CITY OF SAN DIEGO STANDARD FENCES

City of San Diego
Development Services Department

INFORMATION BULLETIN
222
October 2020

This Information Bulletin provides prescriptive designs for the construction of masonry, chain link, or wood fences that are seven feet or less in height and solely supporting their self-weight. Note that fences that are 7 feet or less in height meeting the conditions specified in Information Bulletin 220 do not require building permits.

I. LIMITATIONS

The use of the fences specified in this document is limited to sites where the following conditions exists:

- Risk Category I
- Seismic design category D.
- Wind speed 90 mph, Exposure B.
- Footings are embedded in native or compacted non-expansive soil.

Fences not exempt from permitting shall be designed by a registered design professional licensed in the State of California and are subject to special inspection requirements specified in chapter 17 of the California Building Code. Fences designed by a registered design professional shall be submitted for plan review. Submittal package shall include plans and structural calculations. See Information Bulletin 220 for minimum plan content requirements.

A soils report may be required depending on project locations.

II. ZONING REGULATIONS

San Diego Municipal Code Chapter 14 Article 2 Division 3 regulates the location and the height of fences in the required setbacks and in the visibility area as follows:

- Solid fences and standard all-metal chain link fences (open fences), located on the front or street side property line, shall not exceed 3 feet in height except as provided in Section 142.0310(c) of the SDMC.
- Fences located in required side yards and required rear yards are permitted up to 9 feet in height. Any portion of the fence above 6 feet in height shall be an open fence (35% open to light, 75% open to light if the property is within the Coastal Overlay Zone).
- Fences in visibility areas shall not exceed 3 feet in height.

III. SPECIFICATIONS

A. WOOD FENCES

Details for typical wood board fences are provided in Table B and Figures 1 and 2. Materials for wood fence construction shall be as specified below.

- FASTENERS: Common nails shall conform to ASTM F1667. Screws shall conform to ANSI/ASME Standard B18.6.1.
- BOARDS AND RAILS: Species and grade of boards and rails used in fence construction shall be Western Cedars No. 2, Redwood No. 2, or better.
- POSTS: Species and grade of wood posts shall be Redwood No. 2, pressure-treated Western Cedars No. 1, or better in conformance with section 2304.12.2.2 of the CBC.
- FOOTINGS: Posts shall be set in 12-inch diameter concrete footings embedded in undisturbed natural ground or properly compacted fill. Footings must be placed over 3 inches of loose gravel. Wood posts must extend through the concrete footings onto the gravel below. Concrete shall have a compressive strength of 2,500 psi at 28 days and conform to the specifications of Section III.E-Concrete.

- Fences located in Very-High Fire Hazard Severity Zones, governed by Chapter 7A of the California Building Code, Chapter R337 of the California Residential Code, or Brush Management Zones, governed by the City of San Diego's Brush Management Ordinance, may need to meet additional fire protection re-quirements.

B. CHAIN LINK FENCES

This information bulletin does not address the design of metal chain link fences. Sizes and spacing of its elements shall follow manufactures installation specifications. The minimum footing size for chain link fences shall be as shown on Figure 3 unless larger footings are required and specified by the fence manufacturer. Concrete footings shall have a compressive strength of 2,500 psi at 28 days and conform to the specifications of Section III.E-Concrete.

C. MASONRY FENCES

Table C and Figure 4 contain dimensional requirements and specifications for masonry fences and footings. All footings must extend at least 12 inches into undisturbed native soil or fill which has been compacted to at least 90 percent relative compaction. Soil should be dampened prior to placing concrete in footings. Materials for masonry fence construction shall be as specified below.

- MASONRY BLOCKS: Concrete masonry units (CMU) shall be medium weight conforming to ASTM C90. CMU blocks shall have a minimum compressive strength of 2,000 psi and be laid in running bond. Wall assemblies may be partially grouted or grouted solid. All head and bed joints shall be 3/8" thick. Bed joints of the starting course over the concrete foundation may be between 1/4" and 3/4".
- MORTAR: Type S or M mortar conforming to ASTM C270 shall be used in masonry construction.
- GROUT: Grout shall have a minimum compressive strength of 2,000 psi and conform to ASMT C476.
- REINFORCING STEEL: Reinforcing steel shall conform to ASTM A 615, Grade 60. ASMT A 615 Grade 40 may be used for #3 and #4 reinforcing bars only. Horizontal reinforcing shown in Figure 4 shall be continuous; however, lap splices may be provided as an alternative to meet this requirement. The minimum required length of lap splices shall be as specified in Figure 6. Vertical reinforcing shall not be spliced except as specified in Figure 4. All bars shall be clean of loose flaky rust, grease, or other materials likely to impair bond.
- MORTAR KEY: To insure proper bonding between the footing and the first course of CMU blocks, a mortar key must be formed by embedding a flat 2x4 form flush with the top of the freshly placed footing. The flat 2x4 form should be removed after the concrete has started to harden.
- FOOTINGS: Masonry fences shall be founded on continuous concrete footings with a minimum compressive strength of 3,000 psi at 28 days and conform to the specifications of Section III.E-Concrete.

D. VINYL FENCES

This information bulletin does not address the design of vinyl fences. Sizes and spacing its elements shall follow manufactures installation specifications. The minimum footing size for vinyl fences shall be as specified in Table B unless otherwise specified by the fence manufacturer. Concrete footings shall have a compressive strength of 2,500 psi at 28 days and conform to the specifications of Section III.E-Concrete.

E. CONCRETE

Footings shall be constructed with normal weight concrete; the concrete mix design used shall meet the following criteria:

- Type II portland cement conforming to ASTM C150.
- ¾" aggregate conforming to ASTM C33.
- Water conforming to ASTM C1602.
- Water-to-cement ratio of 0.50
- Slump between 2" and 5".

IV. CITY INSPECTIONS

Fences covered in this document are exempt from permitting; therefore, City inspections are not required.

Documents Referenced in this Information Bulletin

- **California Building Code**
- **San Diego Municipal Code**
- **Information Bulletin 220, How to Obtain a Permit for a Retaining Wall or Fence**

Figure 1 / Wood Fence—Horizontal Boards

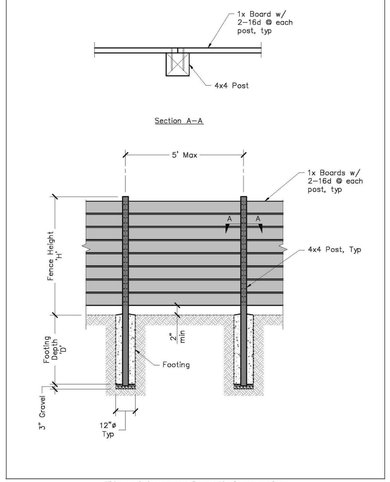


Figure 2 / Wood Fence—Vertical Boards

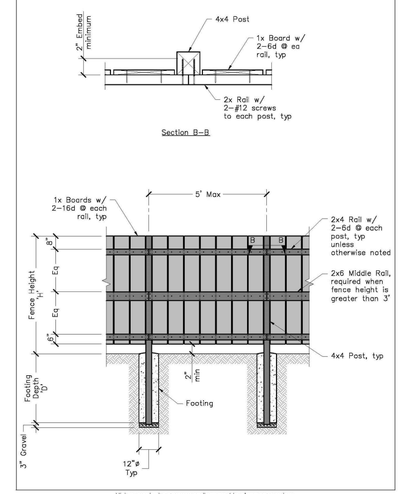


Figure 3 / Chain Link Fence

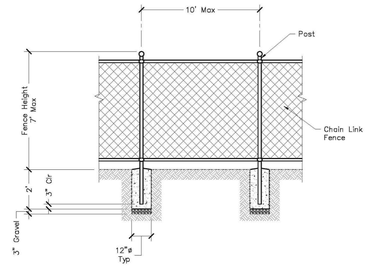


Figure 4 / Masonry Fence

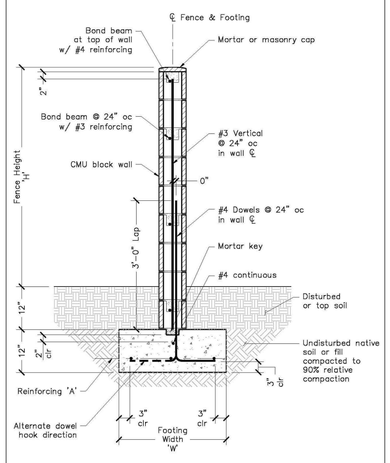
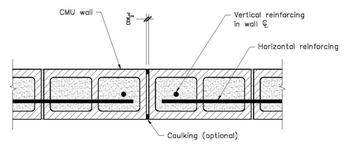


Figure 5 / Typical Control Joint



Note: Control joint spacing shall not exceed 25' on center

Figure 6 / Typical Lap Splices

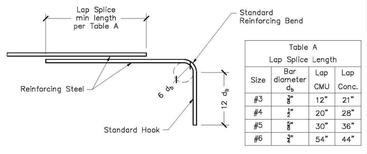


Table A
Lap Splice Length

Size	Bar diameter d_b	Lap CMU	Lap Conc.
#3	⅜"	12"	21"
#4	½"	20"	28"
#5	⅝"	30"	36"
#6	¾"	54"	44"

Table B / Post Footing Depth

Fence Height 'H'	Footing Depth 'D'
3'-0"	2'-3"
4'-0"	2'-6"
5'-0"	3'-0"
6'-0"	3'-3"
7'-0"	3'-6"

Table C / Requirements for Masonry Walls

Fence Height 'H'	CMU Block Size	Footing Width 'W'	Reinforcing 'A'
4'-0"	6" or 8"	2'-0"	2-#4
5'-0"	6" or 8"	2'-3"	3-#4
6'-0"	8"	2'-6"	3-#4
7'-0"	8"	3'-0"	4-#4

SHEET: FENCES WALLS - INFO BULLETIN 222
PROJECT NAME:
ADDRESS:

SHEET ___ OF ___
PRJ-

CITY APPROVAL STAMP

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