

HOME SIZE	MAX. ROOF LIVE/SNOW LOAD (PSF)	30 PSF		40 PSF		100 PSF	
		BSB	OSB	BSB	OSB	BSB	OSB
SINGLE WIDE	4:12	10'-16"	2 ROWS	2 ROWS	2 ROWS	2 ROWS	2 ROWS
		16.5'-20"	3 ROWS	3 ROWS	3 ROWS	3 ROWS	
		20.5'-24"	4 ROWS	4 ROWS	4 ROWS	4 ROWS	
DOUBLE WIDE	3:12	20'-28.5"	3 ROWS	3 ROWS	3 ROWS	3 ROWS	3 ROWS
		24'-32"	4 ROWS	4 ROWS	4 ROWS	4 ROWS	
		28.5'-32"	5 ROWS	5 ROWS	5 ROWS	5 ROWS	
	4:12	20'-28.5"	4 ROWS	4 ROWS	4 ROWS	4 ROWS	
		24'-32"	5 ROWS	5 ROWS	5 ROWS	5 ROWS	
		28.5'-32"	6 ROWS	6 ROWS	6 ROWS	6 ROWS	
TRIPLE WIDE	4:12	30'-40"	4 ROWS	4 ROWS	4 ROWS	4 ROWS	4 ROWS
		36.5'-40"	5 ROWS	5 ROWS	5 ROWS	5 ROWS	
		40.5'-44"	6 ROWS	6 ROWS	6 ROWS	6 ROWS	

**TABLE NOTES:**  
 TO USE TABLE, FIND HOME SIZE (SINGLE, DOUBLE OR TRIPLE), THEN FIND ROOF PITCH, WIDTH AND LENGTH. FOLLOW ROW ACROSS TO DESIGN SNOW LOAD THEN DESIGN WIND LOAD. READ TOTAL NUMBER OF C.P. SEISMIC PIERS, # OF ROWS & TIEDOWNS REQUIRED. SEE PLAN ABOVE FOR PLACEMENT OF C.P. SEISMIC PIERS AND TIEDOWN SPECIFICATIONS.

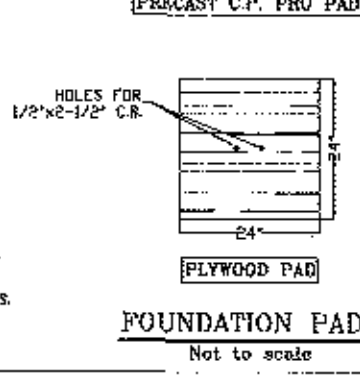
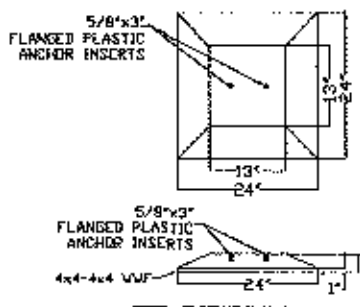
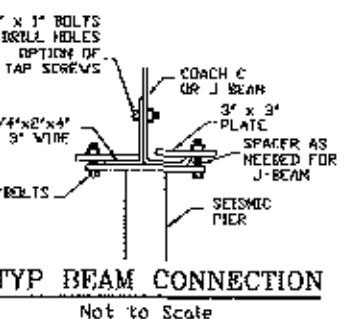
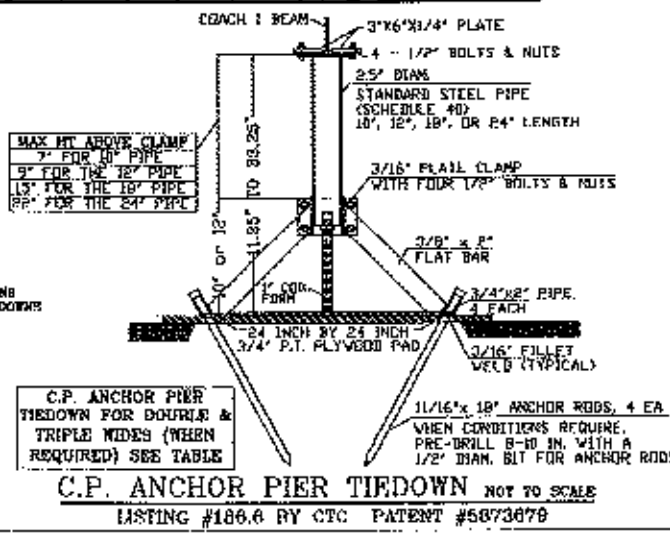
FOR EXAMPLE, FOR A 24'x32' HOME WITH A 3:12 ROOF PITCH, DESIGN SNOW LOAD OF 30 PSF & 85 MPH EXPOSURE C WIND LOAD, READ 12 C.P. SEISMIC PIERS, PLACED IN 3 ROWS, WITH 6 C.P. ANCHOR PIER TIEDOWNS. LAYOUT SHOWN IN DOUBLE WIDE PLAN VIEW ABOVE.

FOR SINGLE WIDES, WHERE TIEDOWN COLUMN IS SPLIT AS SHOWN, INSTALL 2 EARTH ANCHOR TIEDOWNS AT EACH ENDWALL. TOTAL # OF ENDWALL TIEDOWNS PER HOME IS INDICATED BY TABLE BY 2.

HOME SIZES REFER TO NOMINAL SIZES THAT ARE COMMONLY MANUFACTURED. IF THE EXACT SIZE OF THE HOME IS NOT LISTED, CHECK THE NEXT HIGHER OR LOWER SIZE AND USE THE ONE THAT REQUIRED MORE PIERS.

THE TIEDOWNS SHALL BE LISTED & INSTALLATION INSTRUCTIONS SHALL BE ON SITE AT TIME OF INSPECTION.

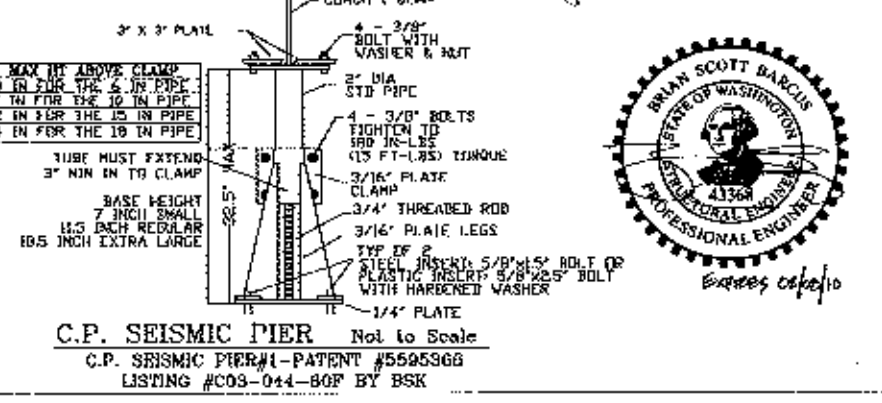
NO MORE THAN 1/3 OF THE TOTAL NUMBER OF C.P. SEISMIC PIERS MAY BE EXTENDED ABOVE 22.75 INCHES MEASURED FROM THE BASE OF THE PIER TO THE TOP FLANGE OF THE PIER. NO MORE THAN 1/6 OF THE C.P. ANCHOR PIER MAY BE EXTENDED ABOVE 25 INCHES MEASURED AS STATED ABOVE.



**GENERAL NOTES:**  
 REFERENCE: 2008 IRC & 2008 IRC, APPENDIX E-MANUFACTURED HOUSING USED AS DWELLINGS  
 1. DESIGN LOADS SHALL BE CONSISTENT WITH LOCAL REQUIREMENTS WHEN INSTALLED. THE FOLLOWING DESIGN LOADS ARE INCORPORATED HEREIN:  
 FLOOR LIVE LOAD: 40 PSF ROOF LIVE SNOW LOAD: 30PSF - 100 PSF AS LISTED IN TABLE  
 SEISMIC DESIGN CATEGORY: D BASIC WIND SPEED & EXPOSURE: 60-100MPH AS LISTED IN TABLE  
 SITE CLASS D S<sub>w</sub>=1.5 S<sub>ds</sub>=1.4 F<sub>o</sub>=1.4  
 2. FOOTINGS ARE TO BE SUPPORTED BY EITHER FIRM UNSATURATED UNDISTURBED SOIL OR COMPACTED FILL, ASPHALT OR CONCRETE. FOOTINGS ARE DESIGNED FOR 1000 PSF BEARING CAPACITY AND SHALL BE COMPATIBLE WITH LOCAL SOIL CONDITIONS. ALL FOOTINGS SHALL BE FOUND IN ACCORDANCE WITH IRC A502 GUIDELINES. PREPARE SUBGRADE PER SOIL REPORT, WHEN AVAILABLE.  
 3. STRUCTURAL STEEL:  
 a. SHALL CONFORM TO ASTM A99 F<sub>y</sub> = 36 KSI MINIMUM.  
 b. SHALL BE FABRICATED ACCORDING TO AISC SPECIFICATIONS.  
 c. SHALL BE WELDED ACCORDING TO AWS SPECIFICATIONS:  
 E. ELECTRODES: E70  
 F. PLATES: ASTM A36  
 G. BOLTS: STANDARD ASTM A307  
 H. THREADED ROD: COLD DRAWN LOW CARBON WELDABLE  
 d. ALL METAL COMPONENTS INCLUDING NAILS & SCREWS ETC. ARE TO BE PROTECTIVE COATED.  
 4. THE C.P. SEISMIC PIER SHALL BE LISTED & LABELED BY BSK ASSOCIATES FOR THESE ULTIMATE LOADS:  
 A. 7" THRU 18" HIGH PIERS: 2203 LBS. (STRONG DIR), 2278 (WRAK DIR), 18,000 VERTICAL  
 B. 19" HIGH X-LARGE PIER: 1653 LBS. (STRONG DIR), 1462 (WRAK DIR), 18,000 VERTICAL  
 5. THIS FOUNDATION SYSTEM IS FOR PLACING MANUFACTURED HOMES CONTRACTED WITH LONGITUDINAL OR CROSS JOISTS.  
 6. THIS FOUNDATION SYSTEM IS DESIGNED TO BE CONSTRUCTED ON A FAIRLY LEVEL SITE WITH NO EXISTING SOIL PROBLEMS. SEE NOTE 2.  
 7. THE SIZE, TYPE & LOCATION OF STANDARD VERTICAL SUPPORT PIERS & FOOTINGS MUST BE INSTALLED PER THE HOME MANUFACTURER'S INSTALLATION MANUAL.

**FOUNDATION PAD NOTES:**  
 1. TWO FOUNDATION PAD TYPES ARE AVAILABLE FOR USE WITH THIS SYSTEM. THE CUSTOMER MAY CHOOSE EITHER OF THE PAD TYPES FOR THEIR HOME.  
 2. FDM PADS SHALL BE PLACED ON FIRM, LEVEL UNDISTURBED SOIL (SEE GEN. NOTE 2)  
 3. THE FOUNDATION PADS SHALL BE ORIENTED AS SHOWN ON THE PLAN VIEW DRAWING WITH THE BOLT HOLES PERPENDICULAR TO THE CHASSIS BEAM. SEE PLAN VIEW.  
 4. PRECAST CONCRETE FOUNDATION PADS  
 A. 2500 PSI AT 28 DAYS AS TESTED AND SHOWN BY STABILIZE WEIGHT CONCRETE.  
 B. PRESSURE TREATED FOUNDATION PAD  
 A. 3/4" INCH A.P.A. 48/24 EXTERIOR P.A.I.-83 CC. PLUGGED, RED-QA397,PRP-108.  
 6. ATTACHMENT TO EXISTING CONCRETE SLAB  
 THE C.P. SEISMIC PIER MAY BE ATTACHED TO AN EXISTING COMPETENT CONCRETE SLAB OR CONCRETE FOOTING ACCORDING TO THE FOLLOWING CRITERIA:  
 1. ATTACH WITH TWO 1/2" O.D. 17# RAMBOLT/ BIRMINGHAM TRUBOLT WEDGE ANCHORS  
 2. MINIMUM EMBEDMENT = 2.5"  
 3. MINIMUM CONCRETE THICKNESS = 3.75"  
 4. MINIMUM EDGE DISTANCE = 2"  
 7. FROST ZONE  
 WHEN THE HOME IS TO BE LOCATED IN AN AREA SUBJECT TO FREEZES, ALL FOOTINGS MUST EXTEND BELOW THE FROST DEPTH PER IRC SECTION 1006.2.1 AND/OR PER LOCAL BUILDING OFFICIAL. THIS WILL REQUIRE REPLACING THE FOUNDATION PAD (PLYWOOD OR PRECAST) WITH A FOAMED CONCRETE FOOTING. ATTACH C.P. SEISMIC PIER TO CONCRETE FOOTING PER NOTE 6 (ABOVE). FOOTING DEPTH SHALL BE 24" MIN. DEPTH SUFFICIENT TO PENETRATE MOST ZONE OF FROST BUILDING OFFICIAL.

**COACH SIZE NOTES:**  
 1. UNLESS APPROVED BY ROCK SOLID ENGINEERING, INC., THE ROOF PITCH SHOULD NOT EXCEED:  
 A. SINGLE WIDES: 4:12  
 B. DOUBLE AND TRIPLE WIDES: 3:12 or 4:12 AS LISTED IN TABLE  
 2. FOR ANY HOME SIZE OTHER THAN AS SHOWN ON THIS PLAN OR REFERENCED IN THE TABLE, THE LAYOUT SHALL BE REVIEWED & APPROVED BY ROCK SOLID ENGINEERING, INC.  
**INSPECTION REQUIREMENTS:**  
 1. THE DESIGN OF THIS SYSTEM IS BASED ON STANDARD MANUFACTURED HOMES AS BUILT BY THE MANUFACTURER. SITE BUILT ADDITIONS SUCH AS GARAGES AND SECONDARY ROOFS HAVE NOT BEEN INCLUDED IN THIS DESIGN.  
 2. ALL DIMENSIONS INCLUDED ON THIS PLAN, INCLUDING COACH SIZE, ROOF HEIGHT AND PIER HEIGHT, SHOULD BE FIELD VERIFIED BY THE LOCAL BUILDING OFFICIAL. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S ATTENTION.  
 3. THE BUILDING PAD SHOULD BE INSPECTED TO ENSURE THAT PROPER SOIL CONDITIONS AND DRAINAGE PATTERNS HAVE BEEN ESTABLISHED IN ACCORDANCE WITH THE HOME INSTALLATION MANUAL AND IRC APPENDIX E.



**REVISIONS**

NO.	DESCRIPTION	DATE	BY

**FOR: CENTRAL PIERS, INC.**  
 284 N. THORNE  
 FRESNO, CA. 93706  
 (559) 268-0828

**ENGINEERED FOUNDATION SYSTEM: C.P. SEISMIC PIER (IBC/IRC)**

**ROCK SOLID ENGINEERING, INC.**  
 CIVIL & GEOTECHNICAL CONSULTANTS  
 Foundation Engineering • Site Assessments • Manufactured Home Foundations • Expert Witness

1100 MAIN STREET, SUITE 4, WATSONVILLE, CA. 95076 (831) 724-5868

DATE: 01-29-09  
 SCALE: AS SHOWN  
 DRAWN: YMW  
 JOB #: W03002  
 SHEET: 1  
 OF 1 SHEETS