

WIDTH	ROOF PITCH	LENGTH	WIND LOAD(MPH,EXP)			
			15psf or 70B,80B	70C	75C	80C
10'-13.5'	3:12	UP TO 48 FT	4	4	6	8
		UP TO 60 FT	6	6	8	10
		UP TO 78 FT	8	8	8	12
	4:12	UP TO 48 FT	4	4	6	8
		UP TO 60 FT	6	6	8	10
		UP TO 78 FT	8	8	10	14
13.6'-16'	3:12	UP TO 48 FT	4	4	6	8
		UP TO 60 FT	6	6	8	10
		UP TO 78 FT	8	8	10	12
	4:12	UP TO 48 FT	4	6	8	10
		UP TO 60 FT	6	6	10	12
		UP TO 78 FT	8	8	12	16

FIND HOME COACH WIDTH, THEN ROOF PITCH, THEN LENGTH. FOLLOW ACROSS TO DESIGN WIND LOAD. READ TOTAL NUMBER OF C.P. ANCHOR PIERS REQUIRED. REFER TO DRAWINGS ABOVE FOR PLACEMENT OF PIERS. IF EXACT DIMENSION OF HOME IS NOT LISTED, USE NEXT LARGER SIZE.

COACH SIZE	WIND LOAD(MPH,EXP)	# OF ANCHOR PIERS			
		15psf or 70B,80B,70C	75C	80C	
20'-21'	4:12	UP TO 60 FT	4	6	6
		UP TO 78 FT	4	6	8
21.1'-28'	4:12	UP TO 60 FT	4	6	8
		UP TO 78 FT	6	8	8
	5:12	UP TO 60 FT	6	6	8
		UP TO 78 FT	6	8	10
28.1'-32'	5:12	UP TO 60 FT	6	8	8
		UP TO 78 FT	8	10	12
30'-37'	4:12	UP TO 60 FT	4	4	6
		UP TO 78 FT	4	6	8
37.1'-48'	4:12	UP TO 60 FT	4	6	8
		UP TO 78 FT	6	8	10

FIND HOME COACH WIDTH, THEN ROOF PITCH, THEN LENGTH. FOLLOW ACROSS TO DESIGN WIND LOAD. READ TOTAL NUMBER OF C.P. ANCHOR PIERS REQUIRED. REFER TO DRAWINGS ABOVE FOR PLACEMENT OF PIERS. IF EXACT DIMENSION OF HOME IS NOT LISTED, USE NEXT LARGER SIZE.

**GENERAL NOTES:**

REFERENCE: CALIFORNIA CODE OF REGULATIONS, TITLE 25 (Effective July 2004)

- THE DESIGN WIND LOADS ARE AS LISTED IN THE TABLE. MINIMUM WIND LOAD IS 15 PSF.
- THE DESIGN LOADS SHALL BE CONSISTENT WITH ROOF LIVE LOAD AND WIND ZONE AS ESTABLISHED FOR PERMANENT BUILDING BY THE GOVERNING JURISDICTION.
- FOOTINGS ARE TO BE SUPPORTED BY EITHER FIRM, UNSATURATED SOIL, COMPACTED FILL, ASPHALT OR CONCRETE. FOOTINGS ARE DESIGNED FOR 1000 PSF BEARING CAPACITY & SHALL BE COMPATIBLE WITH LOCAL SOIL CONDITIONS. ALL FOOTINGS SHALL BE FOUNDED IN ACCORDANCE WITH H.C.D GUIDELINES AND TITLE 25.
- STRUCTURAL STEEL:
  - SHALL CONFORM TO ASTM A36 Fy = 36 KSI MINIMUM.
  - SHALL BE FABRICATED ACCORDING TO AISC SPECIFICATIONS.
  - SHALL BE WELDED ACCORDING TO AWS SPECIFICATIONS:
    - ELECTRODES: E70
    - PLATES: ASTM A36
    - WELDS: SAE GR5=ASTM A449=ASTM A325
    - THREADED ROD: COLD DRAWN LOW CARBON WELDABLE
  - ALL METAL COMPONENTS INCLUDING NAILS & SCREWS ETC. ARE TO BE PROTECTIVE COATED.
- THE C.P. ANCHOR PIER SHALL BE LISTED AND LABELED BY CERTIFIED TESTING AND CONSULTING SERVICES (CTC) FOR THE FOLLOWING LOADS:
  - LATERAL : 28 IN. PIER : 1893 LBS. WORKING LOAD
  - VERTICAL : 33.5 IN. PIER: 1493 LBS. WORKING LOAD
- ALL MANUFACTURER REQUIRED PIERS MUST BE POSITIVELY ATTACHED TO THE CHASSIS BEAM AND FOUNDATION PAD PER TITLE 25, SECTION 1334.1. STANDARD PIER SPACING PER MANUFACTURER'S INSTALLATION MANUAL WITHOUT MANUFACTURER'S INSTALLATION MANUAL, STANDARD PIERS TO BE DETERMINED BY TITLE 25, SECTION 1335.5.
- THE HEIGHT OF THE C.P. ANCHOR PIER, FROM THE BASE TO THE TOP OF THE PIER, SHOULD NOT EXCEED 33.5 INCHES. NO MORE THAN 1/2 OF THE C.P. ANCHOR PIERS MAY BE EXTENDED ABOVE 28 INCHES.
- THIS SYSTEM MAY BE USED WITH MASONRY BLOCK STANDARD SUPPORTS. THE BLOCKS SHOULD BE INSTALLED PER THE HOME INSTALLATION MANUAL.
- THIS SUPPORT SYSTEM PLAN IS DESIGNED TO BE CONSTRUCTED ON A LEVEL SITE WITH NO EXISTING SOIL PROBLEMS (SECTION 1334, TITLE 25)
- THE ANCHOR PIER SHALL NOT BE INSTALLED IN NON-COHESSIVE SOIL. (CLASS 4 SP, SW, GP, GW)

**COACH SIZE NOTES:**

- SPACING OF ANCHOR PIERS TO BE DETERMINED BY TABLE BY COACH SIZE.
- UNLESS APPROVED BY ROCK SOLID ENGINEERING, INC., THE ROOF PITCH SHOULD NOT EXCEED THAT LISTED IN THE TABLE.
- FOR ANY COACH SIZE OTHER THAN LISTED IN THE TABLE, THE ANCHOR AND PAD LAYOUT SHALL BE REVIEWED AND APPROVED BY ROCK SOLID ENGINEERING, INC.

**INSPECTION REQUIREMENTS:**

- 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.
- 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.
- THE BUILDING PAD SHOULD BE INSPECTED TO ENSURE THAT PROPER PAD PREPARATION AND DRAINAGE PATTERNS HAVE BEEN ESTABLISHED IN ACCORDANCE WITH TITLE 25 & MANUFACTURER'S HOME INSTALLATION MANUAL.



**STATE APPROVAL**

**ENGINEERED TIEDOWN SYSTEM APPROVED**

SUBJECT TO CORRECTIONS NOTED

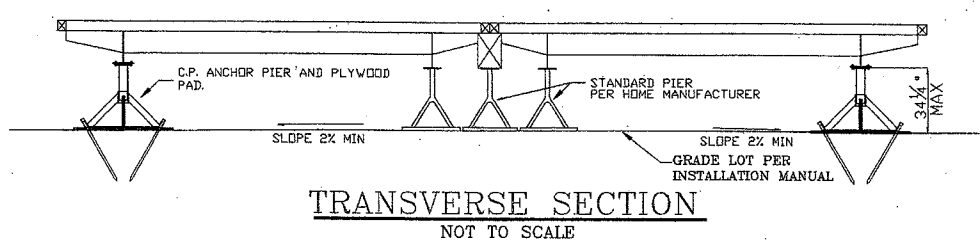
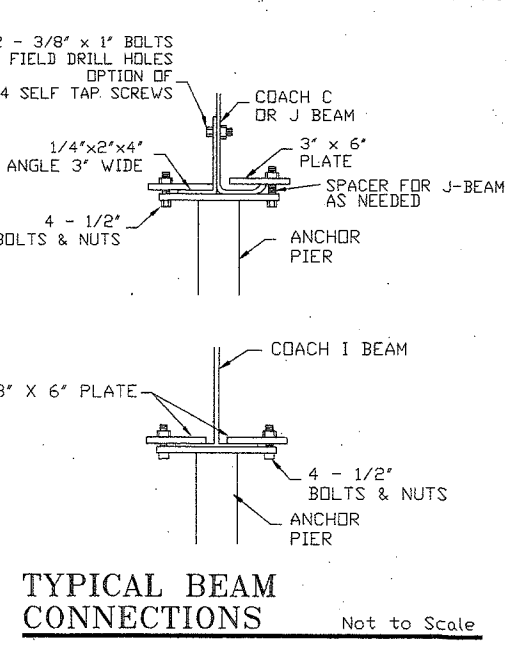
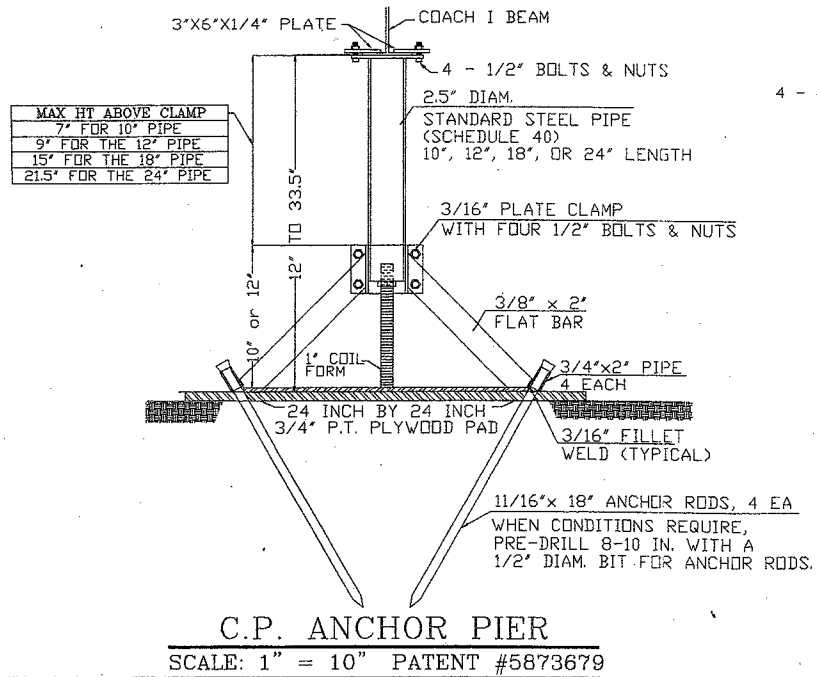
Approved does not authorize or approve any omission or deviation from requirements of applicable State laws and regulations.

State of California  
Department of Housing and Community Development  
DIVISION OF CODES AND STANDARDS

By: *[Signature]* Date: 11/3/09

SPA NO: ETS 107D

This Plan Approval Expires: 11/3/09



REVISIONS	BY
10-04-05	YW
10-23-07	YW

**FOR: CENTRAL PIERS, INC.**  
284 N. THORNE  
FRESNO, CA. 93706  
1 800 653 0387

**C.P. ANCHOR PIER-ENGINEERED TIEDOWN SYSTEM (ETS-107D)**

DATE: 10-22-03  
SCALE: AS SHOWN  
DRAWN: YMW  
JOB #: W03002  
SHEET: 1  
OF 1 SHEETS

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