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### **SPECIFICATIONS** RELOCATABLE CLASSROOMS

### 4.01 MATERIAL SPECIFICATIONS:

- 1. Structural framing shall be Hem Fir- Larch graded in accordance with the standard grading rules of the Western Wood Products Association or standard grading rules No. 16 of the West Coast Lumber Inspection Bureau, latest editions. Grades shall be as follows unless noted otherwise on the drawings. (Hem Fir South is not allowed.) Each piece shall be grade marked and no piece may fall below grades indicated. All framing except as noted Hem Fir No. 2
- 2. Plywood shall be as shown on these drawings with exterior glue in accordance with U.S. Product Standard PS 1-95. All panels shall be marked with an APA grade mark with an identification index as shown on drawings. Use 4'x8' panels-minimum, except at boundaries and at framing changes where minimum panel dimension shall be 24" at roofs and floors and 12" at walls.
- 3. Bolts for timber connections shall conform to ANSI/ASME Standard B18.2.1-1981 & 2005 edition of NDS (the National Design Specification for Wood Construction by the National Forest Products Association). Bolts shall be installed in accordance with the requirement of 200 NDS. Bolt holes shall be 1/32 to 1/16 inch larger than bold diameter. Bolts shall be full body steel bolts with minimum yield strength of 45,000 PSI. Re-tighten bolts before closing in work.
- 4. Lag screws shall be steel and conform to ANSI/ASME Standard B18.2.1 and 2005 NDS Holes for lag screw shanks shall be bored the same depth and diameter as the shank. The remaining depth of penetration of the screw shall be bored to 70% of the shank diameter. One quarter inch (1/4") diameter lag screws need not have pre-drilled holes if it can be shown that wood members are not damaged during installation. Provide full diameter body lag screws with bending yield strengths per Table 9.3 in NDS
- 5. Provide malleable iron washers or equivalent cut plate washers (not less than a standard cut washer) under nuts and bolt or lag screw heads which bear on wood.
- 6. Wood screws shall conform to ANSI/ASME Standard B18.6.1 and the requirements of the 2005 NDS. Galvanized or other corrosion resistant coating where exposed to weather or used in Screws shall be steel with cut threads and bending yield strengths per Table 11.3 in NDS.
- 7. Wood members shall be cut or notched only as shown on structural drawings.
- 8. When required nailing tends to split wood members, nail holes shall be pre-bored to 3/4 of the nail
- 9. Structural nailing shall be with BOX NAILS per all requirements of 2005 NDS. Nailing not specifically indicated shall comply with CCR Title 24, Part 2, Table 2304.9.1. All nails shall be galvanized or other corrosion resistant coating where exposed to weather, in foundations and as noted on plans, per the requirements of CCR Title 24, Part 2, with minimum bending yields per table 11N in NDS. (See nail equivalence below.)
- 10. Nail equivalence: (provide minimum nail lengths as required for specified penetration, TYPICAL: U.N.O.)

6d equals .113" DIA. - provide 1.36" minimum point penetration 8d equals .131" DIA. - provide \*1.57" minimum point penetration 10d equals .148" DIA. - provide \*1.78" minimum point penetration 16d equals .162" DIA. - provide \*1.94" minimum point penetration (\* 1 1/2" at 2x members)

- 11. Pressure preservative treatment shall be per Section 2303.1.8, CCR Title 24, Part 2. Provide quality mark on all treated foundation members from agency approved by DSA. All foundation members shall be marked as "For ground contact (LP22)" or "For above ground use (LP2)" as appropriate. Treat all cut ends of pressure treated members with an approved preservative. (Willard W/B Copper Green 2% or an approved equivalent). Where noted, members below the sub floor that are not a part of the foundation shall be pressure treated per LP2.
- 12. Only material in contact with ground needs to be pressure treated, all other foundation lumber can be DF or HF#2 or equal.
- 13. If machine nailing is utilized for this project, contractor shall comply with all requirements of CCR Title 24, Part 2. Machine nailing is subject to approval by the Structural Engineer or Architect and the Division of the State Architect.
- 14. Fasteners for pressure-preservative treated and fire-retardant treated wood shall comply with Section 2304.9 of CBC.
- 15. Nails and spikes used in wet or exterior locations shall comply with Section 2304.9.1.1 of CBC.
- 16. Shim material shall be plywood CD EXP 1 or equal (not pressure treated).
- 17. Used lumber in good condition is acceptable for use in foundation system.

# 5.01 SITE INSTALLATION REQUIREMENTS FOR DSA CLASSROOM BUILDINGS:

In the case of equipment located in the State of California, the LESSEE (School District) is responsible for the site being cleared (free of grass, trees, shrubs, etc) and graded to within 4 1/2" of level grade for each building. If the site exceeds the 4 1/2" level grade requirement additional costs may be charged to lessee.

Under no circumstances should the site be greater that 9" from level grade or have less than a 1000 PSF MINIMUM SOIL BEARING PRESSURE.

Prior to delivery, the lessee shall mark the four corners of the building on the site, including door location. Should special handling be required to either place, install or relocate the classroom on the lessee's site due to site obstruction such as fencing, landscaping, other classrooms, etc., additional costs will be charge to the lessee.

# 6.01 TEST AND INSTALLATION:

- 1. Provide Electrical Grounding Test per DSA IR E-1.
- 2. No other tests and inspections are required.

# 1.01 GENERAL REQUIREMENTS:

- 1. The requirements of the general conditions of the agreement and these General Requirements apply to the several trade sections with the same force as though fully repeated in each section.
- 2. Name brands are indicated to establish a standard of quality. Items of equal or better quality may be substituted for the listed brand named products.

# 1.02 SCOPE OF WORK:

- 1. The work consists of manufacturing off-site in a plant, and installing on-site, modular relocatable building as defined herein, shown and detailed on the drawings. In the case of a Stockpile: the modular relocatable building is manufactured in-plant and stored off-site until such time that it is relocated from the off-site storage location and installed on-site.
- 2. All requirements of CCR (California Code of Regulation) Title 19 and 24 relating to inspections and verified reports shall be complied with and shall include:
- a) General responsible charge of Field Administration by the Architect of Record.
- b) Inspection during the course of construction by an Inspector approved by DSA (Division of the State Architect) and the District Architect. The Inspector shall be responsible for and approved to inspect the general construction, welding, mechanical and electrical work. Cost of these inspections shall be borne by the School District.
- c) On site inspection of the building installation, electrical and utility of the building installation or connection by an Inspector approved by the DSA and retained by the School District.
- d) Other special tests or inspections as may be required by DSA. Cost of these inspections/tests shall be borne by the School District.

#### 1.03 WORK NOT INCLUDED:

- 1. All on-site or off-site utilities and the connection of them to the building unless indicated on the drawings.
- 2. All leveling, grading or other site preparation (except concrete or wood leveling strips, where Required) unless otherwise indicated on the drawings.
- 3. Fire alarm system, program bell, clock, public address system, intercom system, TV system, computer data or any other low voltage system, unless otherwise indicated on the drawings or the lease agreement.

# 1.04 ACCESSIBILITY OF SITE:

The School District shall provide access to the site for the installation of the building. Removal of trees, shrubs, fencing, sprinklers, etc. necessary for move-in and removal of the buildings shall be the responsibility of the School District.

# 2.01 SITE ASSEMBLY:

1. Scope of Work: Contractor (Class Leasing Inc.) shall provide all labor, materials and services to prepare the building elements, transport them from the plant to the site and to complete the

The condition of the site, such as drainage and soil bearing capacity, shall be the responsibility of the School District and the District Architect.

# 2. Assembly of Elements:

building manufacturer's drawings.

- a) In a location on the site as determined by the District Architect. The contractor shall place the foundation as detailed on the drawings.
- b) The elements shall be brought to the site on wheel assembly and transferred to the prepared
- site. Great care shall be taken to avoid damage to the elements by racking or bumping. c) Connection of the elements together shall be done according to instructions on the drawings. Flashing, trim and other loose items shall be installed per plans and details of the original

# 3.01 CARPENTRY:

- 1. Scope of Work: Contractor shall provide all labor, materials and services to install carpentry.
- 2. Workmanship:
- a) FRAMING: securely nailed, bridged and blocked to form rigid structure. Work cut, fitted and assembled level, plumb and true to line. Trim in as long lengths as possible with all standing trim in one piece. Trim sealed at all edges.
- b) NAILING: in accordance with the title 24 CCR-Table 2304.9.1. Nails shall be corrosion
- c) Machine applied nailing shall have prior demonstration and approval by DSA Field Inspector and the Architect. The approval is subject to continuous satisfactory performance. Plywood shall have a minimum thickness of 3/8". If nail heads penetrate the outer ply more than would be normal for a hand hammer or if minimum allowable edge distances are not maintained, the performance will be deemed unsatisfactory.
- d) TRIM: sealed at all edges. Sealant painted to match trim or siding.

# **APPLICABLE BUILDING CODES**

ALL NEW WORK SHALL COMPLY AND CONFORM TO THE REQUIREMENTS OF THE 2010 CBC

2010 CALIFORNIA CODE OF REGULATIONS (CCR)

-2010 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)

-2010 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE ( PART 1, TITLE 24, CCR)

-2010 CALIFORNIA BUILDING CODE (CBC) (PART 2, TITLE 24, CCR) (2009 INTERNATIONAL BUILDING CODE VOLUMES 1-3 WITH 2010 CALIFORNIA AMENDMENTS)

-2010 CALIFORNIA ELECTRICAL CODE (CEC) ( PART 3, TITLE 24, CCR) (2008 NATIONAL ELECTRICAL CODE WITH 2010 CALIFORNIA AMENDMENTS)

-2010 CALIFORNIA MECHANICAL CODE (CMC) (PART 4, TITLE 24, CCR) (2009 UNIFORM MECHANICAL CODE WITH 2010 CALIFORNIA AMENDMENTS)

-2010 CALIFORNIA PLUMBING CODE (CPC) (PART 5, TITLE 24, CCR)

(2009 UNIFORM PLUMBING CODE WITH 2010 CALIFORNIA AMENDMENTS)

-2010 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

-2010 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR) (2009 INTERNATIONAL FIRE CODE WITH 2010 CALIFORNIA AMENDMENTS)

TITLE 19 CCR PUBLIC SAFETY, STATE FIRE MARSHALL REGULATIONS

### **DESIGN DATA:**

FLOOR LIVE LOAD = 50 PSF, 50 + 20 PSF PARTITIONS, 100 PSF ROOF LIVE LOAD = 20 PSF REDUCIBLE FOR TRIBUTARY AREA = 85 MPH (V) (3 SECOND GUST), K zτ = 1.0 SNOW LOAD: PROJECT IS NOT LOCATED IN A SNOW REGION. BUILDING CODES = IBC AND CBC 2007

SEISMIC DESIGN DATA:
Basic Seismic-Force-Resisting System = STEEL MOMENT FRAME SEISMIC DESIGN DATA: ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE = E (per CBC Section 1613A.5.6) Seismic Design Category = E (per CBC Section 1613A.5.6)

Design Base Shear: 24x40 BUILDING = 9404 # (Roof, Floor, Walls & Partitions) 36x40 BUILDING = 14110 # (Roof, Floor, Walls & Partitions) 48x40 BUILDING = 18810 # (Roof, Floor, Walls & Partitions)

SEISMIC DESIGN DATA: SEISMIC DESIGN DATA:

Basic Seismic-Force-Resisting System = WOOD PANEL SHEAR WALL

SHEAR ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE Seismic Design Category = E (per CBC Section 1613A.5.6)
Design Base Shear: 24x40 BUILDING = 9404 # (Roof, Floor, Walls & Partitions) 36x40 BUILDING = 14110 # (Roof, Floor, Walls & Partitions) 48x40 BUILDING = 18810 # (Roof, Floor, Walls & Partitions

FRONT

Cs2 = 0.286 R: = 3.5 SITE CLASS = D 1: = 1.0 Cs2 = 0.154 R: = 6.5 SITE CLASS = D Ss = 2.0 per CBC Figure 1613A.5(3), REDUCED TO 1.5 per ASCE 7-05 Section 12.8 1. Ss = 2.0 per CBC Figure 1613A.5(3), REDUCED TO 1.5 per ASCE 7-05 Section 12.8.1.3 S1 = 1.3 per CBC Figure 1613A.5(2) SD1 = 1.3 S1 = 1.3 per CBC Figure 1613A.5(2)

#### FLOOD DESIGN DATA: Project is not located in a flood zone LIMITATIONS WOOD FOUNDATION PC ONLY:

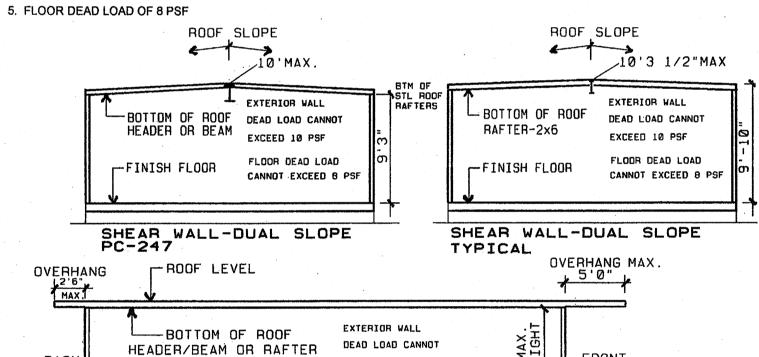
WOOD FOUNDATION ONLY PC IS DESIGNED TO SUPPORT THE SUPERSTRUCTURE FOR THE RELOCATABLE BUILDINGS AS LISTED ON THIS DRAWING

- THE DESIGN CALCULATIONS ARE BASED ON THE FOLLOWING:
- 1. DSA APPROVED STOCKPILE BUILDINGS
- 2. ROOF OVERHANGS OF 5'-0" MAXIMUM
- 3. SINGLE SLOPE OR DUAL SLOPE BUILDINGS WALL HEIGHT: 9'-0" MAXIMUM ON DUAL SLOPE BUILDING. WALL HEIGHT: 10'-4" MAXIMUM ON SINGLE SLOPE BUILDING (HEIGHT DETERMINED FROM FINISH FLOOR IN BUILDING TO BOTTOM OF STEEL ROOF STRUCTURE: BEAMS OR ROOF HEADERS)

WALL HEIGHT: 9'-10" MAXIMUM ON SHEAR WALL-DUAL SLOPE BUILDING

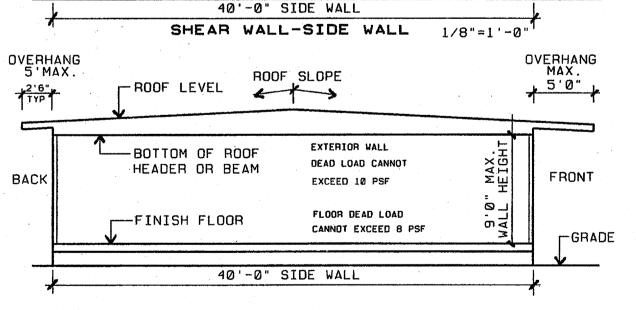
-FINISH FLOOR

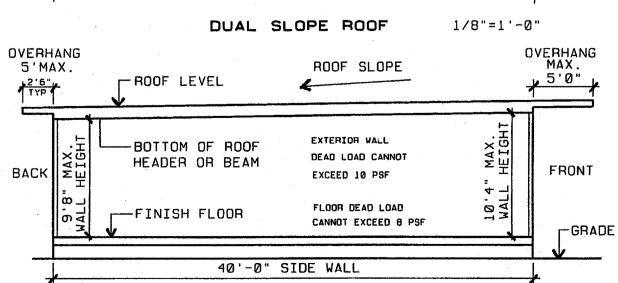
4. WALL DEAD LOAD OF 10 PSF (NO STUCCO)



FLOOR DEAD LOAD

CANNOT EXCEED 8 PSF





TYPICAL ELEVATIONS ARE SHOWN TO CLARIFY FOUNDATION PC ONLY LIMITATIONS DOCUMENTATION SHALL BE PROVIDED BY ENGINEER OF GENERAL RESPONSIBLE CHARGE TO BE REVIEWED AND APPROVED BY THE DSA STRUCTURAL PLAN REVIEWER.

1/8"=1'-0"

MONO SLOPE ROOF

SCOPE OF WORK: DSA FOUNDATION PLANS FOR EXISTING STOCKPILE BUILDINGS FOR CLASS LEASING, INC.

SHEET INDEX: STOCKPILE BUILDING FOUNDATION PC# 04-111441 - 2010 CODE UPDATE F1.0 COVER SHEET, BUILDING DATA, STOCKPILE APPROVAL INDEX

E1 1 12 40 50 50 20 DEE WOOD FOUNDATION PLAN & DETAILS AD INCENT BUILDING BAD F2.0 24 x 40 - 50 PSF FOUNDATION PLAN & DETAILS, ADJACENT BUILDING PAD

F2.1 24 x 40 - 50+20 PSE FOUNDATION PLAN & DETAILS ADJACENT PUR DING PAD F2.0 - 36 × 40 - 50 PSF FOUNDATION PLAN & DETAILS, ADJACENT PUIL DING DAD

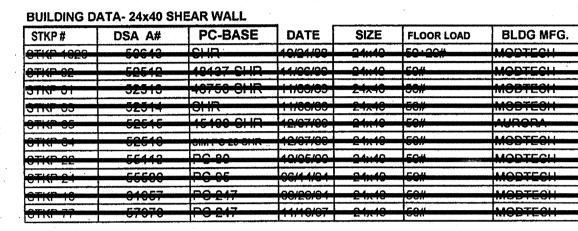
F2.1 26 x 40 50 20 PSF FOUNDATION PLAN & DETAILS ADJACENT PUIL DING PAD F2 2 26 40 400 DSE FOUNDATION DLAN & DETAILS, AD LACENT DUN DING DAD

F4.0 48 x 40 50 PSF FOUNDATION PLAN & DETAILS, ADJACENT BUILDING PAR F4.4 48 × 40 50+20 PSE EQUIDATION PLAN & DETAILS AD JACENT BUILDING PAD

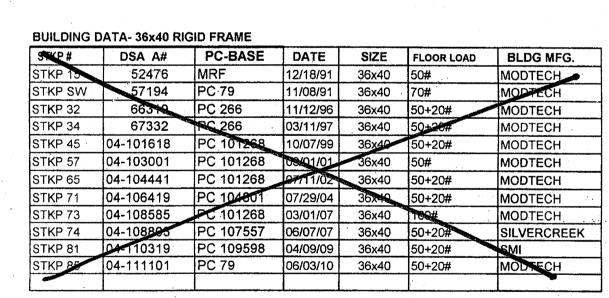
F4.2 48 x 40 100 PSF FOUNDATION PLAN & DETAILO, ABJACENT BUILDING DAD ADJACENT BUILDINGS: ONLY THOSE BUILDINGS MANUFACTURED BY THE SAME COMPANY

MAY BE PLACED ADJACENT TO EACH OTHER.

CLASS LEASING- APPROVED STOCKPILE A NUMBERS FOR THIS FOUNDATION PC

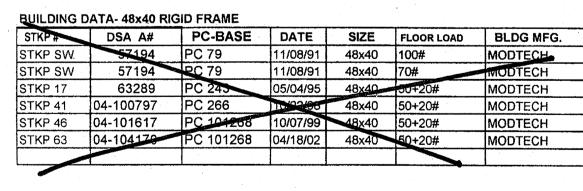


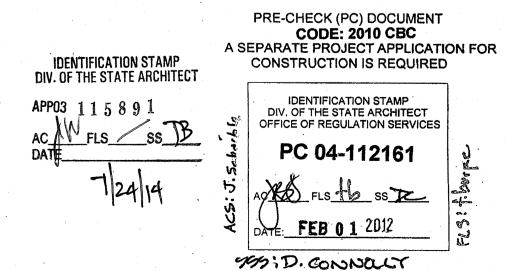
**BUILDING DATA- 24x40 RIGID FRAME** DSA A# PC-BASE DATE SIZE FLOOR LOAD BLDG MFG.



PC 104796 07/17/03 24x40

STKP 76 04-105455





STOCKPILE CLASSROOM **RELOCATION FOUNDATION PLAN & DETAILS**  LICKNICE EXPIRES 6-30-2

REVISIONS

AUG 25 776

24×40·50

08-15-2011 SCALE DRAWN LAM-CLLS