



Code Check 5th Edition California References

This document is intended to be used with Code Check 5th Edition. The lines with checkboxes are the same as the lines in Code Check 5th, and in some cases are truncated, so that only the first few words of the line are printed here.

*The building section of Code Check 5th edition is based upon the 2006 IRC and the 1997 Uniform Building Code (UBC). California adopted neither of those codes; the 2007 CBC is based upon the 2006 International Building Code (IBC) with amendments. The code numbers in the right column are from the 2007 California Building Code (CBC, which is based upon the 2006 IBC. An asterisk * at the end of the code citation indicates a change from the 2001 CBC, which was based upon the 1997 UBC. Commentaries on changes or comparisons to the 2001 CBC are in red.*

Questions? Contact us through www.codecheck.com

Code Check 5th Edition Page 1:

PLANNING, SITE & GRADING

General

- Determine climatic and geographic design criteria _____ 1604.1
The corresponding UBC sections were 1804.1 for soil issues and 1629.1 for seismic. CBC sections 1608 through 1613 deal with specific climatic & geographic design issues.
- Special considerations for SDC D₀, D₁, & D₂ _____ 1613.1*
The "seismic zones" system has been replaced with Seismic Design Categories (SDC) A through F. This system was revised between the 2003 and 2006 editions. The majority of California is in SDC D₀, D₁, or D₂, though some areas are a C. Full analysis of all section 1613 issues is not required for conventional wood-frame buildings.
- Approved plans & permit card on site _____ Appendix Chapter 1 – 105.7
CBC chapter 1 is devoted to clarifying which agencies enforce which parts of the code, and the IBC chapter 1 administrative provisions were moved to Appendix 1 in the CBC.
- Engineered design per IBC specs OK as alternative _____ n/a
This section not applicable because the CBC is derived from the IBC, not the IRC.
- Are special inspection reports req'd? T13 _____ 1704 – 1715*
The types and procedures of special inspections have been greatly expanded.
- Verify setback – unrated walls min 5ft to PL _____ T602*
The minimum setback of unrated walls has been extended from 3 feet to 5 feet. In the area between 3 & 5 feet, the amount of openings is restricted to 25% of the wall area per T704.8. Beyond 5 feet, no ratings are required for walls.
- No openings in walls <3ft to PL EXC _____ T704.8
Foundation vents permitted _____ 704.14X*
The 2001 CBC did not allow foundation vents closer than 3 feet. In the 2007 CBC, these do not count in the 25% calculation above.
- Inspection & Approval prior to covering any work _____ Appendix Chapter 1 109.6

Soils, Grading & Drainage

- Grading from foundation min 6in/10ft EXC _____ 1803.3*
5% slope to 2% swale OK if physical obstructions necessitate _____ 1803.3*
- 2% slope OK when warranted by climatic or soil conditions _____ 1803.3X*
The 2001 CBC referred to drainage & grading in appendix chapter 18. In 2007 it is in the body of the code. The old rule was 1:12 (8.33%) slope for 6 feet around the structure.
- Foundations enclosing usable space require drainage EXC... _____ 1807.4.2
where underfloor drain is on same...OR _____ 1807.1.2
In well-drained ground or sand/gravel _____ 1807.1.2
The UBC only required drainage when dampproofing was required. The CBC requires an approved drainage system when the crawlspace is below the perimeter grade and the site does not readily drain.
- Walls retaining earth & enclosing interior space... _____ 1807.1
- Foundations & slabs on expansive soils designed... _____ 1805.8

Footings & Foundations

General

- Footing stepped to maintain bottom slope <1:10 _____ 1805.1
- Utility or other trench not to undermine footing _____ 1803.1
- Size (width and depth) T2 _____ T1805.4.2*
- Excavation free of roots, forms removed _____ 3304.1
- Pockets for untreated wood beams req 1/2in air space ends & sides _____ 2304.11.2.5

Table 2 Dimension	Minimum Foundation Size (inches)		
	Number of Floors Supported by Foundation		
	1	2	3
Footing Thickness	6	6 (UBC was 7)	8
Footing Width	12	15 (UBC was 12)	18

In the UBC, footing depth depended on the number of floors supported. In the CBC, the minimum depth is 12 inches. Wall thickness in the CBC is based upon soil lateral pressure, foundation wall height, and maximum unbalanced backfill height per T1805.5.

Code Check 5th Edition Page 2:

Rebar

- SDC D₀, D₁, & D₂ #4 bar req'd in bottom of footing & top of stem wall _____ n/a
- SDC D₀, D₁, & D₂ #4 bar... _____ n/a
- Min clearance to forms & soil _____ n/a

The CBC is not prescriptive with regard to reinforcement and refers to ACI 318 to determine the items above. The net effect for most buildings will match the IRC requirements shown in Code Check.

Plates & Sills

- Bottom of sill 6in min to earth (PT or naturally durable if <8in above earth) 2304.11.2.2
Wood plates and sheathing closer than 8in to earth and supported by exterior foundation walls must be PT or naturally durable. 6in OK if hardscape exterior.
- Sill treated or decay resistant (on concrete slabs on earth) _____ 2304.11.2.4
- Pressure-treated wood fasteners req.... _____ 2304.9.5
Zinc coating weight per ASTM A 153 – see AF&PA Technical Report No. 7

Anchor Bolts

- Sill plates req bolts _____ 1805.6
- Min 2 bolts per plate section, min 7in embedment _____ 2308.6
- Max 12in from end of sill _____ 2308.6
- Plate washers req'd at braced wall lines _____ 2305.3.11
Steel plate washers req'd at all sills in conventional framing _____ 2308.12.8

Code Check 5th Edition Page 3:

Basements & Retaining Walls

General

- Design req'd for retaining walls without lateral support & retaining... _____ 1805.5
- Foundations walls considered laterally supported if... _____ **not prescriptive**
- Parge CMU prior to dampproofing EXC... _____ 1807.2.2.1
Dampproofing materials approved for direct application _____ 1807.2.2.1X*
Modern dampproofing materials were not addressed in the UBC
- No backfill >4ft until... _____ n/a (3304.1.2)
- Reinforcement distance from soil _____ T1805.5(2-4)
These tables are usable for foundation walls with lateral support at top and bottom.

Concrete Slabs

- Slab floor on grade min 3 1/2 in thick _____ 1910.1
- Reinforcement reqs support.... _____ n/a
- Elevated or wood-supported... _____ chapter 16, ACI 318
- Vapor retarder... _____ 1910.1

Concrete Masonry Units

General (empirical designs based on ACI 530 & limited by 1613)

- Hollow block min 8in if >1 story ~~or~~ → 9ft _____ 2109.5.2.1
- 6 in solid block OK for one story buildings _____ 2109.5.2.1
- Anchor roof & floor structure... _____ 2109.7.3
- Reinforcement distance from soils... _____ T1805.5(2-4)

Grout

- All cells w/ reinforcement req fill _____ ACI 530*
- Cleanouts req'd _____ ACI 530*
- Max lift of continuous pour _____ ACI 530*

Underfloor Areas (Crawlspaces)

Foundation Wall

- Remove all form materials (exc ICF) & organic debris _____ 3304.1
- Repair rock pockets or voids _____ ACI

Code Check 5th Edition Page 3 (continued):

Access openings

- Min 18in high X 24in wide EXC _____ 1209.1
- 16in high OK in perimeter wall _____ ☉
- Opening must allow removal of equipment in crawlspace _____ 1209.3

Ventilation

- Exterior openings req'd under floors except for basements _____ 1203.3
- Vent openings within 3ft of each corner _____ n/a
- Openings screened or grated _____ 1203.3.1
- Min area 1 sq. ft. per 150 sq. ft EXC _____ 1203.3.1
- No ventilation if vapor retarder, insulated... _____ 1203.3.2*

(CBC still has the 1/1500 reduction also)

18in soil to joist, 12in soil to girder _____ 2304.11.2.1.1

This amendment is enforced by the State Structural Pest Board

Code Check 5th Edition Page 4:

Floor Framing

Girders

- Minimum size 4x6 up to 6ft span and 8ft o.c. _____ 2308.7*
- Girder end joints over supports _____ 2308.7
- Min bearing (1 1/2in on wood, 3in on concrete) _____ 2308.7
- Joints over supports must be tied _____ 2308.7
- Max horizontal offset under perpendicular bearing walls = joist depth _____ 2308.8.4
- No notching tension side of 4in or thicker except at ends _____ n/a

Joists

- Joist spans per tables _____ 2308.8
- Min bearing 1 1/2 on wood _____ 2308.8.1
- Joists into side of girder req hanger or min 2x2 ledger _____ 2308.8.2
- Joist lap min 3in & 3 10d nails _____ 2308.8.2
- Double joists under parallel bearing walls _____ 2308.8.4
- Prevent rotation (blocking or hangers at ends) _____ 2308.8.2
- Blocking at intermediate supports _____ 2308.8.2
- Joists >2X12 blocked or bridged max 8ft O.C. _____ 2308.8.5
- No notches middle 1/3 of span _____ 2308.8.2
- Bored holes min 2in from top or bottom or other notch or hole _____ 2308.8.2
- Install manufactured joists AMI _____ 2308.8.2.1
- Modification of I-joists... _____ 2308.8.2.1

Note – CBC has header and girder span tables 2308.9.5&6

Code Check 5th Edition Page 5:

Note: Conventional wood framing is limited to 2 stories in SDC D or E _____ 2308.12.1

Wall Framing

Stud Framing

- Size, spacing, notching & boring _____ 2308.9.10 & 2308.9.11
- Studs must fully bear on min 2in nominal sole plate _____ 2308.9.2.4
- End-jointed lumber OK if identified... _____ 2303.1.1
- Corners req 3 studs min EXC _____ 2308.9.2
- 2 studs OK if approved spacers or backup cleats _____ 2308.9.2X

Top Plates

- Bearing wall intersections... _____ 2308.9.2.1
- End joints must offset...**48 inches in CBC** _____ 2308.9.2.1
- Joints need not be over studs _____ n/a
- Notches... _____ 2308.9.10

Code Check 5th Edition Page 5 (Continued):

Structural Sheathing/Bracing

Wall Bracing

- All exterior walls req bracing _____ 2308.9.3
- Let-in 1x4... _____ 2308.9.3
- Let-in 1x4 for second of... _____ 2308.9.3
- Structural sheathing _____ 2308.9.3
- Plywood _____ 2308.9.3
- Braced wall panels min 48 in length _____ 2308.9.3
- All panel joints over studs... _____ 2308.9.3
- Nail panels to schedule... _____ 2308.9.3
- Wood structural panels per grade stamp... _____ 2303.1.4

Hold-Downs

- Alternate braced wall panels req tie-downs _____ 2308.9.3.1
- Min braced wall panel tie-down... _____ 2308.9.3.1
- Tie-down device installed AMI _____ 2308.9.3.1

Underfloor Support & Cripple Walls

- Cripple studs no less than size of studs above them _____ 2308.9.4
- Cripple wall <14in sheathed or... _____ 2308.9.4
- Cripple walls >4ft sized as if... _____ 2308.9.4

The CBC has two separate tables of bracing requirements for conventional construction. Table 2308.9.3(1) is for SDC A, B, & C, and Table 2308.12.4 is for SDC D & E. The latter table is more restrictive than the IRC, and does not allow 3-story construction, which must instead conform to 2301.2.

Code Check 5th Edition Page 6:

Nailing Schedule

T2304.9.1

Use values in Code Check table except as follows:

Stud to sole plate – 4 8d common toenail or 2 16d end nail

Double studs – face nail 16d at 24in o.c.

Double top plates – 16d at 16in o.c.

Top plates – laps & intersections 2 16d common

Ceiling joists – laps over partitions – 3 16d common

Ceiling joists to parallel rafters 3 16d common

Rafter to plate – 3 8d common – toenail

1x8 sheathing to each bearing – face nail – 3 8d common

Built-up corner studs – 16d common at 24in o.c.

Built-up girders and beams – 20d common at 32in face nail

Collar tie to rafter – 3 10d common

Jack rafter to hip – 3 10d common toenail

Roof rafter to 2x ridge – 2 16d common toenail or facenail

Roof & Ceiling Framing

Trusses

- Provide design drawings, ... _____ 2303.4.1.2
- Design professional approval req'd for any field modifications... _____ 2303.4.1.7
- Bracing per drawings or accepted engineering practice (BCSI 1-03) _____ 2303.4.1.5

Rafters & Ceiling Joists

- Spans per table _____ 2308.10.2&3
- Rafter span can be measured from purlin _____ 2308.10.5
- Purlin no smaller than... _____ 2308.10.5
- Purlin braces min 2x4 max 45 degrees _____ 2308.10.5
- Prefabricated wood I-joists AMI _____ 2308.8.2.1
- Notching & boring... _____ 2308.10.4.2
- Supports <3:12 slope roof design as beams not rafters _____ 2308.10

Code Check 5th Edition Page 6 (continued):

Rafters & Ceiling Joists (continued)

- Rafter ties req'd if joists not tied to parallel rafters _____ 2308.10.4.1
 - Rafter ties min 2x4 on lower 1/3 of every rafter pair _____ n/a
 - Collar ties for wind uplift upper 1/3 max 4ft O.C. _____ n/a
 - Collar ties can be 1x4 _____ n/a
- The IBC does not distinguish between rafter ties and collar ties, though it uses both terms interchangeably. The IRC defines these as shown above.
- Ridge board min 1x & full depth of cut rafter _____ 2308.10.4
 - Headers & trimmers >4ft doubled _____ 2308.10.3
 - Headers >6ft hung w/ hardware _____ 2308.10.3
 - Ends of rafters min 1 1/2in bearing _____ 2308.10..4.1 ceilings, not rafters
 - Max allowable deflection ceiling joists L/240 _____ 1604.3
 - Max allowable deflection roof rafters >3:12 L/180 _____ 1604.3

Code Check 5th Edition Page 7

Exterior Wall Covers

General

- Exterior walls req'd to prevent water accumulation ... _____ 1403.2*
 - Water-resistive membrane req'd... _____ 1403.2*
 - All penetrations req flashing... _____ 1405.3*
 - Flashing req'd for door & window openings _____ 1405.3*
- Flashing requirements are greatly expanded, and include a requirement for continuous flashing above projecting trim.

Stucco

- Must conform to ASTM C926 & C1063 _____ 2510.3*
- This major change makes these two standards a part of the code
- 3-coat system req'd EXC... _____ 2512.1
 - 2-coat over masonry _____ 2512.1
 - Weep screed min 4in to earth, 2in to hardscape _____ 2512.1.2
 - Min 2 layers Grade D or equivalent _____ 2510.6
 - Lap paper/paper wire/wire... _____ 2510.6
 - Paper lap horizontal min 2in, vertical min 6in _____ n/a
 - Total thickness from sheathing 7/8in _____ T1405.2

Exterior Insulation Finish Systems (EIFS)

- Must follow manu instructions _____ special inspections 1704.12
- Water-resistive barrier & drain plane req'd... _____ 1704.12X
- No decorative trim nailed through... _____ special inspections 1704.12
- Terminate at least 6in above ground _____ special inspections 1704.12

Other Siding Materials

- Water-resistive barrier req'd behind vinyl siding _____ 1405.13.1*
- Water-resistive barrier req'd behind hardboard siding _____ 1404.2*
- Fiber cement horizontal lap siding end joints req caulk (flashing) or H-clips 1405.17.2*
- Panel siding vertical joints lapped or behind batten _____ n/a
- Panel siding horizontal joints lapped or flashed... _____ n/a

Masonry Veneer

- SDC A, B, C max thickness 5in _____ 1405.5.2(ACI 530 & ASCE5)
- SDC D0, D1 max thickness 4in _____ 1405.5.2(ACI 530 & ASCE5)
- SDC D2 max thickness 3in _____ 1405.5.2(ACI 530 & ASCE5)
- Max height 30ft (20ft in SDC D2) _____ 1405.5.2(ACI 530 & ASCE5)
- Braced wall panels & hold-downs req'd in SDC D _____ 1405.5.2(ACI 530 & ASCE5)
- No additional loads on masonry veneer _____ ACI 530
- Min 3/4 gap between top of veneer and structural frame _____ ACI 530
- Metal ties max 24in horizontal & vertical spacing _____ 1405.6

Code Check 5th Edition Page 7 (continued):

- Flashing to exterior surface @ all openings & horizontal transitions _____ 1405.3.2
(req'd at first course above finished ground & at other points of support)
- Min 3/16 weepholes max spacing 33in O.C. _____ 2104.1.8
- Min 1in air space between sheathing & veneer OR _____ ACI 530
- Mortar/grout fill over water-resistive membrane _____ ACI 530

Attics**General**

- Attics 30in high or higher req access 20in x 30in _____ 1209.2*
UBC was 22 x 30
- Opening must have 30in clear above _____ 1209.2*
- Opening must allow removal of attic mechanical equipment _____ 1209.3

Ventilation

- Vent each enclosed attic & each enclosed rafter bay _____ 1203.2*
(UBC left issue of enclosed rafter bays up to local BO)
- 1/8in to 1/4in mesh screen over openings _____ 1203.2.1*
(UBC did not allow 1/8in mesh)
- Min net opening area 1/150th of vented area OR _____ 1203.2
- 1/300th if 50-80% in upper portion _____ 1203.2X
- Conditioned unvented attic assemblies OK _____ n/a
- Insulation min 1in clearance to sheathing near vents _____ 1203.2

Code Check 5th Edition Page 8:**Roof Coverings****Roof Sheathing**

- Solidly sheathed for asphalt shingle _____ 1507.2.1
- Wood panels req grade stamp and rating _____ 2303.1.4
- Nail to schedule (6in edge, 12in field min) _____ 2304.9.1
- 1/8in gap on sheathing marked "sized for spacing" _____ n/a

Roof Coverings – General

- Class A, B, or C fire rating req'd _____ 1505.1*
State laws had amended the UBC to essentially the same rule for replacement roofs.
- Materials req manu identification & agency approvals _____ 1506.4
- Install AMI _____ 1507.1
- Flashing req'd at roof/wall intersections, penetrations, chimneys, etc _____ 1503.2

Sloped Roofing

- Min 24in ice-dam... _____ 1507.2.8.2, various others*
- Asphalt shingle slope min 2:12.... _____ 1507.2.2
- Asphalt shingle fasteners min 4, min 3/4 into... _____ 1507.2.7
- 16in wood shingles min slope 3:12 (3 3/4in exposure... _____ 1507.8.2
- Wood shakes min slope (3:12 in IRC, 4:12 in CBC... _____ 1507.9.2
- Clay/concrete tile min slope 2 1/2:12... _____ n/a (AMI)
- Chimney cricket req'd AMI or if chimney >30in wide... _____ n/a

Low Slope Roofing

- Built-up roofs min slope 1/4:12... _____ 1507.10.1
- Install AMI _____ 1507.1
- Install drains at each low point _____ 1503.4 → CPC 1101.11.1
- Secondary drains req'd 2in above low point of roof _____ 1503.4 → CPC 1101.11.2.2

Code Check 5th Edition Page 8 (continued):

Fireplaces & Chimneys

Masonry Fireplaces

- Footing min 12in thick... _____ 2111.2
- Hearth min 4in thick _____ 2111.9.1
- Hearth extension min 2in thick _____ 2111.9.2
- No combustible material remaining... _____ 2111.9
- Hearth extension min 16in deep... _____ 2111.10
- Hearth extension min 20in deep... _____ 2111.10
- No combustible material within 6in of opening _____ 2111.11X4
- Combustible material <12in of opening.... _____ 2111.11X4
- All combustion air from outdoors.... _____ 2111.13

Masonry Chimneys

- Reinforcement & anchoring in SDC D _____ 2113.3
- Termination min 3ft above roof AND 2ft above... _____ 2113.9
- Spark arrester req'd... _____ 2113.9.1 (CA amendment)
- Spark arrester min area.... _____ 2113.9.1
- Spark arrester mesh min 3/8in max 1/2in _____ 2113.9.1

Manufactured Fireplaces & Chimneys

- Must be L&L & installed AMI _____ CMC
- Hearth extension per listing & instructions _____ CMC
- Decorative shrouds req listing for specific chimney _____ CMC
- Chimney chase req's fireblocking at attic _____ 717.2.5
- Termination AMI _____ CMC 801.2 → NFPA 211?
- Spark arrester req'd _____ 2113.9.1 (CA amendment)

The CBC does not have a separate chapter for fireplaces. Masonry fireplaces and chimneys are in the chapter on masonry, and manufactured fireplaces are regulated by the CMC.

Gas Appliances

- Decorative logset AMI, damper blocked... _____ CMC, CPC
- Decorative logs with pilots must have pilot safety _____ CMC, CPC
- Log lighters req hard gas pipe _____ CMC, CPC
- Req'd valve within 6ft of fireplace in same room _____ CMC, CPC

Code Check 5th Edition Page 9:

Egress

Doors & Landings

- Door w/ direct access to exterior req'd _____ 1024.6
UBC req'd one exit per 10 persons, based upon 300 sq. ft. per person of net useable area, so large houses might require more than one exit. The CBC requires only 1 exit _____ 1019.2 #2
- Min one exit 3ft wide (32in clear at 90°)... ~~side-hinged~~ _____ 1008.1.1&2
Less restrictive than IRC
- All doors req keyless operation from interior _____ 1008.1.8
- Hallways min 36in wide _____ 1017.2 exception 3
- Floor or landing each side of all exterior doors EXC _____ 1008.1.4
2 (or more?) risers OK at exterior door that is not req'd exit _____ 1008.1.6 Exception
- Max threshold height at doors 3/4in for sliders & 1/2in all other doors _____ 1008.1.6*
UBC 1003.3.1.6 allowed 1in thresholds when accessibility not req'd
- Landing can be 7 3/4 in below threshold if door does not swing out _____ 1008.1.4*
- Exit balconies req positive attachment... _____ 2308.12.7

Code Check 5th Edition Page 9 (continued):

Bedroom & Basement Egress

- All sleeping rooms (below 4th story) req escape & rescue openings _____ 1026.1
- Window sill **opening** height max 44in above floor _____ 1026.3
- Min 20in wide & min 24in high _____ 1026.1
- Min 5.7 sq. ft EXC _____ 1026.2
- 5.0 sq. ft OK if grade level access _____ 1026.2X*
- Approved interior quick-release... _____ 1026.4
- Basements req escape & rescue openings EXC _____ 1026.1*
- Basements <200 sq. ft & only for mechanical equipment _____ 1026.1X5*
- The UBC req'd escape from all basements, though only requiring one escape opening. The CBC req's separate escape from each basement sleeping room but not from adjoining areas of the basement provided there is at least one escape opening.**
- Window wells min 9sq. ft & min 36in horizontal dimension _____ 1026.5.1
- Permanent ladder req'd if >44in below grade _____ 1026.5.2
- Ladder may project 6in into req'd well space _____ 1026.5.2

Interior Wall Covers

Gypsum board

- Install only after rough inspections complete _____ Appendix chapter 1 109.6
- Install only after building is weather-protected _____ 2508.2.1
- Nailing per schedule _____ n/a (ASTM)*
- There is no drywall fastening table for other than diaphragms. The ASTM standards for gypsum construction prevail.**
- Edges & ends over or perpendicular to framing _____ 2508.3

Greenboard

- Not allowed were subject to direct water exposure (tubs or showers)... _____ 2509.3*
- OK for adhesive ceramic tile w/ no direct water exposure _____ 2509.2
- Ceiling framing max 12in O.C. for 1/2in greenboard _____ 2509.3
- Ceiling framing max 16in O.C. for 5/8in greenboard _____ 2509.3
- Use cement fiber tile backer in tub/shower areas _____ 2509.2*
- Clarification that greenboard is not a substitute for cement board**

Wall & Ceiling Insulation

- Vapor retarder facing conditioned space EXC _____ n/a
- primarily cooling condition (hot humid climate) _____ n/a
- Light fixtures in building envelope either _____ n/a
- Installer to provide certificate for blown-in insulation _____ n/a
- The CBC does not include energy provisions. These are title 24, part 6, available as a free download from the CBC web site.**

Code Check 5th Edition Page 10:

Windows & Safety Glazing

Minimum Light & Ventilation

- Habitable rooms req openings for natural light min 8% floor area _____ 1205.2*
- Artificial light is acceptable in the CBC (often requested for media rooms)**
- The light and ventilation minimums have been reduced from 10%/5% to 8%/4%**
- Bathrooms may have artificial light only _____ 1205.3
- Bath fan may not discharge into any part of attic _____ CMC
- Habitable rooms min openings for ventilation 4% floor area _____ 1203.4.1*
- Bathrooms req 1 1/2 sq. ft openings OR.... mechanical venting _____ 1203.4.2.1 (CMC)*
- Mechanical ventilation is req'd, not just an option when there are no windows.**
- 2 rooms considered one for light & ventilation if... _____ 1203.4.1.1, 1205.2.1

Safety Glass Identification

- Tempered glass reqs permanent etched label EXC _____ 2406.2
- Spandrel glass removable paper label OK _____ 2406.2X2
- Only 1 lite req's... _____ n/a
One lite must be fully marked in a multi-pane window; the rest need only say "CPSC 16 CFR 1201" _____ 2406.2.1*

Exterior Windows & Doors

- 3rd party performance testing & labeling req'd EXC _____ 1405.12*
This section also requires installation in accordance with manufacturer's instructions.
- Decorative glazed openings exempt _____ n/a
- Openable windows ≥4in w/ drop-off >72in req window guards... _____ 1405.12.2*
The UBC had no window guard requirement. This issue came up through the CPSC.

Hazardous locations Requiring Safety Glass

- Tub/shower enclosure + doors & windows w/ lower edge <60in _____ 2406.3#5*
The UBC measured the 5ft from the drain inlet level; the CBC measures it from a standing surface, which could be at the tub lip level.
- Glass in doors if 3-inch sphere could pass through _____ 2406.3#1
- Glass in sliding doors or fixed panels of sliding doors _____ 2406.3#2
- Sidelites w/ vertical edge of glazing <24in of door swing EXC _____ 2406.3#6
- Lites perpendicular to door on latch side _____ 2406.3#6X3*
New exemption for most perpendicular sidelites
- All glass in railings _____ 2406.3#8
- Glazing ≤3ft horizontally of stair or 5ft horizontally of bottom nosing w/ no intervening guard & lower edge <60in from floor _____ 2406.3#s10&11*
The UBC did not specify the exception for intervening guards. The CBC spared us the new IRC exemption for glass above the railing.
- Windows w/ walk through hazard, ALL of: _____ 2406.3#7
>9 sq. ft AND
bottom edge <18in from floor or ground AND
top edge >36in above floor or ground AND
within 36in horizontally of walking surface
- Decorative glass in doors, sidelites, & windows exempt except bathrooms, stairs, & landings _____ 2406.3.1#2
Gray area of interpretation – glass panels mounted or hung on a solid surface are now exempt. Could that apply to decorative glass hung over a shower window?

Skylights

- Skylights may be tempered, heat-strengthened, laminated, wired, or approved rigid plastics _____ 2405.2
- Min 4in curb if roof slope <3:12 _____ 2405.4X
The UBC req'd a curb for skylights less than 45° from horizontal. CBC now allows lesser height if specified in the manufacturer's installation instructions.

Swimming Pool Barriers

General

- Applies to all pools or spas >24in deep _____ 3109.2
Note – California Health & Safety Code 115921 defines a pool to be anything >18in deep
- Barrier fence req'd min 48in high _____ 3109.4.1
Note – California Health & Safety Code 115923 requires the barrier to be 60 inches
- Bottom of fence max 2in above grade _____ 3109.4.1
- Gate lockable, self-closing, open away from pool _____ 3109.4.1.7
- If latch <54in high, must be poolside... _____ 3109.4.1.7
- No openings >1/2 within... _____ 3109.4.1.7
- Doors & screen doors w/ direct pool access req alarm audible throughout house within 7 seconds of opening for 30 seconds duration _____ 3109.4.1.8
- Alarm control min 54in high, automatically resetting _____ 3109.4.1.8

Code Check 5th Edition Page 11:

Stairs & Decks

General

- Illumination req'd for all stairways _____ 1205.4
- Switch req'd top & bottom of interior stairs w/ 6 or more risers _____ 1205.4.1
- Floor or landing req'd at top & bottom of interior stairways (including garage) exc where door does not swing over stairs _____ 1009.4 Exception 3
- Headroom min 6ft 8in _____ 1009.2
- Min stairway width above handrail 36in _____ 1009.1X1
- Handrail may project into req'd width 4 1/2in _____ 1012.7*
UBC maximum projection into stair width was 3 1/2in
- Max riser height 7 3/4in _____ 1009.3X4*
- Min tread depth 10in _____ 1009.3X4*
UBC was 8in rise and 9in run
- Max difference between tallest/shortest riser or largest/shortest tread 3/8in _ 1009.3.2
- Winder tread min 6in & develop req'd length within 12in from inside _____ 1009.3.2
CBC also req's dimensional uniformity on winders, UBC did not
- Nosing min 3/4 max 1 1/4 req'd on stairs with solid risers EXC _____ 1009.3X4*
Nosing not req'd if tread depth \geq 11in _____ 1009.3X4*
Radius of nosing curvature max 1/2in. IRC is 9/16. UBC did not address nosings

Handrails

- Grippable handrail req'd if 4 or more risers _____ 1009.10X4
- Handrail height min 34in max 38in _____ 1012.2
- Grips min 1 1/4in max 2in circular cross section or equivalent _____ 1012.3
Round handrails must be from 1 1/4 to 2 inches in diameter. Non-round handrails must have a perimeter dimension of 4 inches to 6 1/4 inches. This prohibits the grooved 2x6 with "equivalent gripping surface" as a handrail.
- Min 1 1/2in between wall & handrail _____ 1012.6
The space below the handrail must also be 1 1/2 inches, though that space can be reduced by 1/8 inch per additional perimeter inch beyond 4 inches, i.e., a 6-inch perimeter dimension handrail only needs 1 1/4 inches clearance below it.
- Ends must return to wall or newel post _____ 1012.5
- Handrail on open side of stairs must not allow 4 3/8in sphere to pass _____ 1013.3X5*
- Openings between treads of open risers <4in _____ 1009.3.3X1*
The UBC did not address open risers or allow the 4 3/8in opening in guard handrails.
- Triangular space between riser, tread & rail must not allow 6in sphere _____ 1013.3X1

Guardrails

- Req'd for any walkoff >30in above floor or grade _____ 1013.1
- Min height ~~36in~~ 42in (34in if guard is stair handrail) _____ 1013.2*
- Opening must not allow 4in sphere to pass through _____ 1013.3
(IBC says "balusters or ornamental patterns" & therefore does not prohibit horizontal dividers)
- Guards w/ openings 4 3/8 max on open sides of stairs... _____ 1013.3X5*

Code Check 5th Edition Page 12:

Fire Protection

Stairs

- Fireblocking req'd at concealed space under stairs at top & bottom... _____ 717.2.4
- Enclosed accessible space below stairs... _____ 1009.5.3*
UBC req'd 5/8 type X, CBC accepts ordinary 1/2in gypsum board.

Fireblocking & Draftstopping

- Fireblocking req'd in concealed spaces of stud walls max 10ft horizontal _____ 717.2.2*
No 10ft vertical requirement
- Fireblocking req'd at horizontal/vertical intersections such as... _____ 717.2.3

- Seal gaps around ducts, ~~wires~~, & pipes... 712.4.2*
- Fireblock material may be 2x lumber... 717.2.1
- Compressed glass fiber tightly packed 717.2.1
- Unfaced fiberglass min 16in vertical... n/a
- Fireblock between chimney & framing 717.2.5, 2113.20*

Fireblocking must be supported on metal, not simply packed against chimney

Code Check 5th Edition Page 12 (Continued):

- Floor/ceiling draftstopped if >1,000 sq. ft... n/a*
- No longer req'd for residential, and also not req'd if sprinklered 717.3.2&3
- Draftstop material 1/2in gypsum or 3/8in panels 717.3.1*
- Cement fiber, mineral wool, & fiberglass now explicitly accepted

Separation & Protection from Garage

- Min 1/2in gypsum board on garage side... 406.1.4*
- The separation is no longer a modified one-hour wall – it is prescriptive
- Min 5/8in gypsum board on ceiling... 406.1.4
- Min 1/2in gypsum board on walls supporting ceiling... n/a*
- Because the requirement is prescriptive, the occupancy separation rule calling for supporting construction to have at least the same rating as what is above does not apply, negating sections 509.4 and 508.3.3.1 and table 508.3.3.
- Approved firestop material at penetrations... 712.3.1X
- Ducts from house to garage min 26 gauge steel 406.1.4*
- Fire dampers can no longer be used as a means of installing flex ducts in garages
- No duct openings into garage 406.1.4
- No openings between garage and sleeping rooms 406.1.4
- Door between house & garage rated 20 minute or... 406.1.4
- Noncombustible floor sloped to drain 406.1.3*, 406.2.6
- Carport exempt if open 2 or more sides 406.1.4*
- Carport is NOT exempt if there are enclosed areas above
- Interior walls of detached garage min 1/2 gypsum if within 3ft... n/a

Smoke Alarms

- NFPA 72 fire alarm systems OK... 907.2.10X*
- Req'd in each sleeping room... 907.2.10.1.2
- Min 1 detector each story including basements 907.2.10.1.2
- Interconnect so activation of one alarm sets off all alarms 907.2.10.3*
- UBC only req'd they be audible throughout house, not that all be activated
- Compliance req'd for work requiring permit EXC 907.2.10.5.1*
- Work on exterior only n/a
- No more \$1,000 threshold amount
- Power from building wiring plus battery backup 907.2.10.2
- Battery power alone OK for remodel where no finishes removed 907.2.10.5.2

Habitability Requirements & Final Inspection

- Building address numbers visible from street 501.2
- Heat req'd in habitable rooms... 1204.1*
- UBC said 70°F, CBC says 68°F
- Min one room 120sq. ft... 1208.3
- Habitable room dimensions... 1208.1
- Sloped ceiling rooms min 50% must be... 1208.2X2
- Slope ceiling room area <5ft... 1208.2X2
- Ceiling height habitable space 7ft 6in 1208.2
- Kitchens, baths, hallways min ceiling height 7ft EXC 1208.2
- 6ft 8in OK in baths over fixture & front clearance area ☉
- Ceiling height unfinished basements min 6ft 8in n/a

###