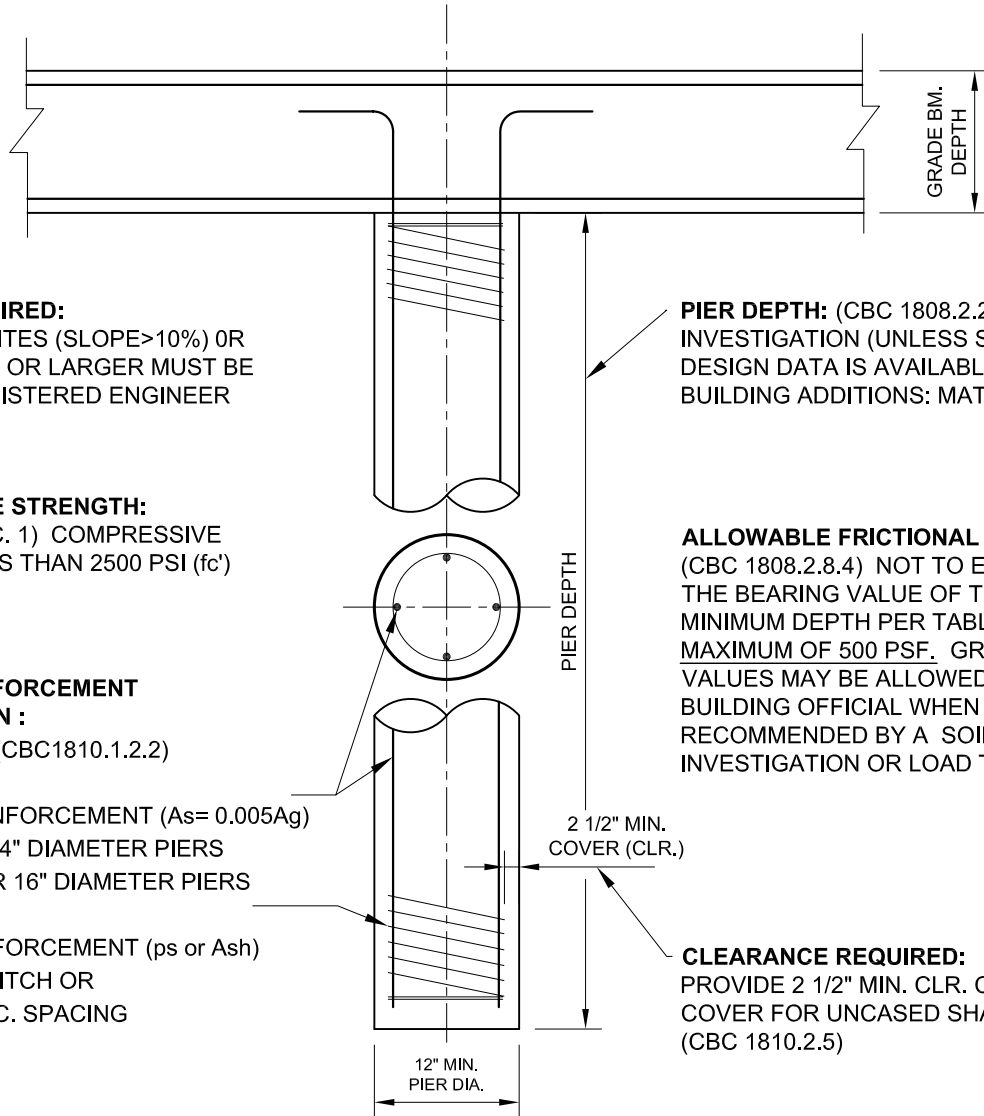


# RESIDENTIAL PIER REQUIREMENTS

THIS DRAWING DEPICTS MINIMUM CODE REQUIREMENTS PER CBC 2007. INFORMATION IS FOR REFERENCE ONLY AND IS NOT A SUBSTITUTE FOR ACCURATE DRAWINGS PREPARED FOR EACH PROPOSED CONSTRUCTION PROJECT.



**ENGINEERING REQUIRED:**  
SLOPED BUILDING SITES (SLOPE>10%) OR  
PIERS 18" DIAMETER OR LARGER MUST BE  
DESIGNED BY A REGISTERED ENGINEER

**MINIMUM CONCRETE STRENGTH:**  
(CBC 1808.2.23.2 EXC. 1) COMPRESSIVE  
STRENGTH NOT LESS THAN 2500 PSI (fc')

**MINIMUM PIER REINFORCEMENT  
FOR SEISMIC DESIGN :**  
CATEGORY D OR E: (CBC1810.1.2.2)

LONGITUDINAL REINFORCEMENT ( $A_s = 0.005A_g$ )  
4-#4 for 12" AND 14" DIAMETER PIERS  
4-#5 OR 5-#4 .FOR 16" DIAMETER PIERS

TRANSVERSE REINFORCEMENT (ps or Ash)  
#3 SPIRAL @ 3" PITCH OR  
#3 HOOP @ 3" O.C. SPACING

**PIER DEPTH:** (CBC 1808.2.2) PER SOIL  
INVESTIGATION (UNLESS SUFFICIENT  
DESIGN DATA IS AVAILABLE).  
BUILDING ADDITIONS: MATCH EXISTING

**ALLOWABLE FRICTIONAL RESISTANCE:**  
(CBC 1808.2.8.4) NOT TO EXCEED 1/6 OF  
THE BEARING VALUE OF THE SOIL AT  
MINIMUM DEPTH PER TABLE 1804.2,  
MAXIMUM OF 500 PSF. GREATER  
VALUES MAY BE ALLOWED BY THE  
BUILDING OFFICIAL WHEN  
RECOMMENDED BY A SOIL  
INVESTIGATION OR LOAD TEST

**CLEARANCE REQUIRED:**  
PROVIDE 2 1/2" MIN. CLR. CONCRETE  
COVER FOR UNCASD SHAFTS  
(CBC 1810.2.5)

**SPECIAL INSPECTION REQUIREMENTS:** (CBC1704.9)

SPECIAL INSPECTOR / SOIL ENGINEER SHALL:

PER TABLE 1704.9:

- OBSERVE PIER DRILLING AND MAINTAIN ACCURATE RECORDS
- VERIFY PIER LOCATIONS, DIAMETER AND DEPTH

PER TABLE 1704.4:

- INSPECT REINFORCING STEEL
- TAKE SAMPLES AND PERFORM TESTS
- INSPECT PLACEMENT BY TREMIE OR FUNNEL HOPPER (CBC1810.1.3)

PROVIDE A REPORT INDICATING WORK IS IN CONFORMANCE WITH APPROVED PLANS

NAME, ADDRESS AND PHONE NO. OF DESIGNER  
XXX XXX XXX XXX  
XXX XXX XXX XXX

WET SIGNATURE OF DESIGNER ON EACH SHEET  
(AND PROFESSIONAL STAMP IF APPLICABLE)

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**EXAMPLE  
RESIDENCE**

1234 MAIN ST.  
SANTA ROSA, CA 9540-  
APN # 000-000-000

**RESIDENTIAL  
CONC. PIER DETAIL**

SAMPLE DRAWING

SCALE: N.T.S.  
DATE: DEC. 15, 2008

SHEET NO.

**RP-1**