These 1 Exam Prep Tabs are based on the *International Building Code* - *Building-2015 Edition*.

Each tabs sheet has five rows of tabs. Start with the first tab at the first row at the top of the page; proceed down that row placing the tabs at the locations listed below. Place each tab in your document, manual, or book setting it down one notch until you get to the last tab. Then start with the highlights.

<table>
<thead>
<tr>
<th>1 Exam Prep Tab</th>
<th>Section #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
<td>Pg. xxi</td>
</tr>
<tr>
<td>Scope &amp; Administration</td>
<td>101</td>
</tr>
<tr>
<td>Inspections</td>
<td>110</td>
</tr>
<tr>
<td>Definitions</td>
<td>202</td>
</tr>
<tr>
<td>Use &amp; Occupancy Classification</td>
<td>302</td>
</tr>
<tr>
<td>Special Requirements - Use &amp; Occupancy</td>
<td>401</td>
</tr>
<tr>
<td>General Bldg. Height &amp; Areas</td>
<td>501</td>
</tr>
<tr>
<td>Allowable Bldg. Height</td>
<td>Table 504.3</td>
</tr>
<tr>
<td>Unlimited Area Buildings</td>
<td>507</td>
</tr>
<tr>
<td>Mixed Use &amp; Occupancy</td>
<td>508</td>
</tr>
<tr>
<td>Types of Construction</td>
<td>601</td>
</tr>
<tr>
<td>Fire &amp; Smoke Protection</td>
<td>701</td>
</tr>
<tr>
<td>Exterior Walls</td>
<td>705</td>
</tr>
<tr>
<td>Penetrations</td>
<td>714</td>
</tr>
<tr>
<td>Opening Protectives</td>
<td>716</td>
</tr>
<tr>
<td>Interior Finishes</td>
<td>801</td>
</tr>
<tr>
<td>Fire Protection Systems</td>
<td>901</td>
</tr>
<tr>
<td>Exam Prep Tab</td>
<td>Section #</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Means of Egress</td>
<td>1001</td>
</tr>
<tr>
<td>Design Occupant Load</td>
<td>1004</td>
</tr>
<tr>
<td>Accessible Means of Egress</td>
<td>1009</td>
</tr>
<tr>
<td>Exit Access</td>
<td>1016</td>
</tr>
<tr>
<td>Exits</td>
<td>1022</td>
</tr>
<tr>
<td>Exit Discharge</td>
<td>1028</td>
</tr>
<tr>
<td>Emergency Escape Opening</td>
<td>1030.1</td>
</tr>
<tr>
<td>Accessibility</td>
<td>1101</td>
</tr>
<tr>
<td>Interior Environment</td>
<td>1201</td>
</tr>
<tr>
<td>Ventilation Area Req.</td>
<td>1203.4.1</td>
</tr>
<tr>
<td>Exterior Walls</td>
<td>1401</td>
</tr>
<tr>
<td>Structural Design</td>
<td>1601</td>
</tr>
<tr>
<td>Load Combinations</td>
<td>1605</td>
</tr>
<tr>
<td>Minimum Live Loads</td>
<td>Table 1607.1</td>
</tr>
<tr>
<td>Wind Loads</td>
<td>1609</td>
</tr>
<tr>
<td>Earthquake Loads</td>
<td>1613</td>
</tr>
<tr>
<td>Special Inspections &amp; Tests</td>
<td>1701</td>
</tr>
<tr>
<td>Soils &amp; Foundations</td>
<td>1801</td>
</tr>
<tr>
<td>Concrete</td>
<td>1901</td>
</tr>
<tr>
<td>Masonry</td>
<td>2101</td>
</tr>
<tr>
<td>Steel</td>
<td>2201</td>
</tr>
<tr>
<td>Wood</td>
<td>2301</td>
</tr>
<tr>
<td>Conventional Light-Frame Construction</td>
<td>2308</td>
</tr>
<tr>
<td>Glass and Glazing</td>
<td>2401</td>
</tr>
<tr>
<td>Exam Prep Tab</td>
<td>Section #</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Safety Glazing</td>
<td>2406</td>
</tr>
<tr>
<td>Gypsum Board &amp; Plaster</td>
<td>2501</td>
</tr>
<tr>
<td>Plastic</td>
<td>2601</td>
</tr>
<tr>
<td>Plumbing Systems</td>
<td>2901</td>
</tr>
<tr>
<td>Elevators</td>
<td>3001</td>
</tr>
<tr>
<td>Special Construction</td>
<td>3100</td>
</tr>
<tr>
<td>Public Right-of-Way</td>
<td>3202</td>
</tr>
<tr>
<td>Referenced Standards</td>
<td>3500</td>
</tr>
<tr>
<td>Index</td>
<td>Pg. 663</td>
</tr>
</tbody>
</table>

*** Please continue with the highlights on the following page***
# Marginal Markings
Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2012 edition. Deletion indicators in the form of an arrow are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.

A single asterisk [*] placed in the margin indicates that text or a table has been relocated within the code. A double asterisk [**] placed in the margin indicates that the text or table immediately following it has been relocated there from elsewhere in the code.

## Chapter 1: Scope Administration

### 101.2 Scope
Highlight entire paragraph, including exceptions

### 102 Applicability

#### 102.1 General
Specific requirement shall be applicable. The most restrictive shall govern.

#### 102.2 Other Laws
IBC does not nullify local, state, or federal law.

#### 102.4.1 Conflicts
Entire paragraph

## Duties and Powers of the Building Official

### 104.7 Department Records
Entire paragraph

## Permits

#### 105.1 Required.
shall first make application to the building official and obtain the permit required.

#### 105.1.1 Annual permit
The building official is authorized to issue an annual permit upon … owned or operated by the applicant for the permit.

#### 105.1.2 Annual permit records
Entire paragraph

#### 105.2 Work exempt from permit
Permits shall not be required for the following: 1 – 13.

#### 105.2.1 Emergency Repairs
the permit application shall be ... through end of paragraph.

#### 105.2.2 Repairs
Entire paragraph

#### 105.3.2 Time limitation of application
An application for a permit ... not exceeding 90 days each.

#### 105.4 Validity of permit

#### 105.7 Placement of permit
Entire paragraph

## Submittal documents

### 107 Construction documents
<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
</table>

### 107.2.1 Information on Construction documents:
Construction documents shall be of sufficient clarity ... through the end of the paragraph.

### 107.3.1 Approval of construction documents

### 107.5 Retention of Construction Documents:
Entire paragraph

### 108 Temporary Structures and Uses

### 108.1 General:
Such permits shall be limited as to time of service but shall not be permitted for more than 180 days.

### 109 Fees

**Work commencing before permit issuance:** Entire paragraph.

### 109.6 Refunds:
The building official is authorized to establish a refund policy.

### 110 Inspections

**Lowest Floor Elevation:** Entire paragraph

**Frame inspection**

**Inspection Requests:** It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection.

### 112 Service Utilities

**Authority to disconnect service utilities:** The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code.

### Ch. 2: Definitions:
Key definitions include: Accessible; Accessible Means of Egress; Aerosol; Awning; Basement; Building Line; Certificate of Compliance; Circulation Path; Child Care Facilities; Common Path of Egress Travel; Dalle glass; Dead loads; Dwelling; Dwelling Unit; Floor Area; Gross, Floor Area Net; Inspection Certificate; Live loads; Plastic Glazing; Public Way; Skylight, Unit; Skylights and Sloped Glazing; Sunroom

### Ch. 3: Use and Occupancy Classification

**Assembly Group A**

**Business Group B**

**Example, a carwash.**

**Educational Group E:** building or structure occupied by six or more persons at any time for educational purposes through the 12th grade.

**Factory Industrial Group F**
<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>306.2</td>
<td><strong>Moderate-Hazard Factory Industrial F-1 Moderate Hazard</strong>: Millwork (Sash and door).</td>
</tr>
<tr>
<td>306.3</td>
<td><strong>Low-Hazard Factory Industrial F-2</strong>: Metal products (fabrication and assembly)</td>
</tr>
<tr>
<td>307.1</td>
<td><strong>High Hazard Group H</strong> — that involves the manufacturing ... complying with Section 414. Hazardous occupancies are classified in groups H-1, H-2, H-3, H-4 and H-5</td>
</tr>
<tr>
<td>307.1</td>
<td><strong>Hazardous materials</strong></td>
</tr>
<tr>
<td>307.3</td>
<td><strong>High Hazard Group H-1</strong>: Buildings and structures containing materials that pose a detonation hazard.</td>
</tr>
<tr>
<td>307.4</td>
<td><strong>High Hazard Group H-2</strong>: Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning.</td>
</tr>
<tr>
<td>307.5</td>
<td><strong>High Hazard Group H-3</strong>: Buildings and structures containing materials that readily support combustion or that pose a physical hazard.</td>
</tr>
<tr>
<td>307.6</td>
<td><strong>High Hazard Group H-4</strong>: Building and structures which contain materials that are health hazards.</td>
</tr>
<tr>
<td>307.7</td>
<td><strong>High Hazard Group H-5</strong>: Semiconductors and comparable research and development areas in which hazardous production materials are used.</td>
</tr>
<tr>
<td>307.8</td>
<td><strong>Multiple Hazards</strong>: Building and structures which contain materials that are classified as H-1 through H-4.</td>
</tr>
<tr>
<td>308.1</td>
<td><strong>Institutional Group I</strong>: In which people are cared for or live .... detained for penal or correctional purposes.</td>
</tr>
<tr>
<td>308.3</td>
<td><strong>Group 1-1</strong>: include buildings housing more than 16 persons, on a 24 hour basis, who because of age, mental disability or other reason must have personal care. Example: Congregate care facilities.</td>
</tr>
<tr>
<td>308.4</td>
<td><strong>Group 1-2</strong>: buildings used for medical, surgical, psychiatric, nursing or custodial care for persons who are not capable of self preservation. Example: Psychiatric Hospitals</td>
</tr>
<tr>
<td>308.5</td>
<td><strong>Group 1-3</strong>: buildings inhabited by more than five persons who are under restrain or security.... measures not under occupant control. Example: Jails.</td>
</tr>
<tr>
<td>308.5.1</td>
<td><strong>Condition 1</strong>: free movement allowed .... means of egress without restraint.</td>
</tr>
<tr>
<td>308.5.2</td>
<td><strong>Condition 2</strong>: free movement allowed ...Egress to the exterior is impeded by locked exits.</td>
</tr>
<tr>
<td>308.5.3</td>
<td><strong>Condition 3</strong>: free movement allowed ... through end of paragraph</td>
</tr>
<tr>
<td>308.5.4</td>
<td><strong>Condition 4</strong>: free movement is restricted from an occupied space.</td>
</tr>
<tr>
<td>308.5.5</td>
<td><strong>Condition 5</strong>: free movement is restricted from an occupied space.</td>
</tr>
<tr>
<td>309.1</td>
<td><strong>Mercantile Group M</strong>: building or structure use for the display and sale of merchandise. Example: Drug Stores.</td>
</tr>
</tbody>
</table>
Residential Group R-1: containing sleeping units where the occupants are primarily transient. Examples: Boarding Houses, Hotels, Motels. Congregate living facilities with 10 or more occupants.

Residential Group R-2: containing sleeping units where the occupants are permanent in nature. Examples: highlight the list. Congregate living facilities with 16 or fewer are classified as R-3.

Residential Group R-3: occupants are permanent in nature but not classified as R-1, R-2 or R-4 or I. Examples: highlight the list.

Residential Group R-4: Highlight entire paragraph.

Storage Group S: use of building or structure for storage that is not classified as hazardous.

Group S-1: Moderate hazard storage — highlight the list under this section.

Group S-2: Low hazard storage — highlight the list under this section.

Group U: Utility and Miscellaneous Group — highlight the list under this section.

Chapter 4: Special Detailed Requirements Based on Use and Occupancy

Covered Mall and Open Mall Buildings

Applicability. Shall apply to buildings or structures … three stories above grade plane.

Means of egress: Each tenant space and the covered mall building ..... this section and this code.

High rise buildings

Smoke Removal: Exceptions 2. Windows shall be permitted to be fixed provided that glazing can be cleared by firefighters.

Atriums

General: Highlight entire paragraph.

Public Parking garages: Shall be classified as either open or enclosed.

Clear height: The clear height of each floor level shall not be less than 7 feet.

Guards. Guards serving as vehicle barrier systems shall comply with Section 406.4.3 and 1015.

Vehicle barriers: not less than 2 feet 9 inches shall be placed .... below is greater than 1 foot.

Vehicle ramps: Vehicle ramps shall not be considered as required exists unless pedestrian facilities are provided. Vehicle rams utilized for vertical circulation as well as for parking shall not exceed a slope 1:15

Open parking garages
Table 406.5.4 Open Parking Garages Area and Height: Highlight table.

408.3.8 **Interior exit stairway and ramp construction.** shall be permitted to have glazing installed in doors and interior walls at each landing level providing access to the interior exit stairway or ramp, provided that the following conditions are met: 1-6

408.7 **Security glazing.** In occupancies in Group 1-3, windows and doors in I-hour fire barriers constructed in accordance with Section … shall be permitted to have security glazing installed provided that the following conditions are met.1-4

410 Stages, Platforms, and Technical Production Areas

410.4.1 **Temporary platforms:** A temporary platform is one installed for not than 30 days.

501 Chapter 5: General Building Heights and Areas

505.3 **Equipment Platforms:** Equipment platforms shall not be a part of any mezzanine … means of egress from the building.

505.3.2 **Automatic sprinkler system**

506.1 **General:** Highlight entire paragraph

Table 506.2 **Allowable Area Factor:** Highlight table. Note: This table correlates occupancy with type of construction (see) Match A-1 with type III-A and you have an assembly building (theater) with a maximum height 65 feet, 3 stories, 14,000 sq. ft. per story. This table takes the occupancy type and relates it to how fire resistant the construction is and determines how large the building is allowed to be.

506.3 **Frontage increase:** Highlight entire paragraph

507 Unlimited Area Buildings

508 Mixed Use and Occupancy

601 Chapter 6: Types of Construction

602.2 **Types I & II:** types of construction in which the building elements listed in Table 601 are of non-combustible materials, except as permitted in Section 603.

602.3 type of construction in which the exterior walls are of non-combustible materials and the interior building elements are of any material permitted by this code.

Table 601 **Fire Resistance Rating Requirements:** Highlight the table including the notes.

602.4 **Type IV:** (Heavy Timber, HT), type of construction in which the exterior walls are of non-combustible materials and the interior building elements are of solid or laminated wood without concealed spaces.

Table 602 **Fire-Resistance rating Requirements for Exterior Walls Based on Fire-Separation Distance:** Highlight table
Table 602.4  **Wood Member Size Equivalences:** Highlight table

602.5  **Type V:** type of construction in which the structural elements, exterior walls and interior walls are of any materials permitted in this code.

701  **Chapter 7: Fire Resistant**

701.1  **Scope:** Highlight the entire paragraph.

703  **Fire-Resistance Ratings and Fire Tests**

703.6  **Fire-resistance-rated glazing.** Fire-resistance-rated glazing, when tested in accordance with ASTM E 119 or UL 263 and complying with the requirements of Section 707 … shall be permanently identified on the glazing.

705  **Exterior walls**

705.2  **Projections:** Cornices, eave overhangs, exterior balconies and similar projections extending beyond the exterior wall shall conform to the requirements of this section and Section 1406.

Projections shall not extend any closer to the line used to determine the fire separation distance as shown in Table 705.2.

Highlight Sections 705.2.1 through 705.2.3.

Table 705.8  **Maximum area of exterior wall openings based on fire separation distance and degree of opening protection.**

705.8.3  **Unprotected openings.** Where unprotected openings are permitted, windows and doors shall be constructed of any approved materials. Glazing shall conform to the requirements of Chapters 24 and 26.

705.11.1  **Parapet construction:** shall have non-combustible faces for the uppermost 18 inches, including counter flashing and coping materials.

706  **Fire walls**

706.1  **General:** Highlight entire paragraph

Table 706.4  **Fire Wall Fire-Resistance Ratings:** Highlight table

706.5  **Horizontal continuity:** shall be continuous from exterior wall to exterior wall and shall extend not less than 18 inches beyond the exterior surface of exterior walls.

706.6  **Vertical continuity:** shall extend from the foundation to a termination point at least 30 inches above both adjacent roofs.

710.5  **Openings.** Openings in smoke partitions shall be protected in accordance with Section 710.5.1 and 710.5.2.
<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>714</td>
<td>Penetrations</td>
</tr>
<tr>
<td>716</td>
<td>Opening Protectives</td>
</tr>
<tr>
<td>716.2</td>
<td><strong>Fire-resistance-rated glazing.</strong> Fire-resistance-rated glazing tested as part of a fire-resistance-rated wall assembly in accordance with ASTM E 119 or UL 263 and labeled in accordance …shall not otherwise be required to comply with this section.</td>
</tr>
<tr>
<td>716.5.3.2</td>
<td><strong>Glazing in door assemblies.</strong> In a 20-minute fire door assembly, the glazing material in the door itself shall have a minimum fire-protection-rated glazing of 20 minutes … shall be tested in accordance with NFPA 257 or UL 9, including the hose stream test, in accordance with Section 716.6.</td>
</tr>
<tr>
<td>716.5.5.1</td>
<td><strong>Glazing in doors.</strong> Fire-protection-rated glazing in excess of 100 square inches (0.065 m2) shall be permitted in fire door assemblies when tested as components of the door assemblies …shall have a maximum transmitted temperature in accordance with Section 716.5.5.</td>
</tr>
<tr>
<td>716.5.8</td>
<td><strong>Glazing material.</strong> Fire-protection-rated glazing conforming to the opening protection requirements in Section 716.5 shall be permitted in fire door assemblies.</td>
</tr>
<tr>
<td>716.5.8.1</td>
<td><strong>Size limitations.</strong> Fire resistance-rated glazing used in fire doors shall comply with the size limitations of NFPA 80, and as provided in Section 716.5.8.1.2.</td>
</tr>
<tr>
<td>716.5.8.3</td>
<td><strong>Labeling.</strong> Fire-rated glazing shall bear a label or other identification showing the … required in Table 716.3 that shall be issued by an approved agency and shall be permanently identified on the glazing.</td>
</tr>
<tr>
<td>716.5.8.4</td>
<td><strong>Safety glazing.</strong> Fire-protection-rated glazing and fire-rated glazing installed in fire door assemblies shall comply with the safety glazing requirements of Chapter 24 where applicable.</td>
</tr>
<tr>
<td>716.6.3</td>
<td><strong>Safety glazing.</strong> Fire-protection-rated glazing and fire-rated glazing installed in fire door assemblies shall comply with the safety glazing requirements of Chapter 24 where applicable.</td>
</tr>
<tr>
<td>716.6.7</td>
<td><strong>Interior fire window assemblies.</strong> Fire-protection- rated glazing used in fire window assemblies located in fire partitions and fire barriers … to use in assemblies with a maximum fire-resistance rating of 1 hour in accordance with this section.</td>
</tr>
<tr>
<td>718</td>
<td>Concealed spaces</td>
</tr>
<tr>
<td>718.2</td>
<td><strong>Fireblocking:</strong> In combustible construction, fire blocking shall be installed to cut off concealed draft openings and shall form an effective barrier between floors, between a top story and a roof or attic space.</td>
</tr>
<tr>
<td>718.2.1</td>
<td><strong>Fire blocking materials:</strong> Highlight Items 1 through 8.</td>
</tr>
<tr>
<td>720</td>
<td>Thermal- and Sound-Insulating Materials</td>
</tr>
<tr>
<td>720.2</td>
<td><strong>Concealed installation:</strong> shall have a flame spread index of not more than 25 and a smoke developed index of not more than 450.</td>
</tr>
<tr>
<td>720.3.1</td>
<td><strong>Attic floors:</strong> shall have a critical radiant flux of not less than 0.12 watt per square centimeter when tested in accordance with ASTM E 970.</td>
</tr>
</tbody>
</table>
Section/Page  Highlight

721  Prescriptive Fire Resistance

Table 721.1(1) **Maximum protection of structural parts based on time periods for various noncombustible insulating materials**: Highlight table.

Table 721.1(2) **Rated fire resistance periods for various walls and partitions** Highlight table.

Table 721.1(3) **Maximum protection for floor and roof systems** Highlight table.

722  Calculated fire resistance

Table 722.2.3(2) **Cover thickness for prestressed concrete floor and roof slabs (inches)** Highlight table.

Table 722.6.2(1) Time assigned to wallboard membranes Highlight table.

801  Chapter 8: Interior Finishes

801.7  **Windows.** Show windows in the exterior walls of the first story above grade shall be permitted to be of wood or of unprotected metal framing.

Table 803.11 **Interior wall and ceiling finish requirements by occupancy**: Highlight table.

804  Interior Floor Finish

804.4.2  **Minimum critical radiant flux**: Highlight entire paragraph.

901  Chapter 9: Fire Protection Systems

903.2.1.1  **Group A-1**: Highlight conditions 1 - 4

903.3.1.2  **NFPA 13R sprinkler systems**: Automatic sprinkler systems in Group –R occupancies up to and including four stories in height … shall be permitted to be installed throughout in accordance with NFPA 13R.

1000.01  Chapter 10: Means of Egress

1001.2  **Minimum requirements**: Highlight entire paragraph

1002  Definitions

1003  General Means of Egress

1003.2  **Ceiling height**: Shall not be less than 7 feet, 6 inches — Highlight all 8 exceptions.

1003.3  Protruding objects

1003.3.1  **Headroom**: Permitted to extend below minimum ceiling height required by Section 1003.2 provided a minimum 80" shall be provided for any walking surface, including walks, corridors, aisles and passageways.
Exception: Door closers and stops shall not reduce headroom to less than 78 inches.

1003.2 Post-mounted objects: shall not overhang that post or pylon more than 4 inches where the lowest point of the leading edge is more than 27 inches and less than 80 inches above the walking surface.

Exception: shall not apply to sloping portions of handrails between the top and bottom riser of stairs and above the ramp run.

1003.3 Horizontal projections: Objects with leading edges … shall not project horizontally from either side more than 4 inches over any walking surface into the circulation path.

Exception: Handrails are permitted to protrude 4 1/2 inches from the wall.

1003.5 Elevation change: changes in elevation of less than 12 inches exist in the means of egress, sloped surfaces shall be used. Where slope greater than 1:20, ramps complying with Section 1012 shall be used. Where the difference is 6 inches or less, the ramp shall be equipped with either handrails or floor finish materials that contrast with adjacent floor finish materials.

1004.1 Design occupant load

Table 1004.1.2 Maximum floor area allowances per occupant Highlight table.

1005 Means of Egress Sizing

1005.2 Minimum width based on component

1005.3.2 Other Egress Components. Means of egress capacity factor of 0.2 inch per occupant.

1008 Means Egress Illumination

1010 Doors, Gates, Turnstiles

1010.1 Size of doors: Where this section requires a minimum clear width of 32 inches … Means of egress doors in a Group 1-2 Occupancy used for the movement of beds shall provide a clear width not less than 41 1/2 inches. The height of door openings shall be not less than 80 inches. Exceptions: Highlight 1-8.

1010.1.1 Projections into clear width: shall not be projections into the required clear width lower than 34 inches above the floor or ground. Exception: Door closers shall be permitted with a minimum of 78 inches above the floor.

1010.1.2 Door swing: Egress doors shall be of the pivoted or side-hinged swinging type. Exceptions: Highlight 1-9.

1010.1.6 Landings at doors: shall have a width not less than the width of the stairway or the door, whichever is greater.

1010.1.7 Thresholds: Thresholds at doorways shall not exceed 0.75 inch in height for sliding glass doors or 0.50 inch for other doors.
Section/Page  | Highlight
--- | ---
1010.1.9.2 | **Hardware height:** Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches minimum and 48 inches maximum above the finished floor.

1011 | **Stairways**

1011.4 | **Width and capacity:** shall be determined as specified in Section 1005.1, but the minimum width shall not be less than 44 inches.

1011.3 | **Headroom:** Stairways shall have a headroom clearance of not less than 80 inches measured vertically from a line connecting the edge of the nosings. **Exception:** Spiral Stairways are permitted a 78 inch headroom clearance.

1011.5.2 | **Riser height and tread depth.** Stair riser heights shall be 7 inch max 4 inch minimum … Rectangular treads shall be 11 inches minimum measured horizontally.

**Exception:** 3. In Group R-2 occupancies, the maximum riser height shall be 7 ¾ inches; the minimum tread depth shall be 10 inches; and the minimum winder tread depth shall be 6 inches. A nosing not less than 3/4 inch but not more than 1 1/4 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches.

1011.5.4 | **Dimensional uniformity:** Highlight entire paragraph and the 3 exceptions.

1011.8 | **Vertical rise:** shall not have a vertical rise greater than 12 feet between floor levels or landings.

1011.10 | **Spirals stairways:** Spiral stairways are permitted to be used as a component in the means of egress o4.1ly within dwelling units or from a space more than not more than 250 sq. ft. in area and serving not more than 5 occupants.

1011.14 | **Alternating tread devices**

1011.14.1 | **Handrails of alternating tread devices:** Handrails shall be provided on both sides of alternating tread devices and shall comply with Section 1021.

1012 | **Ramps**

1012.2 | **Slope:** shall have a running slope not steeper than 1:12. The slope of other pedestrian ramps shall not be steeper than 1:8.

1012.3 | **Cross slope:** The slope measured perpendicular to the direction of travel shall not be steeper than 1:48 horizontal.

1012.4 | **Vertical rise:** The rise for any ramp run shall be 30 inches maximum.

1012.5.1 | **Width and capacity:** The clear width of a ramp between handrails … shall be 36 inches minimum.

1012.6 | **Landings:** Ramps shall have landings at the bottom and top of each ramp.

1012.6.1 | **Slope:** Landings shall have a slope not steeper than 1 unit vertical in 48 units horizontal in any direction.

1012.6.2 | **Width:** The landing width shall be not less that the width of the widest ramp run adjoining the landing.
1012.3 **Length:** Landing length shall be 60 inches minimum.

1012.4 **Change of direction:** between ramp runs, the landing shall be 60 inches by 60 inches min.

1012.8 **Handrails:** Ramps with a rise greater than 6 inches shall have handrails on both sides.

1014 **Handrails**

1014.2 **Height:** measured above stair tread nosings, or finish surface of ramp slop, shall be uniform not less than 34 inches and not more than 38 inches.

1014.3 **Handrail Graspability:** shall comply with Section 1014.3.1 or shall provide equivalent graspability.

1014.3.1 **Type I:** circular cross section shall have an outside diameter of at least 1 ¼ inches and not greater than 2 inches. Not circular, shall have a perimeter dimension of at least 4 inches and not greater than 6 1/4 inches with a maximum cross section dimension of 2 1/4 inches. Edges shall have a minimum radius of 0.01 inch.

1014.3.2 **Type II:** with a perimeter greater than 6 1/4 inches provide a graspable finger recess area on both sides of the profile.

1014.7 **Clearance:** Clear space between a handrail and a wall or other surface shall be a minimum of 1 1/2 inches.

1015 **Guards**

1015.2 **Where required:** open-sided walking surfaces, including mezzanines, equipment platforms, stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side.

1015.2.1 **Glazing.** Where glass is used to provide a guard or as a portion of the guard system, the guard shall also comply with Section 2407. Where the glazing provided does not meet the strength and attachment requirements of Section 1607.7, complying guards shall also be located along glazed sides of open-sided walking surfaces.

1015.3 **Height:** shall be not less than 42 inches high measured vertically as follows: Highlight 1 -3.

1015.4 **Opening limitations:** shall not have openings which allow passage of a sphere 4 inches in diameter from the walking surface to the required guard height.

1016 **Exit Access**

1017 **Exit Access Travel Distance**

Table 1017.2 **Exit Access Travel Distance** Highlight table.

1018 **Aisles**

1020 **Corridors**

Table 1020.2 **Minimum Corridor Width** Highlight table.
Interior exit stairway and ramp exterior walls: fire-protection rating not less than 3/4 hour.

Exits and aisles shall be located so that the travel distance to an exit door shall not be greater than 200 feet measured along the line of travel in non-sprinklered buildings; and not more than 250 feet in sprinklered buildings.

Walking surfaces: shall be of slip-resistant materials.

Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet. Exception: grade floor openings, 5 sq. ft.

Minimum dimensions: Minimum height 24 inches, minimum width 20 inches

Maximum height from floor: Not greater than 44 inches.

Where required. Sites, buildings, structures, facilities … shall be accessible to persons with disabilities.

Employee work area: Work areas, or portions of the work area, … where the elevation is essential to the function of the space shall be exempt from all requirements.

Accessible Routes

Site Arrival Points. At least one accessible route within the site shall be provided … to the accessible entrance served.

Within a Site. At least one accessible route shall connect accessible buildings.

Employee Work Areas. Common use circulation paths within employee work areas shall be accessible routes.

Multistory buildings and facilities
<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1105</td>
<td>Accessible Entrances</td>
</tr>
<tr>
<td>1105.1</td>
<td>Public Entrances: at least 60 percent of all public entrances shall be accessible.</td>
</tr>
<tr>
<td>1105.1.1</td>
<td>Parking Structure Entrances: direct access to the building or facility entrance shall be accessible.</td>
</tr>
<tr>
<td>1105.1.5</td>
<td>Service Entrances. If the service entrance is the only entrance...that entrance shall be accessible.</td>
</tr>
<tr>
<td>1105.1.6</td>
<td>Tenant Spaces. At least one accessible entrance shall be provided to each tenant in a facility.</td>
</tr>
<tr>
<td>1106</td>
<td>Parking and Passenger Loading Facilities</td>
</tr>
<tr>
<td>1106.1</td>
<td>Table 1106.1 Accessible Parking Spaces</td>
</tr>
<tr>
<td>1106.3</td>
<td>Hospital Outpatient Facilities. At least 10% ... shall be accessible.</td>
</tr>
<tr>
<td>1106.4</td>
<td>Rehabilitation Facilities and Outpatient Physical Therapy Facilities. At least 20% ... of patient and visitor parking spaces ... shall be accessible.</td>
</tr>
<tr>
<td>1106.5</td>
<td>Van spaces. For every six or fraction of six accessible parking spaces, at least one shall be a van-accessible parking space.</td>
</tr>
<tr>
<td>1106.7.1</td>
<td>Continuous Loading Zones. one passenger loading zone in every continuous 100 linear feet of loading zone space.</td>
</tr>
<tr>
<td>1107</td>
<td>Dwelling Units and Sleeping Units</td>
</tr>
<tr>
<td>1107.3</td>
<td>Accessible spaces. Highlight exceptions.</td>
</tr>
<tr>
<td>1107.4</td>
<td>Accessible route. Highlight exceptions.</td>
</tr>
<tr>
<td>Table 1107.6.1</td>
<td>Accessible Dwelling Units and Sleeping Units: Highlight table.</td>
</tr>
<tr>
<td>1107.7.1</td>
<td>Structures with Elevator Service: Where no elevator service is provided … determine in accordance with Section 1107.6.2.2.1.</td>
</tr>
<tr>
<td>1107.7.2</td>
<td>Multistory units. A multistory swelling or sleeping unit which is not provided with elevator service is not required to be a Type B unit.</td>
</tr>
<tr>
<td>1108</td>
<td>Special Occupancies</td>
</tr>
<tr>
<td>Table 1108.2.1</td>
<td>Accessible Wheelchair Spaces Highlight table.</td>
</tr>
<tr>
<td>Table 1108.3</td>
<td>Accessible Self-Service Storage Facilities Highlight table.</td>
</tr>
<tr>
<td>1109</td>
<td>Other Features and Facilities</td>
</tr>
<tr>
<td>1109.2</td>
<td>Toilet and Bathing Facilities: At least one of each type of fixture, element, control of dispenser … shall be accessible. Highlight exceptions 1 – 7.</td>
</tr>
</tbody>
</table>
1109.2.2 Water Closet Compartment: Where water closet compartments are provided in a toilet room or bathing room, at least 5 percent of the total number of compartments shall be wheelchair accessible.

1109.2.3 Lavatories. Where lavatories are provided, at least 5 percent, but not less than one, shall be accessible. Where the total lavatories provided in a toilet room or bathing facility is six or more, at least one lavatory with enhanced reach ranges shall be provided.

1109.5 Drinking Fountain

1109.5.1 Minimum Number: No fewer than two drinking fountains shall be provided.

1122 Signage

1201 Chapter 12: Interior Environment

1203 Ventilation

1203.2 Ventilation required: An airspace of not less than 1 inch shall be provided between the insulation and the roof sheathing. The net free ventilating area shall be 1/150 of the area of the space ventilated.

1203.2.1 Openings into attic: Exterior openings into the attic space of any building for human occupancy intended shall be protected to prevent the entry of birds, squirrels, rodents, snakes and other similar creatures.

1203.5 Natural ventilation

1203.5.1 Ventilation Area Required. The openable area of the openings to the outdoors shall be not less 4 percent of the floor area being ventilated.

1203.5.1.1 Adjoining spaces: Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the opening to the adjoining room shall be unobstructed and shall have an area of ...8% of floor area of interior room, not less than 25 sq. feet.

1205 Lighting

1205.2 Natural light: The minimum net glazed area shall not be less than 8% of the floor area of the room served.

1205.4 Stairway illumination: Stairways within dwelling units and exterior stairways serving a dwelling unit shall have an illumination level on tread runs of not less than 1 footcandle.

1208 Interior Space Dimensions

1208.1 Minimum roof widths: Habitable spaces, other than a kitchen, shall not be less than 7 feet in any plan dimension. Kitchens will have a clear passageway of not less than 3 feet.

1208.2 Minimum ceiling heights: Occupiable spaces and corridors shall have a ceiling height: of not less than 7'6”. Bathrooms, toilet rooms, kitchens ... not less than 7 feet.
Section/Page | Highlight
--- | ---
1208.3 | **Room area:** Every dwelling unit shall have no fewer than one room that shall have not less than 120 sq. ft. … Other habitable rooms …70 sq. ft.
1209 | **Access to Unoccupied Spaces**
1209.1 | **Crawl spaces:** Crawl spaces shall be provided with a minimum of one access opening not less than 18 inches by 24 inches.
1209.2 | **Attic spaces:** Not less than 20 inches by 30 inches having a clear height of over 30 inches. A 30 inch minimum clear headroom in the attic space shall be provided at or above the access opening.
1301 | **Chapter 13: Energy Efficiency** (Separate Reference)
1401 | **Chapter 14: Exterior Walls**
Table 1405.2 | **Minimum thickness of weather coverings:** Highlight table.
1405.7 | **Stone veneer:** …units not exceeding 10 inches in thickness shall be anchored directly to masonry, concrete or to stud construction by one of the following methods: Note methods 1 and 2.
| | Familiarize yourself with Sections 1405.8 Slab-type Veneer; 1405.9 Terra cotta; 1405.10 Adhered masonry veneer; 1405.11 Metal veneers
1501 | **Chapter 15: Roof Assemblies & Rooftop Structures**
1503 | **Weather protection**
1503.2 | **Flashing:** shall be installed to prevent moisture entering the wall and roof through joints in copings, and at intersections with parapet walls and other penetrations.
1503.2.1 | **Locations:** Highlight entire paragraph including the exception
1503.3 | **Coping:** Parapet walls shall be properly coped with non-combustible, weatherproof materials of a width no less than the thickness of the wall.
1503.4 | **Roof drainage:** Design and installation of roof drainage systems shall comply with Section 1503 … as applicable, of the International Plumbing Code.
1503.4.2 | **Scuppers:** Shall not have an opening dimension of less than 4 inches.
1503.4.3 | **Gutters:** … placed on the outside of buildings, other than Group R-3, private garages and Type V construction shall be of non-combustible material or a minimum Schedule 40 plastic pipe.
1504 | **Performance requirements**
1504.1 | **Wind resistance of roofs:** shall be designed for wind loads in accordance with Chapter 16 and Sections 1504.2, 1504.3 and 1504.4
1504.1.1 | **Wind resistance of asphalt shingles**
<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1504.2</td>
<td>Wind resistance clay or concrete tiles</td>
</tr>
<tr>
<td>1504.3</td>
<td>Wind resistance non-ballasted roofs</td>
</tr>
<tr>
<td>1504.6</td>
<td><strong>Physical properties:</strong> coverings installed on low slope roofs shall demonstrate integrity based upon 2000 hours of exposure to accelerated weathering tests in accordance with ASTM G 152, 153, 154, 155.</td>
</tr>
<tr>
<td>1505</td>
<td><strong>Fire classification</strong></td>
</tr>
<tr>
<td>1505.2</td>
<td><strong>Class A roof assemblies:</strong> ...effective against severe fire test exposure. Include exceptions 1 and 2.</td>
</tr>
<tr>
<td>1505.3</td>
<td><strong>Class B roof assemblies:</strong> ...effective against moderate fire test exposure.</td>
</tr>
<tr>
<td>1505.4</td>
<td><strong>Class C roof assemblies:</strong> ...effective against light fire test exposure.</td>
</tr>
<tr>
<td>1505.6</td>
<td><strong>Fire retardant treated wood and shingles and shakes:</strong> ...shall be treated by impregnation with by the full cell vacuum pressure process in accordance with AWPA C1.</td>
</tr>
<tr>
<td>1506</td>
<td><strong>Materials</strong></td>
</tr>
<tr>
<td>1507</td>
<td><strong>Requirements for Roof Coverings</strong></td>
</tr>
<tr>
<td>1507.2</td>
<td><strong>Asphalt Shingles</strong></td>
</tr>
<tr>
<td>1507.2.1</td>
<td><strong>Deck requirements:</strong> ...shall be fastened to solidly sheathed decks.</td>
</tr>
<tr>
<td>1507.2.2</td>
<td><strong>Slope:</strong> shall be used on roof slopes of 2:12 or greater, Roofs with slopes between 2:12 and 4:12 double underlayment application is required.</td>
</tr>
<tr>
<td>1507.2.5</td>
<td><strong>Asphalt Shingles:</strong> shall comply with ASTM D 225 or D 3462.</td>
</tr>
<tr>
<td>1507.2.6</td>
<td><strong>Fasteners:</strong> Fasteners shall be galvanized... minimum 12 gage shank, .3/8 diameter head, of a length to penetrate the roofing materials and a minimum of ¾ inch into the roof sheathing.</td>
</tr>
<tr>
<td>1507.2.7</td>
<td><strong>Attachment:</strong> secured to roof minimum of 4 per strip shingle or 2 fasteners per individual shingles.</td>
</tr>
<tr>
<td>1507.2.9</td>
<td><strong>Flashings</strong></td>
</tr>
<tr>
<td>1507.2.9.1</td>
<td><strong>Base and Cap Flashing:</strong> Base flashing shall be of either … minimum nominal 0.019-inch thickness.</td>
</tr>
<tr>
<td>1507.2.9.2</td>
<td><strong>Valleys:</strong> Valley linings of the following types shall be permitted: 1 – 3.</td>
</tr>
<tr>
<td>1507.2.9.3</td>
<td><strong>Drip edge:</strong> Highlight entire paragraph</td>
</tr>
<tr>
<td>1507.3</td>
<td><strong>Clay and Concrete Tiles</strong></td>
</tr>
<tr>
<td>1507.3.3</td>
<td><strong>Underlayment</strong></td>
</tr>
<tr>
<td>1507.3.4</td>
<td><strong>Clay tile:</strong> shall comply with ASTM C 1167</td>
</tr>
<tr>
<td>Section/Page</td>
<td>Highlight</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>1507.3.5</td>
<td>Concrete tile: shall comply with ASTM C 1492</td>
</tr>
<tr>
<td>1507.3.6</td>
<td>Fasteners: shall be corrosion resistant not less than 11 gage, 5/16 inch head, and of sufficient length to penetrate the deck a minimum of 0.75 inches.</td>
</tr>
<tr>
<td>1507.3.7</td>
<td>Attachments: Clay and concrete roof tiles shall be fastened in accordance with Table 1507.3.7.</td>
</tr>
<tr>
<td>1507.3.8</td>
<td>Application: Tile shall be applied …. Based on the following: 1-4.</td>
</tr>
<tr>
<td>1507.4</td>
<td>Metal roof panels</td>
</tr>
<tr>
<td>1507.4.2</td>
<td>Deck slope: Minimum slopes for metal roof panels shall comply with the following: 1 -3.</td>
</tr>
<tr>
<td>1507.4.3</td>
<td>Material Standards: Metal-sheet roof coverings … shall comply with Table 1507.4.3(1).</td>
</tr>
</tbody>
</table>

Table 1507.4.3(1) Metal Roof Coverings: Highlight table.

<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1507.5</td>
<td>Metal roof shingles</td>
</tr>
<tr>
<td>1507.5.2</td>
<td>Deck slope: ... shall be not be installed on roof slopes below 3:12</td>
</tr>
<tr>
<td>1507.5.7</td>
<td>Flashing: ... corrosion resistant, valley flashing shall extend at least 8 inches from the centerline each way and shall have a splash diverter rib not less than 0.75 inch at the flow line formed as part of the flashing. Sections of flashing shall have an end lap of not less than 4 inches.</td>
</tr>
<tr>
<td>1507.6</td>
<td>Mineral surfaced roll roofing</td>
</tr>
<tr>
<td>1507.6.2</td>
<td>Deck slope: ... shall not be below 1:12 slopes.</td>
</tr>
<tr>
<td>1507.7</td>
<td>Slate shingles</td>
</tr>
<tr>
<td>1507.7.6</td>
<td>Application: Minimum headlap in accordance with Table 1507.7.6. Slate shingles shall be secured to the roof with two fasteners per slate.</td>
</tr>
</tbody>
</table>

Table 1507.7.6 Slate Shingle Headlap: Highlight table.

<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1507.7.7</td>
<td>Flashing: ... shall be made with sheet metal. Valley flashing shall be a minimum of 15 inches wide.</td>
</tr>
<tr>
<td>1507.8</td>
<td>Wood shingles</td>
</tr>
<tr>
<td>1507.8.6</td>
<td>Attachment: ... shall be corrosion resistant with a minimum penetration of 0.75 inch into the sheathing.</td>
</tr>
</tbody>
</table>

Table 1507.8.7 Wood Shingle Weather Exposure and Roof Slope. Highlight table.

<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1507.8.8</td>
<td>Flashing: ...For roof slopes of three units vertical in 12 units horizontal and over, the valley flashing shall have a 36 inch wide underlayment....</td>
</tr>
</tbody>
</table>
Deck requirements: spaced sheathing boards shall not be less than 1 X 4 nominal dimensions and shall be spaced on centers equal to the weather exposure to coincide with the placement of fasteners.

Table 1507.9.6 Wood Shake Material Requirements: Highlight table.

Attachment: shall be corrosion resistant with a minimum penetration of 0.75 inch into the sheathing.

Application: side lap not less than 1.5 inches between joints in adjacent courses. Spacing between shakes in the same course shall be 3/8 to 5/8 inches. Naturally durable wood shall be 1/4 to 3/8 inch. Exposure shall not exceed those set in Table 1507.9.8

Table 1507.9.8 Wood Shake Weather Exposure and Roof Slope. Highlight table.

Built-up roofs

Slope: shall be 0.25:12. except for coal-tar shall be 1/8:12.

Table 1507.10.2 Built-Up Roofing Material Standards. Highlight table.

Modified bitumen roofing

Slope: 0.25:12 (2%) slope minimum for drainage

Thermoset single-ply roofing

Slope: 0.25:12 (2%) slope minimum for drainage

Material standards: Thermoset single-ply roof coverings shall comply with ASTM D 4637 or GGSB 37-GP-52M

Thermoplastic single-ply roofing

Slope: 0.25:12 (2%) slope minimum

Sprayed polyurethane foam roofing

Slope: 0.25:12 (2%) slope minimum

Application: A liquid applied protective coating that complies with Table 1507.14.3 shall be applied no less than 2 hours nor more than 72 hours following the application of the foam.

Liquid-applied roofing

Slope: 0.25:12 (2%) slope minimum
1510.2.1 **Height above roof deck:** Penthouses constructed on building other than Type I construction shall not exceed 18 feet in height above the roof deck measured to the average height of the roof of the penthouse.

1511 **Reroofing**

1511.1 **General:** Exceptions: 1. Roof replacement or roof recover: highlight entire paragraph.

1511.3 **Roof replacement:** Roof replacement shall include the removal of existing layers of roof coverings down to the roof deck.

1511.3.1 **Roof recover:** The installation of new roof covering over an existing roof … where any of the following conditions occur: 1 – 4.

1601 **Chapter 16: Structural Design**

1603 **Construction Documents:** Information required in the documents.

1604 **General Design Requirements**

1605 **Load Combinations**

1607 **Live Loads**

Table 1607.1 **Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads:** Highlight table.

1607.8.1 **Handrails and Guards:** must be designed to accommodate 50 lb per lineal foot applied in any direction.

1607.12 **Roof Loads**

1609 **Wind Loads**

1609.1.2 **Protection of openings:** Exceptions: 1. Wood structural panels with a minimum thickness of 7/16 inch and maximum panel span of 8 feet shall be permitted for opening protection in one and two story buildings classified as Group R-3 or R-4 occupancy.

**Exceptions.**
2. Glazing in Occupancy Category I buildings
3. Glazing in Occupancy Category II, III or IV buildings

Fig. 1609.3(1) **Ultimate Design and Wind Speeds – Category II**
Fig. 1609.3(2) **Ultimate Design and Wind Speeds – Category III and IV**
Fig. 1609.3(3) **Ultimate Design and Wind Speeds – Category I**

1613 **Earthquake Loads**
1701  Chapter 17: Special Inspections and Tests
1704  Special Inspections and Tests
1709  Preconstruction Load Tests
1801  Chapter 18: Soil and Foundations

1803.1  General. Geotechnical investigations shall be conducted in accordance with Section 1803.2 and 1803.6.

1803.2  Investigation required: Highlight exception.

1803.5  Investigated Conditions

1803.5.2  Questionable soil: Where the classification … the building official shall be permitted to require that a geotechnical investigation be conducted.

1803.5.4  Ground-water table: A subsurface soil investigation shall be performed to determine whether the existing ground-water table is within 5 feet below lowest floor.

Exception: shall not be required where waterproofing is provided.

1803.6  Reporting: The geotechnical report shall include: Highlight 1-10.

1804  Excavation, Grading, and Fill

1804.3  Placement of backfill: The excavation outside ... controlled low strength material (CLSM).

1804.4  Site Grading: The ground immediately adjacent to foundation shall be sloped away from building at 1:20 (5%) horizontal for a minimum distance of 10 feet.

1804.6  Compacted fill material: Highlight exception.

1805  Dampproofing and Waterproofing

1805.1  General: Walls or portions thereof that retain earth and enclose interior spaces and floors below grade shall be waterproofed and damp proofed in accordance with this section.

1805.3  Waterproofing

1805.4.2  Foundation drain: ... shall extend a minimum of 12 inches beyond the outside edge of the footing.

The pipe or tile shall be placed on not less than 2 inches of gravel or crushed stone complying with section 1805.4.1 and shall be covered with not less than 6 inches of the same material.

1806  Presumptive Load-Bearing Values of Soils

Table 1806.2  Presumptive Load-Bearing Values: Highlight table.

1807  Foundation Walls, Retaining Walls and Embedded Posts and Poles
1807.1.3 **Rubble Stone Foundation Walls**: ... shall not be less than 16 inches thick.

1807.1.6.1 **Foundation wall thickness**: ... shall not be less than the thickness of the wall supported, except that foundation walls of at least 8-inch nominal width shall be permitted to support brick veneered frame walls and 10-inch-wide cavity walls provided the requirements of Section 1807.1.6.2 or 1807.1.6.3 are met.

Table 1807.1.6.3(1) **Plain Masonry Foundation Walls**: Highlight table.

1808 **Foundations**

1808.7.4 **Foundation elevation**: ... top of any exterior foundation shall extend above the elevation of the street gutter at point of discharge of the inlet of an approved drainage device a minimum of 12 inches plus 2 percent.

1809 **Shallow Foundations**

1809.2 **Supporting soils**: Shallow foundations shall be built on undisturbed soil, compacted fill material or controlled low strength material (CLSM).

1809.4 **Depth and width of footings**: The minimum depth of footing below the undisturbed ground surface shall be 12 inches. The minimum width of footings shall be 12 inches.

Table 1809.7 **Prescriptive footings supporting walls of light frame construction**: Highlight table.

1810 **Deep Foundations**

1810.3.5.2 **Cast-in-place or grouted-in-place**

1810.3.5.2.1 **Cased**: Cast-in-place deep foundation elements with a permanent casing shall have a nominal outside diameter of not less than 8 inches.

1810.3.5.2.2 **Uncased**: Cast-in-place deep foundation elements without a permanent casing shall have a diameter of not less than 12 inches. The element length shall not exceed 30 times the average diameter.

1810.3.8 **Precast concrete piles**

1810.3.8.2.1 **Minimum reinforcement**: ... shall consist of at least four longitudinal bars with a minimum longitudinal reinforcement ratio of 0.008.

1901 **Chapter 19: Concrete**

1901.5 **Construction documents**: Shall include: Highlight 1 -11.

1903 **Specification for Test and Material**

1903.1 **General**: shall comply with ACI 318.

1904 **Durability Requirements**
1907  Minimum Slab Provisions

1907.1 General: The thickness of concrete floor slabs supported directly on the ground shall not be less than 3 1/2 inches. A 6-mil polyethylene vapor retarder with joints lapped not less than 6 inches … transmission through the floor slab.

Exception: A vapor retarder is not required: Highlight 1- 5.

1908  Shotcrete

1908.3 Aggregate. Coarse aggregate, if used, shall not exceed ¾ inch.

1908.4.1 Size. The maximum size of reinforcement shall be no. 5 bars … of larger bars will be achieved.

1908.4.2 Clearance. When no. 5 or smaller bars are used, there shall be a minimum clearance between … bars of 2 ½ inches.

When two curtains of steel are provided … have a minimum spacing of six bar diameters.

1908.4.3 Splices. Lap splices of reinforcing bars shall utilize … clearance of 2 inches.

1908.9 Curing. During the curing periods specified herein, shotcrete shall be maintained above 40 F and in moist condition.

1908.2 Final Curing. Final curing shall continue for seven days … the specified strength is obtained.

1908.9.3 Natural curing. Natural curing shall not be used in lieu … above 85 percent

2001  Chapter 20: Aluminum

2002  Materials

2101  Chapter 21: Masonry

2101.3 Special inspection

2103  Masonry Construction Materials

2103.1 Masonry Units: Concrete masonry unit … shall comply with Article 2.3 of TMS 602/ACI 503.1/ASCE 6.

Table 2103.2.3 Ceramic Tile Mortar Compositions

2104  Construction

2104.1 Masonry Construction: ... shall comply with TMS 602/ACI 530.1/ASCE 6.

2109  Empirical Design of Masonry
<table>
<thead>
<tr>
<th>Section/Page</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2109.3.1.4</td>
<td><strong>Shrinkage cracks</strong>: Adobe units shall not contain more than three shrinkage cracks ... shall not exceed 3 inches in length or 1/8 inch in width.</td>
</tr>
<tr>
<td>2109.3.4.4</td>
<td><strong>Wall thickness</strong>: The minimum thickness of exterior walls ... load bearing walls shall be 8 inches.</td>
</tr>
<tr>
<td>2109.3.4.7</td>
<td><strong>Concrete tie beams</strong>: Concrete tie beams shall be a minimum depth of 6 inches ... with a minimum of two No. 4 reinforcing bars.</td>
</tr>
<tr>
<td>2109.3.4.7.2</td>
<td><strong>Wood tie beams</strong>: Wood tie beams shall be a built up or solid ... No splices shall be allowed within 12 inches of an opening.</td>
</tr>
<tr>
<td>2111</td>
<td><strong>Masonry Fireplaces</strong></td>
</tr>
<tr>
<td>2111.3</td>
<td><strong>Footings and Foundations</strong>: Footings and masonry fireplaces ... extend at least 6 inches beyond the face of the fireplace or foundation wall on all sides.</td>
</tr>
<tr>
<td>2111.8.1</td>
<td><strong>Damper</strong>: Masonry fireplaces shall be equipped ... not less than 8 inches above the top of the fireplace opening.</td>
</tr>
<tr>
<td>2111.10.1</td>
<td><strong>Hearth thickness</strong>: The minimum thickness shall be 4”</td>
</tr>
<tr>
<td>2111.11</td>
<td><strong>Hearth extension dimensions</strong>: ... shall extend not less than 16 inches in front of, and not less than 8 inches beyond, each side of the fireplace opening. Where the fireplace opening is 6 sq. ft. or larger, the extension shall extend at least 20 inches in front and 12 inches beyond each side of the opening.</td>
</tr>
<tr>
<td>2111.12</td>
<td><strong>Fireplace clearance</strong>: 2” from front faces and sides and not less than 4” from back face. Exception: Highlight 3 and 4.</td>
</tr>
</tbody>
</table>

Figure 2111.12 **Illustration of exception to fireplace clearance provision**

| 2112         | **Masonry Heaters** |
| 2112.3       | **Foundations and Footings**: The firebox floor shall be a minimum thickness of 4 inches of noncombustible material and be supported on a noncombustible footing. |
| 2112.5       | **Masonry Heater Clearance**: Combustible materials shall not be placed within 36 inches of the outside surface of a masonry heater in accordance with NFPA 211. Exception: Highlight #1. |

| 2113         | **Masonry Chimneys** |
| 2113.5       | **Corbeling**: Masonry chimneys shall not be corbelled more than half of the chimney's wall thickness from a wall or foundation, nor shall it be corbelled from a wall or foundation that is less than 12 inches in thickness. |
| 2113.19      | **Chimney Clearances**: Any portion of masonry chimney located in the interior of a building ... shall have a minimum airspace clearance to combustibles of 2 inches. |

| 2201         | **Chapter 22: Steel** |
Section/Page | Highlight
--- | ---
2203.1 | **Identification**: Highlight entire paragraph
2207 | **Steel Joists**
2211 | **Cold-Formed Steel Light-Frame Construction**
2111.3.3 | **Trusses spanning 60 feet or greater**
2301 | **Chapter 23: Wood**
2303 | **Minimum standards and quality**
2303.1.1 | **Sawn lumber**: Sawn lumber used for load-supporting purposes... shall be identified by the grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS 20 or equivalent.
2303.1.6 | **Fiberboard**
2303.1.6.2 | **Roof insulation**: Where used as roof insulation in all types of construction fiberboard shall be protected with an approved roof covering.
2303.1.6.3.1 | **Protection**: Fiberboard wall insulation applied on the exterior of foundation walls shall be protected below ground level with a bituminous coating
2303.1.8 | **Particleboard**
2303.1.8.1 | **Floor underlayment**: Particleboard floor underlayment ... shall not be less than ¼ inch and shall be installed in accordance with the instructions of the Composite Panel Assn.
2303.1.9.2 | **Moisture Content**: Where preservative treated wood.... not more than 19% moisture
2303.2 | **Fire-retardant-treated wood**: Fire-retardant-treated wood ... a listed flame spread index of 25 or less and show no evidence of significant progressive combustion when the test is continued for an additional 20 minute period.
2303.2.4 | **Labeling requirements**: The label shall contain the following items: Highlight 1 - 8.
2303.4 | **Trusses**
2303.4.1.2 | **Permanent individual truss member restraint.** Where permanent restraint of truss members … accomplished by one of the following methods: 1 – 3.
2303.6 | **Nail and staple requirements**: Nails used for framing and sheathing connections shall have minimum average bending yield strengths as follows … but not larger than 0.142 inch.
2304 | **General Construction Requirements**
2304.8 | **Floor and roof sheathing**

Table 2304.6.1 **Maximum nominal design wind speed**: Highlight table.
Table 2304.8(1) *Allowable spans for lumber and roof sheathing:* Highlight table.

Table 2304.8(2) *Sheathing lumber, minimum grade requirements: board grade:* Highlight table.

Table 2304.8(4) *Plywood Subfloor Spans:* Allowable span for wood structural panel combination subfloor underlayment (single floor): Highlight table.

2304.9.3 **Mechanically laminated decks**

2304.9.3.2 **Nailing:** The length of nails connecting laminations shall not be less than two and one half times the net thickness of each lamination.

2304.10 **Connections and Fasteners**

Table 2304.10.1 *Fastening Schedule:* Highlight table.

2304.12 **Protection against decay and termites**

2304.12.2.1 **Joists, girders, subfloor:** floor without joists are closer than 18", or wood girders are closer than 12 inches to the exposed ground must be of naturally durable or preservative treated wood.

2304.12.1.2 **Wood Supported by Exterior Foundation:** Wood framing members …less than 8" to ground requires preservative treated wood.

2304.12.1.4 **Sleepers and sills:** Sleepers and sills on a concrete or masonry slab that is in direct contact with earth shall be of naturally durable or preservative treated wood.

2304.12.1.6 **Wood siding:** Clearance between wood siding and earth on the exterior of a building shall not be less than 6 inches or less than 2 inches vertical from concrete steps, exposed to the weather except where the sheathing and wall framing are of naturally durable or preservative treated wood.

2304.12.2.2 **Posts or columns:** Posts or columns … Naturally durable or preservative treated wood if in contact with concrete. **Exception:** Highlight exception.

2304.13 **Long term loading:** Wood members used to support dead load of any masonry or concrete shall be…through end of paragraph.

2305 **General Design Requirement for Lateral Force Resisting Systems**

2305.1 **General:** Highlight entire paragraph.

2308 **Conventional Light Frame Construction**

2308.1 **General:** Highlight entire paragraph.

2308.2 **Limitations:** Highlight entire paragraph.

2308.5.3.1 **Bottom plates and sills:** Highlight entire paragraph.

2308.5.3.2 **Top plates:** Highlight entire paragraph.
Table 2308.5.11 Minimum Thickness of Wall Sheathing

2304.2 Floor joists

Table 2308.4.2.1(1) Floor joist spans for common lumber species: Highlight table.

Table 2308.4.2.1(2) Floor joist spans for common lumber species: Highlight table.

2308.4.2.2 Bearing: The ends of each joist shall have not less than 1 ½ inches … ribbon strip and nailed to the adjoining stud.

2308.4.2.3 Framing details: Solid blocking shall not less than 2 inches … or ledger strips not less than 2 inches by 2 inches.

2308.4.4 Framing around openings: Trimmer and header rafters shall be doubled, or of a lumber of equivalent cross section, where the span of the header exceeds 4 feet.

2308.5 Wall Construction

2308.5.1 Stud size, height and spacing: Highlight entire paragraph including exceptions.

Table 2308.5.1 Size, height and spacing of wood studs: Highlight table.

2308.7 Roof and ceiling framing

2308.7.4 Notches and holes: Notching at the ends of rafters or ceiling joists shall not exceed one fourth the depth. Notches in the top or bottom of the rafter or ceiling joist shall not exceed one sixth the depth and shall not be located in the middle one third of the span, except that a notch not exceeding one third of the depth is permitted in the top of the rafter or ceiling joist not further from the face of the support than the depth of the member.

Holes bored in rafters or ceiling joists shall not be within 2 inches of the top and bottom and their diameter shall not exceed 1/3 the depth of the member.

2308.7.6 Framing around openings: Trimmer and header rafters shall be doubled, or of a lumber of equivalent cross section, where the span of the header exceeds 4 feet.

Table 2308.7.1(1) Ceiling joists spans for common lumber species: Highlight table.

Table 2308.7.1(2) Ceiling joists spans for common lumber species: Highlight table.

Table 2308.7.2(1) Rafter spans for common lumber species: Highlight table.

Table 2308.7.2(2) Rafter spans for common lumber species: Highlight table.

2401 Chapter 24: Glass and Glazing

2403 General Requirements for Glass
Identification: Each pane shall bear the manufacturer’s mark designating the type and thickness of the glass or glazing material.

Framing. To be considered firmly supported, the framing members for each individual pane of glass shall be designed so the deflection of the edge of the glass perpendicular to the glass pane shall not exceed ... negative load where loads are combined as specified in Section 1605.

Interior glazed areas. Where interior glazing is installed adjacent to a walking surface, the differential deflection of two adjacent unsupported edges shall not be greater than the thickness of the panels when a force of 50 pounds per linear foot (plf) (730 N/m) is applied horizontally to one panel at any point up to 42 inches (1067 mm) above the walking surface

Louvered windows or jalousies. Float, wired and patterned glass in louvered windows and jalousies shall be no thinner than nominal 3/16 inch (4.8 mm) and no longer than 48 inches (1219 mm). Exposed glass edges shall be smooth.

Wind, Snow, and Seismic and Dead Loads on Glass

Vertical Glass: The design of vertical glazing shall be based on the following Equation 24-1

Sloped Glazing and Skylights

Sloped glazing and skylights: This section applies to the installation of glass ... at a slope more than 15 degrees.

Allowable glazing materials and limitations. Sloped glazing shall be any of the following materials, subject to the listed limitations. 1-2

Screening: Where used in monolithic glazing systems, heat strengthened glass and fully tempered glass shall have screens installed below the glazing material. ... (1) capable of supporting twice the weight of the glazing (2) be firmly and substantially fastened to the framing members and (3) to be installed within 4 inches of the glass. The screens shall be constructed of a noncombustible material not thinner than No. 12 B&S gage with mesh not larger than 1 x 1 inches. Exception: In monolithic and multiple-layer sloped glazing systems, the following applies: 1-4

Framing: Type 1 and 2... frames shall be constructed of noncombustible materials.... Skylights set at an angle of less than 45 degrees... mounted at least 4 inches above the plane of the roof. Skylights shall not be installed in the plane of the roof where the roof pitch is less than 45 degrees from the horizontal.

Safety Glazing

Impact test. Except as provided in Sections 2406.1.2 through 2406.1.4, all glazing shall pass the impact test requirements of Section 2406.2.

Impact test. Where required by other sections of this code, glazing shall be tested in accordance with CPSC 16 CFR 1201. Glazing shall comply with the test criteria for Category I or II as indicated in Table 2406.2(1). Exception: Highlight exception.

Hazardous locations. Locations specified in ...requiring safety glazing material.
Table 2406.2(1) Minimum category Classification of Glazing: Highlight table.

Table 2406.2(2) Minimum Category Classification of Glazing Using ANSI Z97.1: Highlight table.

2407 Glass in Handrails and Guardrails

2407.1 Materials

2407.1.4 Glazing in wind-borne debris regions. Glazing installed in in-fill panels or balusters in wind-borne debris regions shall comply with the following:

2409 Glass in Elevator Hoistways and Elevator Cars

2409.2.2 Glass hoistway doors. The glass in glass hoistway doors shall be not less than 60 percent of the total visible door panel surface area as seen from the landing side.

2409.3 Glass vision panels. Glass in vision panels in elevator hoistway doors shall be permitted to be any transparent glazing material not less than 1/4 inches (0.64 mm) in thickness conforming to Class A.

2409.4.2 Surface area. The glass in glass elevator car doors shall be not less than 60 percent of the total visible door panel surface area as seen from the car side of the door

2501 Chapter 25: Gypsum Board and Plaster

2504.1.1 Wood framing: Wood supports … not less than 2” nominal (except over solid backing shall not be less than 1 x 2 inches)

2507 Lathing and Plastering

Table 2508.1 Installation of Gypsum Construction: Highlight table.

2508.3 Single-ply application

2508.5 Horizontal gypsum board or gypsum panel product diaphragm ceilings: Gypsum board shall be permitted to be used on wood joists to create a horizontal diaphragm (then lists installation specifications)

2509 Gypsum Board in Showers and Water Closets

2509.2 Base for tile: Materials used as a base for tile in tub … manufacturer’s recommendations.

2509.3 Limitations: Water resistant gypsum backing board shall not be used in the following locations.... 1,2.

2510 Lath and furring for cement plaster

2511 Interior plaster

2512 Exterior Plaster
2512.1.2 *Weep screed:* A minimum 0.019 inch...minimum of 4 inches above the earth or 2 inches above paved areas.

2601 Chapter 26: Plastic

2603 Foam plastic insulation

2603.2 *Labeling and Identification:* Packages and containers of foam plastic insulation and foam plastic insulation components delivered to the job site shall bear the label of an approved agency.

2603.4.1.5 *Roofing:* Foam plastic insulation under a roof assembly or roof covering ... shall be separated from the interior of the building by wood structural panel sheathing not less than 0.47 inch....

2606 Light-Transmitting Plastics

2606.9 *Bathroom accessories.* Light-transmitting plastics shall be permitted as glazing in shower stalls, shower doors, bathtub enclosures and similar accessory units. Safety glazing shall be provided in accordance with Chapter 24.

2607 Light-Transmitting Plastic Wall Panels

Table 2607.4 *Area limitation and separation requirements for Light-transmitting plastic wall panels:* Highlight table.

2608 Light-Transmitting Plastic Glazing

2609 Light-Transmitting Roof Panels

2610 Light-Transmitting Plastic Skylight Glazing

2610.2 *Mounting.* The light-transmitting plastic shall be mounted above the plane of the roof on a curb constructed in accordance with the requirements for the type of construction classification, but at least 4 inches (102 mm) above the plane of the roof.

2610.3 *Slope:* Flat or corrugated light transmitting plastic skylights shall slope at least 4:12. Dome shaped skylights shall rise above the mounting flange a minimum distance equal to 10% of the max span of the dome but not less than 3 inches.

2610.5 *Aggregate area of Skylights:* The aggregate area of skylights shall not exceed 33 1/3% of the floor area of the room or space sheltered by the roof for Class CC1 materials, and 25% where Class CC2 materials are utilized.

2610.6 *Separation:* Skylights shall be separated from each other by a distance of not less than 4 feet measured in a horizontal plane.

*Exceptions:* Highlight 1 and 2.

2613 Fiber Reinforced Polymer and Fiberglass Reinforced Polymer

2614 Reflective Plastic Core Insulation
2701  | Chapters 27: Electrical
2702.2.10  | Horizontal Sliding Doors: Standby power shall be provided … not fewer than 50 closing cycles of the door.
2702.2.11  | Means of egress illumination: Emergency power shall be provided … not less than 90 minutes.
2801  | Chapter 28: Mechanical (Separate Reference – IBC Mechanical)
2901  | Chapter 29: Plumbing Systems (Separate Reference – IBC Plumbing)
2902  | Plumbing Facilities
Table 2902.1  | Minimum Number of Required Plumbing Fixtures: Highlight table.
2902.3.2  | Location of toilet facilities in occupancies other than malls. Shall not exceed a distance of 500 feet.
3001  | Chapter 30: Elevators and Conveying Systems
3002.2  | Number of elevator cars in a hostway: Where for or more elevator cars … not more than four elevator cars shall be located in a single hoistway.
3002.3  | Emergency signs: Highlight entire paragraph including exceptions.
3101  | Chapter 31: Special Construction
3103  | Temporary Structures
3103.1.2  | Permit required: Temporary structures that cover an area greater 120 sq. ft … without obtaining a permit.
3103.4  | Means of egress: Temporary structures … exit access travel of 100 feet or less.
3104  | Pedestrian Walkways and Tunnels
3105  | Awnings and Canopies
3105.3  | Design and Construction: Awnings and canopies shall be designed … that relieve the pressures or loads.
3106  | Marquees
3107.1  | General: Signs shall be designed, constructed and in accordance with this code.
3109  | Swimming Pool Enclosures and Safety Devices
3200  | Chapter 32: Encroachment into Public Right of Way
3201.4  | Drainage: Drainage water collected from a roof....shall not flow over in a public walking surface.
Section/Page  Highlight

3202  Encroachments

3202.2  **Encroachments above grade and below 8 feet high:** Encroachments into the public right-of-way … above grade and below 8 feet in height shall be prohibited. Doors and windows shall not open or project into the public right of way.

3202.2.3  Awnings: The vertical clearance from the public right of way to the lowest part of any awning, including valances, shall be 7 feet minimum.

3202.3  **Encroachments 8 feet or more:** Encroachments 8 feet or more … shall comply with Sections 3202.3.1 through 3202.3.4.

3202.3.1  Awnings, canopies, marquees and signs: Awnings, canopies, marquees and signs … less than 15 feet clearance above sidewalk shall not extend into or occupy more than 2/3’s the width of the sidewalk.

3202.3.2  **Windows, balconies, architectural features and mechanical equipment.** Where the vertical clearance above grade to projecting windows, balconies, permitted for each additional 1 inch (25 mm) of clearance above 8 feet (2438 mm), but the maximum encroachment shall be 4 feet (1219 mm).

3202.3.3  **Encroachments 15 feet or more:** Encroachments 15 feet or more above grade shall not be limited.

3202.4  Temporary encroachments

3301  Chapter 33: Safeguards During Construction

3303  Demolition

3303.1  **Construction documents:** Construction documents…no work until such construction documents or schedule or both are approved. (Note: See Ch. 1: Permits)

3304  Site Work

3304.1  **Excavation and fill:** Stumps and roots shall be from the soil to a depth of not less than removed to a depth of not less 12” below the surface of the ground in the area occupied by the building.

3304.1.1  **Slope limits:** Slopes for permanent fill … than one unit in vertical in two units horizontal (50-percent slope).

3304.1.2  **Surcharge:** Highlight entire paragraph.

3306  Protection of Pedestrian

Table 3306.1  **Protection of Pedestrians:** Highlight table.

3306.2  **Walkways:** Walkways shall be provided … be less than 4 feet in width.

3306.4  **Construction Railings:** Construction Railings shall be not less than 42 inches in height.

3306.5  **Barriers:** Barriers shall be not less than 8’ in height.
Barrier Design: Barriers shall be designed to resist loads required in Chapter 16 unless constructed as follows:

Covered Walkways: Covered walkways shall have a clear height of not less than 8 feet as measured from the floor surface to the canopy.

Protection of Adjoining Property

Protection Required: notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavation.

Temporary use of Streets, Alleys and Public Property

Obstructions: Construction materials and equipment shall not placed or stored so as to obstruct access to fire hydrants... nor shall such material or equipment be located within 20 feet of a street intersection.

Fire Extinguishers

Where required: Highlight 1 – 3

Chapter 35: Referenced Standards

Employee Qualifications

Board of Appeals

Group U-Agricultural Buildings

Fire Districts

Supplementary Accessibility Requirements

Rodentproofing

Flood-Resistant Construction

Signs

Patio Covers

Grading

Administrative Provisions