SEPARATION DISTANCE (FSD)	MINIMUM DISTANCE FROM LINE USED TO DETERMINE FSD	0 feet to less than 2 feet	Projections not permitted	2 feet to less than 5 feet	24 inches	5 feet or greater
FIRE SEPARATION DISTANCE (FSD)	MINIMUM DISTANCE FROM LINE USED TO DETERMINE FSD								
0 feet to less than 2 feet	Projections not permitted								
2 feet to less than 5 feet	24 inches								
5 feet or greater	40 inches								

<input type="checkbox"/>	<b>705.2.3 Combustible Projections</b>	
	Combustible Projections Rate 1 hour <ul style="list-style-type: none"> <li>Within 5’ of fire separation line</li> <li>If protected openings are required</li> <li>If no openings permitted</li> </ul>	

<input type="checkbox"/>	<p><b>State exception to <u>705.2</u></b></p> <ul style="list-style-type: none"> <li>Decks or open porches exempt from projection limitation for groups R-3 and R-4</li> </ul>	
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<input type="checkbox"/>	<p><b>State exception to <u>706.5.2</u></b></p> <ul style="list-style-type: none"> <li>Decks or open porches exempt from projection limitation for groups R-3 and R-4</li> </ul>	
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<input type="checkbox"/>	<p><b><u>705.6 Structural Stability</u></b></p> <ul style="list-style-type: none"> <li>Added fire resistance requirements for structural elements that brace walls &gt;30'</li> </ul>	<table border="1"> <thead> <tr> <th colspan="2">FIRE-RESISTANCE RATING REQUIREMENT</th> </tr> <tr> <th>BUILDING ELEMENT</th> <th>TYP</th> </tr> </thead> <tbody> <tr> <td>Primary structural frame<sup>a</sup> (see Section 202)</td> <td>A</td> </tr> <tr> <td>Bearing walls</td> <td>3"</td> </tr> <tr> <td>Exterior<sup>b</sup></td> <td>3</td> </tr> <tr> <td>Interior</td> <td>3"</td> </tr> <tr> <td>Nonbearing walls and partitions</td> <td></td> </tr> <tr> <td>Exterior</td> <td></td> </tr> <tr> <td>Nonbearing walls and partitions</td> <td>0</td> </tr> </tbody> </table>	FIRE-RESISTANCE RATING REQUIREMENT		BUILDING ELEMENT	TYP	Primary structural frame <sup>a</sup> (see Section 202)	A	Bearing walls	3"	Exterior <sup>b</sup>	3	Interior	3"	Nonbearing walls and partitions		Exterior		Nonbearing walls and partitions	0
FIRE-RESISTANCE RATING REQUIREMENT																				
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<input type="checkbox"/>	<p><b><u>706.6.2 Buildings with Sloped Roofs</u></b></p> <ul style="list-style-type: none"> <li>Adds requirements for vertical continuity for certain interior walls</li> </ul>	
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<input type="checkbox"/>	<p><b><u>709.5 (I-1 condition 2)</u></b></p> <ul style="list-style-type: none"> <li>I-1 condition 2 continued</li> <li>Cross corridor door in smoke barrier center mullion exemptions expanded to I-1 con. 2</li> </ul>	
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<input type="checkbox"/>	<b>714.4.1.1.2 Through-Penetration Firestop System</b>	
	<ul style="list-style-type: none"> <li>Added exception for tub/shower drain floor only penetrations from having a T (temperature) rating</li> </ul>	

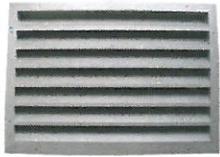
<input type="checkbox"/>	<b>714.4.1.2 Membrane Penetrations</b>	
	<p>Added exceptions:</p> <ul style="list-style-type: none"> <li>6 - allows noncombustible items cast into concrete building elements in certain cases</li> <li>7 - allows the ceiling membrane of 1 &amp; 2 hour fire resistance-rated horizontal assemblies to be interrupted with certain provisions</li> </ul>	

<input type="checkbox"/>	<b>715.4 Exterior Curtain Wall/Floor Intersection</b>	
	<ul style="list-style-type: none"> <li>Exception to allow E 119 tested material in addition to E 2307 for glass curtain walls void protection</li> </ul>	

<input type="checkbox"/>	<b>716.3 Marking Fire-Rated Glazing Assemblies</b>	
	<ul style="list-style-type: none"> <li>Marking added to opening protection table 716.5</li> <li>Marking added to fire window table 716.6</li> <li>New marking definition table 716.3 added</li> </ul>	

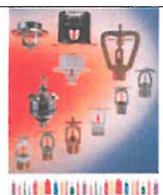
<input type="checkbox"/>	<b>715.5.4 ('09) Wired Glass deletion</b>	
	<ul style="list-style-type: none"> <li>Wired glass no longer exempt from NFPA 257 testing, consistent with NFPA 80</li> </ul>	

<b>716.5.3.1 Smoke and Draft Control</b>		
<input type="checkbox"/>	Smoke rated S Label doors	
	<ul style="list-style-type: none"> <li>• No longer required for rated corridors</li> <li>• Required for smoke barriers only</li> </ul>	

<b>716.5.7.1.1 Light Kits, Louvers and Components</b>		
<input type="checkbox"/>	Added section providing for the approval of 3 <sup>rd</sup> party listed instructions for installation of:	
	<ul style="list-style-type: none"> <li>• light kits</li> <li>• louvers</li> <li>• components</li> </ul>	

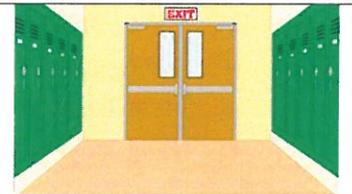
<b>806.1.2 Combustible Decorative Material</b>		
<input type="checkbox"/>	<ul style="list-style-type: none"> <li>• New 10 % exemption #2</li> <li>• Allows NFPA 701 compliant hangings up to 75% of wall</li> <li>• Ceiling suspended material</li> <li>• Same basic exemption as #1</li> <li>• Hung 12" maximum from wall</li> </ul>	

<b>901.8 Pump Riser and Room Size</b>		
<input type="checkbox"/>	Added section addresses room design	
	<ul style="list-style-type: none"> <li>• Working clearances</li> <li>• Remove largest piece of equipment</li> </ul>	

<b>901.8 Pump Riser and Room Size</b>		
<input type="checkbox"/>	If care provided on floor above Level of exit discharge	
	<ul style="list-style-type: none"> <li>• Sprinkle entire floor</li> <li>• Sprinkle all floors below</li> <li>• Fire areas don't matter</li> </ul>	

<input type="checkbox"/>	<p><b>903.2.4 Group F-1</b></p> <ul style="list-style-type: none"> <li>Added requirements for areas &gt;2,500 sqft used to manufacture upholstered furniture or mattresses</li> </ul>	
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<input type="checkbox"/>	<p><b>903.2.6 Group I</b></p> <p>13D Exception modified to require:</p> <ul style="list-style-type: none"> <li>Hydraulic design info sign on riser</li> <li>The system must be supervised and monitored</li> <li>The system must be maintained/inspected per 13R in NFPA 25</li> </ul>	
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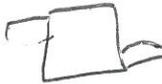
<input type="checkbox"/>	<p><b>903.2.6 Group I</b></p> <p>Day care sprinkler Exceptions added:</p> <ul style="list-style-type: none"> <li>#3 sprinkler exemption for day care at level of exit discharge with exit doors from each care room</li> </ul>	
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<input type="checkbox"/>	<p><b>903.2.6 Group I</b></p> <p>If care provided on floor above Level of exit discharge</p> <ul style="list-style-type: none"> <li>Sprinkle entire floor</li> <li>Sprinkle all floors below</li> <li>Fire areas don't matter</li> </ul>	
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<input type="checkbox"/>	<p><b>903.2.8 Group R</b></p> <p>13D Sprinkler now allowed for:</p> <ul style="list-style-type: none"> <li>All R-3</li> <li>R-4 condition 1</li> <li>Any care facility with 5 or fewer in a single family dwelling</li> </ul> <p><i>Everybody can get out without assistance.</i></p>	
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<input type="checkbox"/>	<p><b>903.2.8 Group R</b></p> <p>13R Sprinkler allowed for R-4 cond. 2 if:</p> <ul style="list-style-type: none"> <li>• Attics sprinkler if used for living, storage, fuel fired equipment</li> <li>• If attics not used for above protect with FRT, Non-combustible construction, or heat detection</li> </ul>	
<input type="checkbox"/>	<p><b>905.3.8 Rooftop Gardens and Landscaped Roofs</b></p> <ul style="list-style-type: none"> <li>• Standpipe shall extend to rooftop gardens</li> </ul>	
<input type="checkbox"/>	<p><b>907.2.9.3 Group R-2 College and University Buildings</b></p> <ul style="list-style-type: none"> <li>• Fire alarm system shall now include <b>smoke detection</b> in college dorms</li> <li>• Exempt if all units exit to exterior or an exit</li> </ul>	
<input type="checkbox"/>	<p><b>907.2.9.3 Group R-2 College and University Buildings</b></p> <ul style="list-style-type: none"> <li>• Common spaces outside of units</li> <li>• Laundry, mechanical, storage rooms</li> <li>• Interior corridors serving units</li> </ul>	
<input type="checkbox"/>	<p><b>907.5.2.2.4 Emergency Voice/Alarm Communication</b></p> <ul style="list-style-type: none"> <li>• Voice/alarm in stadiums, arenas and grandstands must be captioned per chapter 11 when 15,000 or more seats are provided</li> </ul>	

<input type="checkbox"/>	<p><b>908.7 Carbon Monoxide Alarms</b></p> <p>Now includes Groups E and I Group E</p> <ul style="list-style-type: none"> <li>In classrooms with fuel fire appliances, garage or engine shop</li> </ul>	
<input type="checkbox"/>	<p><b>908.7 Carbon Monoxide Alarms</b></p> <p>Group E exempt from rooms:</p> <ul style="list-style-type: none"> <li>100 feet from CO source, or</li> <li>2 stories away from CO source</li> </ul> <ul style="list-style-type: none"> <li>Neither case connected by duct work to source</li> </ul>	
<input type="checkbox"/>	<p><b>911 Fire Command Center</b></p> <ul style="list-style-type: none"> <li>Requirement for approved building information card</li> <li>USBC CHANGE - Larger fire command center may be needed based on building size -Determined by building official</li> </ul>	
<input type="checkbox"/>	<p><b>1001.4 Fire Safety Evacuation Plan (Change removed)</b></p> <ul style="list-style-type: none"> <li>VA deleted 2012 addition requiring fire safety and evacuation review</li> <li>Still in VSFC</li> </ul>	
<input type="checkbox"/>	<p><b>1004.1.2 and Table 1004.1.2</b></p> <ul style="list-style-type: none"> <li>“Exhibit gallery and museum” added to table</li> <li>Mall added to table with reference back to 402.8.3</li> </ul>	

□	<b>1008.1.2 Door Swing</b>	
	<ul style="list-style-type: none"> <li>• Language “serving a room or area containing” added</li> </ul>	 <p><i>Doors Req. to swing in direction of egress.</i></p>

□	<b>1008.1.9.9 Sensor Release of Locked Egress Doors</b>	
	<ul style="list-style-type: none"> <li>• New section added for sensor released doors</li> <li>• Manual release unlocks with direct power interruption</li> <li>• Listed per UL294</li> <li>• Loss of power unlocks</li> <li>• Fire alarm/sprinkler unlocks</li> </ul>	

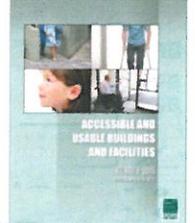
□	<b>1009.3 Exit Access Stairways</b>	
	<ul style="list-style-type: none"> <li>• All unenclosed stairways are now exit access stairways per 1009.3</li> <li>• All exceptions that allow unenclosed stairways located in 1009.3</li> <li>• Enclosure of exit access stairs per 1009.3.1</li> </ul>	

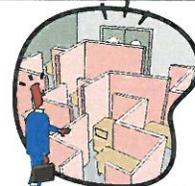
□	<b>1012.3.1 Type 1 Handrail Graspability</b>	
	<ul style="list-style-type: none"> <li>• Min cross-section dimension limited to 1"</li> </ul>	

□	<b>1016.2.2 Group F-1 and S-1 Increase (2015 USBC)</b>	
	<ul style="list-style-type: none"> <li>• New section added allows 400 foot travel</li> <li>• 1 story group F-1 and S-1</li> <li>• 24 foot minimum to bottom of roof/ceiling</li> <li>• NFPA 13 sprinkler</li> </ul>	

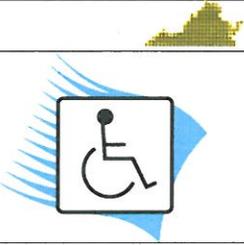
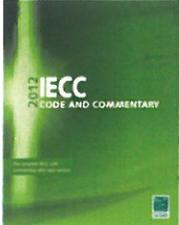
<input type="checkbox"/>	<b>1021.1 Number of exits</b>	
	<ul style="list-style-type: none"> <li>• 1021 further refined to establish when exits verses exit access components are required from a story</li> <li>•</li> </ul>	

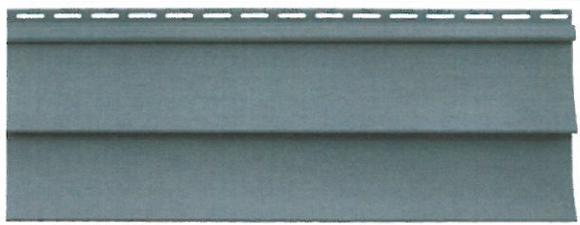
<input type="checkbox"/>	<b>1022 Interior exit stairs</b>	
	<ul style="list-style-type: none"> <li>• All interior exit stairs are now required to be enclosed. No exemptions from enclosure</li> </ul>	

<input type="checkbox"/>	<b>ICC A117.1 (2009)</b>	
	<ul style="list-style-type: none"> <li>• Ensure latest version of reference is used (2009)</li> </ul>	

<input type="checkbox"/>	<b>1104.3.1 Employee work area circulation path Exception 1</b>	
	<ul style="list-style-type: none"> <li>• Minimum work area exception threshold increased from 300 sf to 1,000 sf</li> </ul>	

<input type="checkbox"/>	<b>Tables 1106.1(1) and 1106.1(2)</b>	
	<ul style="list-style-type: none"> <li>• Increase the number of parking spaces</li> <li>• Groups A, B, E, M, R-1, R-2, and I</li> <li>• Plus 1 starting at 125 spaces</li> </ul>	

<input type="checkbox"/>	<p><b>1109.16 and 1109.16.1 Dwellings containing Universal design features</b></p> <p>“Residential Universal design added</p> <ul style="list-style-type: none"> <li>• Optional</li> <li>• A117.1 type C</li> <li>• 5 state A117.1 amendments added to 1109.16.1</li> </ul>	
<input type="checkbox"/>	<p><b>1109.2 and 1109.5 Toilet Facilities and Drinking Fountains (Children)</b></p> <p>Children's' toilets, lavatories and drinking fountains</p> <ul style="list-style-type: none"> <li>• May comply with children's A117 provisions</li> <li>• This includes required fixtures</li> </ul>	
<input type="checkbox"/>	<p><b>IBC Scoping to coordinate with ADA</b></p> <p>Increased scoping to include:</p> <ul style="list-style-type: none"> <li>• Saunas</li> <li>• Steam rooms</li> <li>• Variable message signs in transportation facilities and emergency shelters</li> </ul>	
<input type="checkbox"/>	<p><b>1203.6 Smoking Areas in Restaurants (new section)</b></p> <p>The previous MOA for smoking areas in restaurants has been codified</p> <ul style="list-style-type: none"> <li>• Structural separation</li> <li>• Separate ventilation</li> <li>• See Virginia Indoor Clean Air Act</li> </ul>	
<input type="checkbox"/>	<p><b>2012 IECC and 2012 IBC Chapter 13</b></p> <ul style="list-style-type: none"> <li>• New for 2012:</li> <li>• Commercial Energy provisions are only located in IECC Chapter 4 [CE]</li> </ul>	

<input type="checkbox"/>	<b>1404.12 Polypropylene Siding</b>	
	<p>Section adds requirements for installation and use of polypropylene siding</p> <ul style="list-style-type: none"><li>• 10 foot minimum fire separation distance required</li></ul>	

<input type="checkbox"/>	<b>1405.18 Polypropylene Siding</b>	
	<ul style="list-style-type: none"><li>• Section adds detailed requirements for installation and use of Polypropylene siding</li></ul>	

<input type="checkbox"/>	<b>1502.1 Definitions</b>	
	<p>Added term:</p> <ul style="list-style-type: none"><li>• Photovoltaic Modules/Shingles</li></ul>	

<input type="checkbox"/>	<b>1505.8 Photovoltaic Systems</b>	
	<ul style="list-style-type: none"><li>• Added section addresses installed photovoltaic systems when adhered or attached to roof coverings</li></ul>	

<input type="checkbox"/>	<b>1507.16 Roof Gardens and Landscaped Roofs</b>	
	<ul style="list-style-type: none"><li>• Adds requirement for fire resistance in accordance with Table 601</li></ul>	

**1510.3 Recovering Versus Replacement**

- Adds exception to allow existing ice barrier to remain and be covered if in good condition



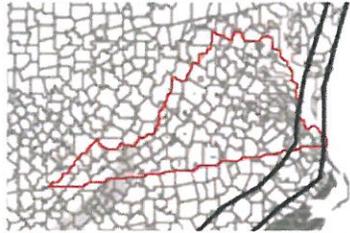
**Table 1604.5 Risk Category of Buildings and Other Structures**

- “Occupancy Category” changed to “Risk Category”

RISK CATEGORY	NATURE OF OCCUPANCY
I	Buildings and other structures that represent a low hazard to human life. <ul style="list-style-type: none"> <li>• Agricultural facilities.</li> <li>• Certain temporary facilities.</li> <li>• Minor storage facilities.</li> </ul>

**Figures 1609 Wind Loads (Wind Speed Maps 1609 A-C)**

- Maps now incorporate importance factors of Categories I-IV
- Design winds speed changed from Basic wind speed to Ultimate design wind speed Vult and Nominal design wind speed Vasd
- Vult and Vasd are required to be provided on the plans



**Figures 1609 Wind Loads (Wind Speed Maps 1609 A-C)**

- Values have changed
- Richmond risk 1 was 90 MPH now 105 Vult and 81 MPH Vasd
- Vult is for strength design method
- Vasd is for Allowable stress design method
- Load combinations per 1605 also changed



**1704.2.3 Statement of Special Inspections**

Exception added for:

- cold-formed steel light frame construction built per 2211.7 (prescriptive design)

<input type="checkbox"/>	<p><b>1704.3.3 Wind Requirements in the Statement of Special Inspections</b></p>
	<p>In high wind regions identified in 1705.10, statement of special inspections shall identify:</p> <ul style="list-style-type: none"> <li>• Main windforce resisting system</li> <li>• Wind-reinforcing components</li> </ul>
<input type="checkbox"/>	<p><b>2205.2 and 2210.2 Seismic requirements for structural steel structures</b></p>
	<p>Deleted seismic requirements for Seismic Design Category "A" Steel Structures</p>
<input type="checkbox"/>	<p><b>2303.1.1.2 End-jointed lumber</b></p>
	<ul style="list-style-type: none"> <li>• End-jointed lumber used in assemblies required to have a fire-resistance rating shall be marked "Heat resistant adhesive" or HRA</li> </ul>
	
<input type="checkbox"/>	<p><b>2306 Allowable Stress Design</b></p>
	<ul style="list-style-type: none"> <li>• Nail pattern for wood diaphragm and shear walls now only contained in NDS</li> </ul>
	
<input type="checkbox"/>	<p><b>2308.2 Limitations (to conventional light-framed construction)</b></p>
	<p>Limits for use based on 40 PSF Floor Live load limit not applicable to slab on grade</p> <ul style="list-style-type: none"> <li>• Allows for prescriptive wood design of any 1 story slab on grade commercial building</li> <li>• No longer limited to group R by 40 psf load</li> </ul>
	

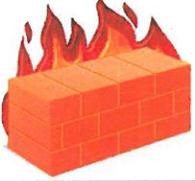
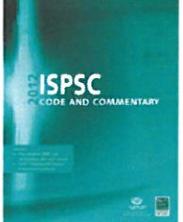
<input type="checkbox"/>	<b>Tables <u>2308.8(1)</u> and <u>2308.8(2)</u> Allowable floor joist spans</b> 	
	<ul style="list-style-type: none"> <li>Revised maximum spans for Southern Pine due to reduced allowable design values</li> </ul>	<p>Example: 40psf LL, 20psf DL, Max Deflection = <math>L/360</math>, #2 S.P., 2x10 @ 16" OC</p> <ul style="list-style-type: none"> <li>Old Span = 16' 1"</li> <li>New Span = 14' 0"</li> </ul>

<input type="checkbox"/>	<b>Tables <u>2308.10.2(1)</u> and <u>2308.10.2(2)</u> Allowable Ceiling Joist Spans</b> 	
	<ul style="list-style-type: none"> <li>Revised maximum spans for Southern Pine due to reduced allowable design values</li> </ul>	<p>Example: Uninhab. Attic, 20psf LL, 10psf DL, Max deflection = <math>L/240</math>, #2 S.P., 2x8 @ 16" OC</p> <ul style="list-style-type: none"> <li>Old Span = 17' 5"</li> <li>New Span = 15' 3"</li> </ul>

<input type="checkbox"/>	<b>Tables <u>2308.10 (1-6)</u> Allowable rafter spans</b> 	
	<ul style="list-style-type: none"> <li>Revised maximum spans for southern pine due to reduced allowable design values</li> </ul>	<p>Example: 20psf LL, 20psf DL, no ceiling (Max. Deflection = <math>L/180</math>), #2 S.P., 2x10 @ 19.2" OC</p> <ul style="list-style-type: none"> <li>Old Span = 18' 4"</li> <li>New Span = 16' 0"</li> </ul>

<input type="checkbox"/>	<b><u>2603.5.5</u> Vertical and Lateral Fire Propagation (foam wall insulation)</b> 	
	<ul style="list-style-type: none"> <li>New state exception for the NFPA 285 fire propagation test requirement</li> <li>Applies to the existing flammability test requirement for exterior walls with foam plastic insulation or other plastic elements</li> <li>Applies to construction types I-IV (not V) and 2 stories or greater</li> </ul>	

<input type="checkbox"/>	<b><u>2603.5.5</u> Vertical and Lateral Fire Propagation (foam wall insulation)</b> 	
	<p>Multiple NFPA 285 tests are not required when:</p> <ul style="list-style-type: none"> <li>Wall assemblies have variable non-combustible components <ul style="list-style-type: none"> <li>Example: CMU changes to pre-cast</li> </ul> </li> <li>Wall assemblies have variable non-plastic combustible components permitted by code <ul style="list-style-type: none"> <li>Example: wood blocking in windows</li> </ul> </li> </ul>	

<input type="checkbox"/>	<p><b>2603.5.5 Vertical and Lateral Fire Propagation (foam wall insulation)</b></p>	
	<ul style="list-style-type: none"> <li>• NFPA 285 fire propagation test exemptions:</li> <li>• Sprinklered buildings</li> <li>• 1" concrete covering insulation each face with no air space; or, 1" concrete covering each face with 1" air space and E84 flame index of 25 or less</li> </ul>	
	<p><b>2603.4 Thermal Barrier</b></p> <p>Thermal barriers for foam plastic</p> <ul style="list-style-type: none"> <li>• 1/2" gypsum still acceptable</li> <li>• For other materials the E119 material test method changed to the NFPA 275 assembly test</li> </ul>	
	<p><b>2603.7 Interior Finish in Plenums</b></p> <ul style="list-style-type: none"> <li>• Updated requirements for foam plastic insulation installed in plenums</li> </ul>	
	<p><b>2603.7 Interior Finish in Plenums</b></p> <ul style="list-style-type: none"> <li>• Option 1: Foam FS&lt;=75, SD&lt;=450, thermal barrier</li> <li>• Option 2: Foam FS&lt;=25, SD&lt;=50, foam tested per IBC 803.1.2 (NFPA 286 room corner test), no thermal barrier required</li> <li>• Option 3: Foam FS&lt;=75, SD&lt;=450, .016 inch thick steel</li> </ul>	
<input type="checkbox"/>	<p><b>3109.1 General</b></p>	
	<ul style="list-style-type: none"> <li>• Refers to ISPSC for swimming pools, pool enclosures, and aquatic recreational facilities</li> </ul>	

2012 Code Change Training  
Companion Guide

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<input type="checkbox"/>	<b><u>Chapter 34: Existing Structures</u></b>	
	<ul style="list-style-type: none"><li>• Entire chapter deleted from USBC</li><li>• All provisions referenced to VRC</li></ul>	

<input type="checkbox"/>	<b><u>Chapter 35: Referenced Standards</u></b>	
	<ul style="list-style-type: none"><li>• ADDED ASTM E329-02 for special inspection testing agencies</li><li>• Revised ASME A17.1/BSA44 elevator standards to the 2010 edition</li><li>• Revised ASME A18.1 lift standards to the 2011 edition</li></ul>	