



RESIDENTIAL PLAN CHECK LIST

Based on the 2013 California Residential Code (CRC)
City of Hermosa Beach - Building Department
1315 Valley Drive
Hermosa Beach, CA 90254
(310) 318-0235

General

1. Legal Owner, Job Address, APN on cover sheet R106.
2. Plans drawn by an Architect or prepared by an Engineer must have the wet stamp and signature of the Architect or Engineer.
3. Plans prepared by a building designer must be signed by the responsible designer (Dept. of Consumer Affairs/Business & Professionals Code).
4. Scale of drawings shown on the plans R106.1.1.
5. SCOPE OF WORK section on plans describing the work to be done including square footage of area of improvement, addition, or building area R106.1.1.
6. Statement "Plans shall comply with Title 24 energy efficiency requirements and all mandatory measures." (**2010 California Energy Code "Title24"** until 7/1/14).
7. Plans specify effective codes 2013 California & HB Municipal codes.
8. Occupancy classification specified on plans R106.1.1.
9. Type of construction specified on plans is suitable for the intended use R106.1.1.
10. Location of building on the site is consistent with ratings of exterior walls, overhangs, and openings R302.
11. Rooms are labeled for the proposed use (bedroom, kitchen, etc. R302).

Room Size and Height (Also see #148 – 150 HBMC)

12. Habitable rooms, other than kitchens not less than 7 feet in any dimension R304.3.
13. One room at least 120 sq. ft. R304.1.
14. Other habitable rooms 70 sq. ft. min. R304.2.
15. Corridors min. 36" wide R311.6.
16. Ceiling height in habitable rooms, hallways, bathrooms and laundry rooms, min height 7 ft. R305.1.

Exits

17. Landings R311.7.7 min 36".
18. Egress door min. 32" wide R311.2.
19. Max distance from any interior point to egress 50' R311.4.
20. Emergency escape window (or door to the outside) provided. Window size min. 20" wide x 24" high, and 5.7 sq. ft. Sill height maximum 44" CRC R310.

Glazing for Light and Ventilation

21. Glazing equal to 8% of floor area R303.1.
22. Openable window area equal to 4% of floor area or mechanical ventilation system providing 0.35 air changes per hour or 15 cu. ft. per minute of outside air per occupant R303.1 Exception 1 (see other exceptions)
23. Bathrooms, laundry rooms, similar rooms 1.5 sq. ft. ventilation opening – not required with mechanical ventilation R303.3 & Exception.

24. Ventilation fans for bathrooms, laundry rooms, and similar areas must provide 50 cubic feet per minute R303.3 Exception.

Safety Glazing

25. Glazing in doors and sliding doors shall be safety glazed R308.4 see exceptions.
26. Doors and enclosures of bathtubs, spas, hot tubs, saunas, etc., shall be safety glazed R308.4.5.
27. Glazing within 24" of a door and 60" of a walkway must be safety glazed R 308.4.2.
28. Glazing with an individual pane greater than 9 sq. ft. where bottom edge is less than 18" above the floor and top edge is greater than 36 inches, and where the pane is within 36" of a walking surface R308.4.3.4 (see exceptions).

Fireplace

29. Factory built fireplaces and chimneys must be listed and labeled, installed per Manufacturer's instructions R1004 & R1005.
30. Masonry Fireplaces to be built per R1001 & R1003 or stamped structural design.
31. Spark arrester & chimney 2' above roof within 10' R1003.9.
32. Glass doors (Title 24 150(e)).
33. Factory built Fireplaces R1004, 1005.
34. Direct vent in bedroom R1004, 1005.

Special Inspection Chapter 17 2013 California Building Code

35. Is engineering required?
36. Architect/engineer to specify areas of special inspections – R109.1.5.2 CBC 1704.
Special Inspection is required for:
 - A. Concrete greater than 2500 psi.
 - B. Epoxy bolting
 - C. Welding
 - D. High-strength bolting
 - E. Structural Masonry (see exceptions)
 - F. Shot Crete
 - G. Special cases or circumstances

FIRE PROTECTION SYSTEMS

37. Automatic Fire Sprinkler Systems R313 & HBMC 15.20.080.
38. Smoke detectors installed as in R314.
39. Carbon Monoxide Alarms as in R315.

Foundation

40. Soils testing as in R401.4.
41. If no test needed, Proscriptive as in Section R401.
42. Footing design as in R403.1 through R403.1.4.2
43. Foundation anchorage R403.1.6 through R403.4.2.
44. Foundation/retaining walls reinforcement – R404.
45. Foundation anchorage R403.1.6 and R403.1.6.1.
46. Foundation anchors as in R403.1.6
47. Foundation drainage/Waterproofing R405 and R406.
48. Stepped footings R403.1.5.
49. Pier and curtain wall R404.1.5.3.
50. Clearance 6" from earth to wood for exterior walls R317.
51. Under floor crawlspace 18"x24" shown on plans R408.4.
52. Under floor ventilation 1 – 1/50 of floor area R408.1.

Framing

53. Floor framing meets conventional construction details CRC Chapter 5.
54. Columns and posts clearance to soil and concrete R317.1.4.
55. Floor Framing Approved wall plate boxes or hangers shall be provided – CBC 2304.10.2
56. Foundation cripple walls under 14", plywood or solid blocked R602.9 T602.3(1).
57. Cripple wall studs over 4" to be same size as for additional story R602.9.
58. Wall framing meets conventional construction details R602.3 Tables referenced.
59. Pressure treated bottom plate R402.1.2 2x6 Figure R403.1(2).
60. Double top plate with min. 24"lap R602.3.2.
61. Studs supporting 2 floors, a roof, a roof and a ceiling must be 2x6 or 3x4 Table R602.3(5).
62. Roof framing; Rafter spans Tables 802.5(1)-(8) Ceiling Joists T802.4(1) & (2).
63. Ceiling Joist & Rafter Connections R802.3.1 & .2.
64. Ceiling joist & Rafter connections R802.3.1.
65. Girder & Header spans Tables R502.5(1) & (2).
66. Roof slope of less than 3:12 design ridge as a beam R802.3.
67. Roof slope (Min. Roof slope 3/12 = 25% R802.2.
68. Truss design drawings R802.10.1.
69. Truss to wall connection R802.10.5.
70. Roof tie down/Uplift resistance R802.11.
71. Attic Ventilation R806.2 pg. 489.
72. Attic access located in hallway, corridor, or similar area (not required < 30" vertical clearance). R807.1 pg. 489.
73. Attic access opening min. 22"x30" R807.1 pg. 489.
74. Framing details (R109.1.4) and Fastening schedule (Table R602.3(1)
75. Lateral support for joists\rafters (R802.8).
76. Rafter/ceiling joist spans (Tables 802.4 and 802.5).
77. Specify exterior (R703) and interior (R702) wall finish.
78. Shear panel location and schedule (R602 Wood R603 Metal).
79. Shear transfer from roof to foundation system (R602 Wood R603 Metal).
80. Fire stop (R302.11 & 602.8) and draft stop (R302.12 & 502.12) locations.
81. Skylight size, location, and ICBO number shown on plans (R308.6).
82. Specify roof material/installation. Include ICBO number where appropriate (R905).

Fire Resistive Assemblies

83. Enclosed storage space under stairs must be of 1 hr. construction (CBC 413.2).
84. 1/2" gypsum must be installed on the garage side of the wall between the garage and the dwelling unit (R302.6).
85. Where habitable space occurs above the garage 5/8" type X drywall must extend along the ceiling (R302.6).
86. 1 Hr. rated wall required between units (R302.2Townhomes R302.3 2 Fam. dwell.).
87. Rated assemblies are required in the attic between units (R302.3).

Stairways

88. Stairway rise, run, and width as based on type and use of stairway (R311.6)).
89. Spiral stairway, winding, etc. (R311.7.4.2).
90. Handrails required for 4 or more risers (R311.7.7).
91. Height of handrail 34"-38" above nosing (R311.7.7.1).
92. Hand grip portion of handrail 1 1/4" to 2" (R311.7.7.3).

93. Handrail shall be continuous beyond top and bottom riser and return (R311.7.7.2).
94. Intermediate rails 4" o.c. required when stairway is over 30" above grade (R312.3).

Guardrails

95. Guardrails required on all ramps, balconies, porches, stairways, etc. when over 30" above grade at any point within 36" of the open side (R312.1).
96. Height of guardrails are 42" for residences (R312.2).
97. Openings in guardrails max. 4" between rails (R312.3)

Electrical Requirements (2013 California Electric Code - CEC)

98. Service amperage and location of service shown on plans (Policy).
99. Fluorescent light in bathroom and kitchen (Title 24).
100. Kitchen to have 2 - 20 amp small appliance branch circuits (CEC 210.52 (3)).
101. GFCI outlets required at kitchen, bathroom, garage, outside, etc. (CEC 210-8).
102. Outlets at kitchen 2 ft. o.c. along counter tops (CEC 210-52(c)(1)).
103. Outlets throughout habitable rooms to be 6 ft. o.c. along walls (CEC 210-52(A)(1)).
104. At least one outlet installed in hallways 10 ft. long (CEC 210-5 (H)).
105. Switched light at exterior doors (CEC 210-70 (2) (B)).
106. Switched light or outlet at each room and hallway (CEC 210-70 (2) (A)).
107. Exterior outlets required at front and rear yard GFCI protected (CEC 210-52(5) (E)).
108. Each bath must have 20 amp dedicated circuit (CEC 210-52(D)).
109. AFCI outlet in all family, dining, living rooms, dens, rec rooms closets, hallways bedrooms and similar areas. (CEC 210-12).

Plumbing Requirements 2013 California Plumbing Code (CPC)

110. Note on plans "All new fixtures shall be Water Conserving" CPC 402.0).
111. Gas water heater location restrictions (CPC 505.1)
112. Water heater size, type, and location (CPC 501).
113. Water heater in garage on 18" stand, protected from vehicle (CPC 508.14).
114. Water heater protection from seismic damage (strapping) (CPC 508.2).
115. T & P valve to exterior or other approved installation (CPC 608.5).

Mechanical Requirements 2013 California Mechanical Code (CMC)

116. Heat source provided - 68 degrees at 3' above floor level in habitable rooms (CRC 303.8).
117. FAU not in bedroom, bath, or closet leading into these rooms, unless gasket door (CMC 904.1).
118. Electrical outlet and light for attic installation (CMC 904.11.5).
119. FAU in attic or under floor, 30" x 30" service space (CMC 904.11.4).
120. Chimney termination 2' above any part of structure within 10' (CMC 802.5.2.1 Table 8-1).
121. Combustion air openings and area for heater (CMC 701.3).
122. Installation in attic min. 22" x 30" opening (CMC 904.11.1).
123. Fireplaces with gas logs to have screens (CMC 907.3).
124. Dryer vent max. 14' in length with 2 - 90 degree bends to outside (CMC 504.3.2).

Energy Compliance Title 24 & California Green Building Codes

125. Title 24 energy compliance documentation submitted (Title 24).
126. Mandatory measures checklist submitted (Title 24).
127. Computer compliance correct software version shows that building does comply (Title 24).

- 128. Prescriptive package requirements have been met (Title 24).
- 129. Dual glazed windows shown on plans (Title 24).
- 130. Radiant Barrier
- 131. Cool Roofs HBMC 15.48.020 Subsection A4.106.5.1 Solar reflectance.
- 132. Energy Star appliances HBMC 15.48.020 Subsection A4.210.1 Appliance rating.
- 133. Low flow water fixtures HBMC 15.48.020 Subsection A4.303 Indoor water Use

Miscellaneous

- 134. Specify exterior and interior wall coverings
- 135. Statement on plans (where appropriate) "A.I.T.C. certificate to be given to inspector prior to installation of glued laminated wood members."
- 136. Retaining walls per City Standard or engineered.
- 137. Height and construction details of concrete walls.
- 138. Veneer Anchoring.
- 139. Airport stamp.
- 140. School fees.
- 141. Requirements letter.
- 142. Easement Right of Way.

Hermosa Beach Municipal Code Modifications

- 143. Electric Conduit for future solar HBMC 15.32.140 Required connecting conduit
- 144. Permeable areas HBMC 15.48.020 Subsection A4.106.4 Water permeable surfaces.
- 145. Fence height maximum 6' side and rear, 42" front HBMC 17.46. 130 Walls, fences and hedges
- 146. Class A and Cool Roofs required HBMC 15.04.080
- 147. Mesh or tarps required whenever scaffolding is installed HBMC 15.04. 140
- 148. **Section 1208.4. - Minimum Dwelling Unit Size.**
1208.4.1 Multifamily dwellings.
 One bedroom or less: Six hundred (600) square feet.
 Two bedrooms: Nine hundred (900) square feet.
 Three bedrooms: Twelve hundred (1200) square feet.
 Three bedrooms and den, or four bedrooms: Fifteen hundred (1500) square feet.
 More than four bedrooms: Eighteen hundred (1800) square feet.
- 149. **1208.4.2 Single-family dwellings.**
 Two bedrooms or less: One thousand (1000) square feet.
 Three bedrooms, or two bedrooms and den: Thirteen hundred (1300) square feet.
 Four bedrooms, or three bedrooms and den: Sixteen hundred (1600) square feet.
 More than four bedrooms: Nineteen hundred (1900) square feet.
- 150. **1208.4.3 Minimum hotel-motel unit size.**
 All hotels, motels or any structure which is intended for occupancy by transients shall have rooms with a minimum unit size of at least two hundred (200) square feet, exclusive of bathrooms.
- 151. 15.04.070 Protection of Private Property During Construction. City may require posting of a bond for property damage adjacent to construction site.
- 152. Fire Sprinklers and Utility undergrounding required for greater than 50% expansion or improvement valuation of existing structures. Sprinklers 15.04.100, Utilities 15.32. 060