Major Changes to the 2019 California Building Code

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Learning Objectives
1. Identify significant changes made in the basic 2018 IBC that are included in the 2019 CBC.
2. Identify California-specific changes to the 2018 IBC in the 2019 CBC.
3. Identify the changes made to the 2016 code by interim changes that will be carried forward in the 2019 CBC.
4. Learn to recognize the impact of the noted changes on practice.

Discussion Prior to Publication
This course has been prepared prior to formal publication of the 2019 California Building Code (CBC). The state agencies have finalized adoptions, but the California agency modifications to the 2018 International Building Code (IBC) are complex. Every attempt has been made to correlate CBC changes and IBC changes, but users should verify the information in this seminar with the final CBC text after the CBC is available on 7/1/19.

2018 IBC is the Basis for the 2019 CBC
Finding Changes

CA language (new & old) is in *Italic Type* (as are words with IBC definitions = confusing)

|   | Double Vertical Lines = CA Change
|   | Solid Vertical Bar = IBC Change (NA for access Chapters 11A and 11B, which are both CA Chapters)
|   | Caret Denotes CA Deletion
|   | Arrow Denotes IBC Deletion
| * | Single asterisk means text has been relocated elsewhere in the code
| ** | Double asterisk means text following mark has been moved there from elsewhere in the code

2019 California Code Timeline

2019 California Codes are based upon:
- 2017 National Electrical Code – NFPA
- 2018 Uniform Mechanical Code– IAPMO
- 2018 Uniform Plumbing Code – IAPMO
- 2018 International Fire Code – ICC
- 2019 Energy Code – California Energy Commission
- 2019 California Residential Code = Chapters 1-10 of the 2018 International Residential Code
- CALGreen – 2019 California Green Building Standards Code
- 2018 International Existing Building Code – Partial Adoption to replace deleted IBC Chapter 34
California State Fire Marshal Amendments

Key to Understanding the California State Fire Marshal’s Amendments to the IBC are:

“In high-rise buildings, Group A, E, H, I, L, and R occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal,..."

We will label these “SFM Occupancies” for further discussion.

Most SFM changes from 2016 CBC carried forward into 2019 CBC without revision

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ICC Code Committees

[A] = Administrative Code Development Committee;
[BE] = IBC - Means of Egress Code Development Committee;
[BF] = IBC - Fire Safety Code Development Committee;
[BG] = IBC - General Code Development Committee;
[BS] = IBC - Structural Code Development Committee;
[El] = International Energy Conservation Code Development Committee (Commercial Energy Committee or Residential Energy Committee, as applicable);
[EB] = International Existing Building Code Development Committee;
[I] = International Fire Code Development Committee;
[FG] = International Fuel Gas Code Development Committee;
[MI] = International Mechanical Code Development Committee;
[PL] = International Plumbing Code Development Committee.

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Definition Change –

2016 CBC

COMMON PATH OF EGRESS TRAVEL. That portion of the exit access travel distance measured from the most remote point within a story to that point where the occupants have separate access to two exits or exit access doorways.

2019 CBC

[BE] COMMON PATH OF EGRESS TRAVEL. That portion of exit access travel distance measured from the most remote point of each room, area or space, to that point where the occupants have separate and distinct access to two exits or exit access doorways.
New Definition –

Commercial place of public amusement. An auditorium, convention center, cultural complex, exhibition hall, permanent amusement park, sports arena, theater or movie house for which the maximum occupancy is 2,500 or more. The facility cultural complexes include but are not limited to art galleries, symphony, concert halls, and museums. A commercial place of public amusement does not include any public or private higher education facility or district agricultural associations.

Used in scoping for adult changing rooms in Chapter 11B, discussed later.

New Definition –

[B5] CONVENTIONAL LIGHT-FRAME CONSTRUCTION.

Construction whose primary structural elements are formed by a system of repetitive wood-framing members. See Section 2308 for conventional light frame construction provisions.

Moved into IBC from Residential Code. See Section 2308 for details.

Chapter 3 – Occupancy and Use

302.1 Occupancy classification. Occupancy classification is the formal designation of the primary purpose of the building, structure or portion thereof. Structures shall be classified into one or more of the occupancy groups listed in this section based on the nature of the hazards and risks to building occupants generally associated with the intended purpose of the building or structure. Occupied roofs shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard, and shall comply with Section 503.1.4.

503.1.4 are new provisions for occupied roofs.
Greenhouse Occupancies

Greenhouses for the conservation and exhibition of plants that provide public access are “A-3” Occupancies. Greenhouses for display and sale of plants that provide public access are “M” Occupancies. Greenhouse not otherwise classified are “U” Occupancies.

IBC “B” Labs vs. CBC “L” Lab occupancies

Per SFM legislative mandate, labs that are typically “B” in the IBC are “L” in the CBC. There are many detailed changes in both the IBC and CBC. Too extensive to cover here in a general discussion. Examine “H” control areas as well.

CBC “Laboratory Suite”

202 LABORATORY SUITE. [SFM] A laboratory suite is a Group L Occupancy space within a building or structure, which may include multiple laboratories, offices, storage, equipment rooms or similar support functions, where the aggregate quantities of hazardous materials stored and used do not exceed the quantities set forth in Table 453.7.3.1 (see Section 453).
Chapter 3 - Congregate Living Facilities: R-2, R-3, R-4

There are a number of subtle changes in both the IBC and the CBC to occupancy classification criteria for group living and group care facilities such as boarding houses, fraternities & sororities, rehabilitation centers and residential care facilities. If you practice in these areas examine the various occupancy classification criteria in Section 310 between R-2, R-3 and R-3 occupancies.

311.1.1 Accessory Storage
Per revisions to § 311.1.1, the criteria for what may be considered to be “accessory storage spaces” and be a part of that occupancy and not considered some kind of “S” occupancy have been simplified and made less restrictive. The 100 sf limit on such spaces has been removed. Also the limit on aggregating such areas has been removed.

404.5 & 6 – 2-story atriums
In other than I-2 occupancies smoke control is not required in 2-story “atriums”. A change to Section 404.6 Item 4 clarifies that a fire barrier is not required between the atrium and the adjoining spaces where the atrium is not required to be provided with a smoke control system.
406 – Motor Vehicle related Occupancies
The sections regarding motor vehicle related occupancies have been reorganized to group all provisions common to all these uses into one section to avoid repetition. There are not any major substantive changes. Items include:
- Accessible parking
- Clear heights
- Floor surfaces and slopes
- Elevation of ignition sources
- Relation to sleeping rooms

420.11 Dorm Cooking Facilities
Cooking areas may be provided in R-2 dormitories if:
- Appliances limited to ovens, cooktops, ranges, warmers, coffee makers and microwaves.
- In approved locations
- Range hood per CMC
- Hood protected per 904.13 with fire suppression

503.1 Fire Wall Criteria
Change to fire wall criteria to clarify their use for height and area adjustments
503.1 General, For the purposes of determining area limitations, height limitations and type of construction, each portion of a building separated by one or more fire walls complying with Section 706 shall be considered to be a separate building.
503.1.4 - Occupied Roofs

A roof level may be an occupied roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the story immediately below the roof. The area of the occupied roof is not to be included in the building area.

Exceptions:
1. The occupied roof occupancy is not limited to the occupancies allowed on the story immediately below the roof when the building is sprinklered.
2. Assembly occupancies are permitted on roofs of open parking spaces of Type I or Type II Construction.

503.1.4.1 Enclosures over occupied roof areas. Elements or structures enclosing the occupied roof areas may not extend more than 48 inches above the surface of the occupied roof.

Exception: Penthouses constructed in accordance with Section 1510.2 and towers, domes, spires and cupolas constructed in accordance with Section 1510.5. This provision implies that overhead structures such as trellises may be seen to create additional stories.

Table 506.2 TYPEVB “U” Occupancy Greenhouses

Per Footnote “i” unsprinklered Type VB “U” Occupancy greenhouses may be 9,000 sf in allowable area, which is equal to prior VA allowable area from 2016 CBC.

510. Vertical offsets in podium buildings

When there is a vertical offset in the 3 hour horizontal assembly the code now clearly states: Where vertical offsets are provided as part of a horizontal assembly, the vertical offset and the structure supporting the vertical offset shall have a fire-resistance rating of not less than 2 hours.

Unclear how this applies to opening protection at full story offsets.
602.4.1 FRT Sheathing in Type III construction

Code now clearly states that FRT sheathing may be used in two-hour or less assemblies in Type IIA construction where FRT framing is used and assemblies are not less than 6” thick.

704.4.1 1-story column membrane fire protection

Code now states that single story columns located between the top and bottom plates may rely on wall membrane fire protection. Does not apply to continuous columns. Applies to both wood and steel light framing.

704.6.1 Secondary attachments to structural members

704.6.1 Secondary attachments to structural members. Where primary and secondary structural steel members require fire protection, secondary attachments to those structural members shall be protected with the same fire resistive material and thickness as required for the structural member. The protection shall extend away from the structural member a distance of not less than 12 inches, or shall be applied to the entire length when the attachment is less than 12 inches long. When an attachment is hollow and the ends are open, the fire resistive material and thickness shall be applied to both exterior and interior of the hollow steel attachment.
Table 705.2 Projection Distances

New rules for projections at property lines fixes broken Table 705.2 from 2015 IBC

705.2.3 Combustible projections and balconies

1-hour or HT @ <5'.
May be unrated construction if sprinkler protection is provided at the projection – typ. side wall heads SFM adds vent provisions for fire rated decks

705.2.3.2 Vents at balconies

705.2.3.2 Vents. [SFM] Vents required by Section 2304.12.2.6 in fire rated exterior balconies or elevated walkway surfaces shall be designed where the voids created at the intersection of the exterior curtain wall and the balcony floor are sealed with an approved material or system to retard the interior spread of flame, hot gases and products of combustion. Rated assemblies shall comply with Section 715. Ventilation openings shall comply with WUI requirements where applicable. Balconies shall comply with the fire sprinkler protection as required by 903.3.1.1 or 903.3.1.2 and the reference standard.
708.4 Fire Partition Continuity
There are a number of subtle changes to the connection and continuity criteria for “Fire Partitions”. These occur in many places such as R occupancy separation walls, tenant separations, corridors, and elevator lobbies among other uses.

708.4.2 Fireblocks & Drafstops in combustible construction
Fireblock and draftstop requirements in combustible construction have been consolidated and modified. In combustible construction where fire partitions do not extend to the underside of the floor or roof sheathing, deck or slab above, the space above and along the line of the fire partition are to be provided with one of the following: fireblocking or draftstopping up to the underside of the floor or roof sheathing, deck or slab above, except where sprinklers are provided.

713.8.1 Membrane Penetrations at outside of shafts
713.8.1 Prohibited penetrations. Penetrations other than those necessary for the purpose of the shaft shall not be permitted in shaft enclosures. Exception: Membrane penetrations shall be permitted on the outside of shaft enclosures. Such penetrations shall be protected in accordance with Section 714.4.2.
707A.3 Exterior Walls

707A.3 Exterior walls. The exterior wall covering or wall assembly shall comply with one of the following requirements:

1. Noncombustible material
2. Ignition-resistant material
3. Heavy timber exterior wall assembly. Sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.

707A.8 Underfloor protection

707A.8 Underfloor protection. The underfloor area of elevated or overhanging buildings shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in either of the following:
   5.1. SFM Standard 12-7A-3; or
   5.2. ASTM E2957

Exception: Heavy timber Structural columns and beams do not require protection when constructed with sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.

707A.8 Underside of appendages

707A.9 Underside of appendages. When required by the enforcing agency the underside of overhanging appendages shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in either of the following:
   5.1. SFM Standard 12-7A-3; or
   5.2. ASTM E2957

Exception: Heavy timber Structural columns and beams do not require protection when constructed with sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.
708A.2.2 Operable skylights

Operable skylights shall be protected by a non-combustible mesh screen where the dimensions of the openings in the screen shall not exceed 1/8-inch (3.2mm).

708A.4 (R337.8.4) Garage door perimeter gap weather stripping

Exterior garage doors shall be provided with weather stripping to resist the intrusion of embers from entering by preventing through gaps between doors and door openings, at the bottom, sides and top of doors, from exceeding gaps 1/8-inch (3.2 mm). Weather stripping or seals shall be installed on the bottom, sides, and top of doors to control gaps between doors and door openings to 1/8-inch (3.2 mm) or less. Gaps between doors and door openings shall be controlled by one of the following methods:

1. Weather stripping products made of materials that: (a) have been tested for tensile strength in accordance with ASTM D638 (Standard Test Method for Tensile Properties of Plastics), (b) exhibit a V-2 or better flammability rating when tested to UL 94, and (c) have been exposed to ASTM G155 (Standard Practice for Operating Xenon Arc Weathering Apparatus) for a period of 2000 hours, where the maximum allowable difference in tensile strength values between exposed and non-exposed samples does not exceed 10%, and (d) have been exposed to a fire of ordinary蔓延ability rating when tested to UL 723, Standard for Tests for蔓延ability of rubber materials for parts of devices and apparatus.

2. Door overlaps onto jambs and headers.

3. Garage door jambs and headers covered with metal flashing.

803.1.1 Wall & Ceiling Finish test criteria

Instead of using ASTM E84 or UL 723, the code now allows compliance with NFPA 286. This test is known as the “room corner” fire test. This test has good performance prediction qualities.
803.3 HT in exit enclosures

No interior finish requirements for CLT or HT except new provisions for meeting requirements at interior exit stairs & ramps and at exit passageways.

803.11 & 12 Laminated products on wood backing

New sections address laminated products over wood substrates. § 803.11 covers factory-produced materials and § 803.12 covers laminates applied on-site over wood substrates. The test criteria are to be per NFPA 286 in § 803.1.1.1, with the materials meeting the flame spread indexes for ASTM E84 or UL 723.

Chapter 10 – Means of Egress

As for every previous edition of the IBC-based CBC, the organization and some of the nomenclature in Chapter 10 has been revised. Most changes are editorial, but approach the chapter with caution and use key word searches.
1004.8 Concentrated Business Uses

The occupant load factor for concentrated business uses like telephone call centers, trading floors, electronic data processing centers and similar business use areas with a higher density of occupants than a normal business may be the actual occupant load with AHJ approval, but not less than one occupant per 50 square feet (4.65 m²) of gross occupiable floor space.

1006.3 Egress from stories or occupied roofs

Per §1006.3.1, the path of egress travel to an exit may not pass through more than one adjacent story. See Exceptions in §1006.3.1. This seems at odds with multiple level open stairs allowed by Section 1019 for open exit access stairs.

1008.2 Exit Discharge Illumination

Where a means of egress leads to a safe dispersal area per §1028.5, that area must be lit with 1 foot-candle (11 lux) of illumination.
1009.7.2 Protection of exterior areas of assisted rescue

Exterior areas for assisted rescue are to be open to the outside air and, in unsprinklered buildings, they are to be separated by walls of 1-hour construction with 3/4-hour doors. The protection must extend beyond the area laterally and vertically for 10', but only in unsprinklered buildings.

2016 CBC Interim Change

Table 1020.1 Corridors

Per the CBC 7/1/16 Supplement (blue pages) corridors at “E” occupancies are no longer required to be 1 hour fire-resistance rated, but may be unrated in sprinklered buildings.

Keep up to date so you don’t miss big changes.

1010.1.4.4 Locking at Educational Occupancies

In Group E and Group B educational occupancies, egress doors from classrooms and other occupied rooms are permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:

1. The door is capable of being unlocked from outside the room with a key or other approved means.
2. The door is readily openable from within the room to comply with § 1010.1.9.
3. Modifications may not be made to listed panic hardware, fire door hardware, or door closers.
1013.2 Low Level Exit Sign Location

Where required, which is in R-1 transient lodging, low level exit signs may now be located up to 18” above floor level.

1015.6 & 1015.7 fall arrest at mechanical equipment

Guards are to be provided where various components that require service are located within 10 feet of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above grade.

Exception: Guards are not required where personal fall arrest anchorage connector devices that comply with ANSI/ASSE Z 359.1 are installed.

1023.5 & 1024.6 Exit Stairway & Exit Passageway Penetrations

Penetrations into or through interior exit stairways and ramps are prohibited except for the following:

1. Equipment and ductwork necessary for independent ventilation or pressurization.
2. Fire protection systems.
4. Two-way communication systems.
5. Electrical raceway for fire department communication systems.
6. Electrical raceway serving the interior exit stairway and ramp and terminating at a steel box not exceeding 16 square inches.

Penetrations may be made for items that serve the enclosure itself.
CBC Chapter 11A Housing Accessibility

HCD proposes to continue to adopt Chapter 11A from the 2016 California Building Code into the 2019 California Building Code with no modifications.

= to Fair Housing Act "adaptable" units as in current code

Table 11B-224.2 Guest Rooms with Mobility Features

<table>
<thead>
<tr>
<th>Total Number of Guest Rooms Provided</th>
<th>Minimum Number of Required Rooms Without Roll-in (Shower)</th>
<th>Minimum Number of Required Rooms With Roll-in Shower</th>
<th>Total Number of Required Rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>301 to 500</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>501 to 1000</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1001 to 2000</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2001 to 3000</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>3001 to 4000</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>4001 to 5000</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>5001 and over</td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

11B-249.1 Adult Changing Facilities

11B-249.1 General. Adult changing facilities shall comply with Section 11B-249.

11B-249.1.1 Where adult changing facilities are provided, each adult changing facility shall comply with Section 11B-249.

11B-249.1.2 Newly constructed commercial places of public amusement shall provide no fewer than one adult changing facility in compliance with Section 11B-813.

Commercial place of public amusement. An auditorium, convention center, cultural complex, exhibition hall, permanent amusement park, sports arena, theater or movie house for which the maximum occupancy is 2,500 or more for the facility. Cultural complexes include but are not limited to art galleries, symphony concert halls, and museums. A commercial place of public amusement does not include any public or private higher education facility or district agricultural associations.
11B-604.8.1 Wheelchair accessible compartments.

11B-604.8.1.2 Doors. Toilet compartment doors... Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (102 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (102 mm) maximum from the front partition. The door opening hinge side jamb for outswinging doors shall be farthest from the water closet and the strike side jamb shall be 54 inches (1372 mm) minimum from the rear wall.

Fig. 11B-604.8.1.2 Toilet Compartments

Figs. 11B – 608.2.1 & 608.5.1 Transfer type showers

Figs 11B - 608.2.1 & 608.5.1 Transfer type showers
11B – 814 Adult Changing Facilities

11B-813.1 Location. Adult changing facilities shall be provided within a unisex (single-user or family) toilet room or other similar private room.

11B-813.2.1.5 Obstructions. When deployed, changing tables shall not obstruct the required width of an accessible route except as allowed by Section 11B-307.2.

11B-813.2.2 Water closet. No fewer than one water closet in compliance with Section 11B-604.

11B-813.2.3 Lavatory. One lavatory in compliance with Section 11B-606.

11B-813.2.8 Turning space. Turning space complying with Section 11B-304 shall be provided within adult changing facilities.

11B-813.2.9 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

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Fig. 11B – 813.2.1.2 Adult Changing Table

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1206.2 Engineering analysis of sound transmission assemblies

Sound transmission criteria are established using ASTM test criteria for both airborne sound (ASTM E 90) and for structure-borne sound (ASTM E 492). Now, the sound transmission class of walls, partitions, and floor-ceiling assemblies may be established by engineering analysis based on a comparison of tested wall partition, and floor-ceiling assemblies having sound transmission class ratings as determined by the test procedures set forth in ASTM E90 by comparing with other tested assemblies.
Table 1404.2 - Stone and masonry veneer thickness

<table>
<thead>
<tr>
<th>COVERING TYPE</th>
<th>MIN. THICKNESS (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhered masonry veneer</td>
<td>0.25</td>
</tr>
<tr>
<td>• Architectural Cast Stone</td>
<td>0.75</td>
</tr>
<tr>
<td>• Other</td>
<td>0.25</td>
</tr>
<tr>
<td>Anchored masonry veneer</td>
<td>2.625</td>
</tr>
<tr>
<td>• Stone (natural)</td>
<td>2.0</td>
</tr>
<tr>
<td>• Architectural Cast Stone</td>
<td>1.25</td>
</tr>
<tr>
<td>• Other</td>
<td>2.625</td>
</tr>
</tbody>
</table>

UPDATED TO CURRENT INDUSTRY TERMS

1404.18 Polypropylene Siding

Polypropylene siding used to be limited to VB construction only. Now it can be used on any construction type if it meets defined fire test criteria.

However, it is limited to exterior walls located in areas where the wind speed does not exceed 100 miles per hour and the building height is less than or equal to 40 feet (12 192 mm) in Exposure C.

1507.1 Roof Underlayment

This section has been reorganized to put underlayment and ice barrier requirements for various roofing materials into a single section. New tables have been added addressing type, application and fastening.
1705.12. Special Inspections for Fire Sprinkler Clearance

Special inspection is now required for minimum clearance of fire sprinkler components to structure and to MEP equipment in Seismic Design Category C, D, E or F for:
- Minimum clearances have been provided as required ASCE/SEI 7
- A nominal clearance of not less than 3 inches is to be provided between fire protection sprinkler system drops and sprigs to adjacent structure.

2304.11 Heavy Timber Construction

Heavy timber provisions in Chapter 23 have been reorganized and information about dimensional equivalencies has been relocated from Section 602.4 to Section 2304.11.

2304.12.2.5 & 6 Slopes & Vents at deck and roof supports

Per § 2304.12.2.5, the impervious moisture barrier system protecting the structure supporting floors must provide positive drainage of water that infiltrates the moisture permeable floor topping.
- Per § 2304.12.2.6, enclosed framing in exterior balconies that are exposed to rain, snow, or water are to be provided with openings that provide a net free cross-ventilation area not less than 1/150 of the area of each separate space between framing members.
2308.5.5.1 Single headers in conventional framing

The conventional wood framing provisions now allow single headers under certain limited conditions with small spans to allow for provision of increased wall insulation.

2407.1.2 Structural Glass Baluster Panels

Structural glass baluster panels are to have an attached top rail. The top rail must be supported by at least three glass baluster panels. It must remain in place if one glass baluster panel fails.

- Per exception, an attached top rail is not required where the glass baluster panels are made of laminated glass with two or more glass plies of equal thickness and of the same glass type.
2407.1.2 Structural Glass Baluster Panels

Increased condition by Exception:
Where the water-resistive barrier is applied over wood-based sheathing in Climate Zones 1A, 2A, or 3A, a ventilated air space is to be provided between the exterior stucco and water-resistive barrier to prevent moisture penetrating the water-resistive barrier.

2603.2.1 Labeling of Foam Insulation without flame retardants

• 2603.2.1 Labeling of polystyrene foam insulation without flame retardants. In addition to the requirements of Section 2603.1, polystyrene foam insulation boards manufactured with flame retardants added shall be labeled in accordance with this section:
  1. Each board shall be labeled on each face every 8 square feet in red 1/2" text with the following information:

   WARNING – FIRE HAZARD
   This product contains NO flame retardants.
   Not rated for flame spread or smoke development requirements of the model building codes.
   Not tested for flame spread or smoke development requirements of the model building codes.

   • Each package shall be labeled on at least two sides in red 1/2" text with the following information:

   WARNING – COMBUSTIBLE MATERIAL
   Keep away from ignition sources.
   Maintain code required separation between product storage and structural under construction (minimum 30 feet).

2603.3 Ex. 6 Installation of Foam Insulation without flame retardants

2603.3 Surface Burning Characteristics. Unless otherwise indicated in this section, foam plastic insulation and foam plastic cores of manufactured assemblies shall have a flame spread index of not more than 75 and a smoke-developed index of not more than 450.

Exceptions:

6. Polystyrene foam insulation boards with a maximum thickness of 2-inches when installed below a minimum 3.5-inch thick concrete slab on grade.
2603.13 Cladding over foam sheathing at wood framing

Provisions for sheathing over foam sheathing have been introduced into the IBC from the International Residential Code. This section addresses fastening siding over thick foam insulation on the exterior of the building. Two tables include fastening requirements based on whether furring is provided under the siding or not.

3001.2 Accessible emergency elevator communications

Additional 2-way communications capabilities are now required at accessible elevators for use by persons with hearing & speech disabilities that:
1. Is a visual text-based and a video-based 24/7 live interactive system.
2. Is fully accessible by the deaf, hard of hearing and speech impaired, and includes voice-only options for hearing individuals.
3. Has the ability to communicate with emergency personnel utilizing existing video conferencing technology, chat/text software, or other approved technology.

3006.2.1 Corridors at elevator hoistway openings

Where elevators open into a corridor required to be fire-resistance rated elevator hoistway openings are to be protected per § 3006.3, which has three options:
1. Elevator lobbies separating the elevator lobby from the corridor.
2. Additional doors that close over the elevator doors.
3. Pressurization of the elevator hoistway per § 909.21 to prevent smoke from entering the hoistway.
3007.1 Fire service access elevator travel
When required by § 403.6.1 fire service access elevators need to serve only levels at or above the lowest level of fire department access. Thus, levels below the lowest level of fire department access need not be served by fire service access elevators.

CA Existing Building Code 405 Structural Repairs
CBSC voted not to approve Structural repair “triggers” in IEBC Sections 405.2 - 405.2.3.2 based on CA statute allowing “replacement in kind”. Pay close attention to adoption tables since these sections may be printed in code but not adopted. That was the case in the 2016 CEBC in Repair Section 404.

Thanks for your Time!
Any Questions??