

GENERAL NOTES AND SPECIFICATIONS

SECTION 1A GENERAL

- 1. GENERAL
A. The requirements of the General Conditions of the agreement and the General Requirements apply to the several trade sections with the same force as though fully repeated in each trade section.

2. SCOPE OF WORK

- A. The work consists of manufacturing all-site in a plant, and installing on-site, modular relocatable buildings as defined herein and shown on drawings.

3. WORK NOT INCLUDED

- A. All on-site or off-site utilities and the connection of them to the building unless indicated on the drawings.

4. WHEELS AND TIRCH

Shall remain the property of the Contractor.

5. ACCESSIBILITY OF SITE

The School District shall provide access to the site for the installation of buildings. Removal of trees, shrubs, fences, utilities, etc. necessary for the removal of buildings shall be the responsibility of the School District.

6. GENERAL CONSTRUCTION

- A. Structural Frame - Each module shall be designed on a moment frame structure to withstand vertical and horizontal loads and comply with requirements of the Division of the State Architect. The necessary provisions are incorporated in the structure to permit the relocation of the structural frame in sections not exceeding 12 feet in width.

SECTION 3A CAST IN PLACE CONCRETE

1. SCOPE OF WORK

Contractor shall provide all materials, labor and services for concrete work indicated on drawings.

2. MATERIALS

- A. Portland Cement - Type I, standard brand, ASTM C-150
B. Aggregate - Washed sand, gravel, rock ASTM C-33
C. Reinforcing steel - ASTM A615 grade 40, deformed, ASTM-305.

3. WORKMANSHIP

- A. Minimum compressive strength of 28 days - 3000 psi; maximum aggregate size 1"; maximum 6.1 gallons of water per sack of cement; minimum of 7.0 sacks of cement per yard; maximum slump 4". Transit, mixed concrete shall be used.

SECTION 5A STRUCTURAL AND MISC. STEEL

1. SCOPE OF WORK

Contractor shall provide all materials, labor and as specified and indicated on the drawings, services required for structural and miscellaneous steel.

2. MATERIALS

- A. Structural Steel Shapes - ASTM A-36, open hearth or electric furnace only, all regular shapes as described in AISC Construction Manual, unless otherwise noted.
B. Cold Formed Light Gauge Steel - ASTM A-570 Grade 33, minimum yield 33,000 PSI.
C. Structural Pipe and Tubing - ASTM A500 Grade B.
D. Bolt Material - Bolts and nuts, American Standard Regular, as detailed in AISC Construction Manual, fabricated from structural quality steel, ASTM A-307.
E. Arc-welding Electrodes - Class E-70 Series for welding A-36 steel to A-36 and E-80 Series for welding A-370 steel to A-36, conforming to requirements of the "Structural Welding Code" of American Welding Society, latest edition.

3. WORKMANSHIP

- A. GENERAL - All work shall conform to the requirements of AISC Standard Specifications, Title 1 - 24 of the California Code of Regulations and the American Iron and Steel Institute Specifications for Design of Light Gauge Steel Structural Members.
B. WELDING - All welding done by shielded electric-arc or flux cored-arc process complying with requirements of the "Structural Welding Code" of the American Welding Society. Welding done by operators qualified by tests acceptable to the Division of the State Architect.
C. ERECTION - Structural Steel erected true, straight, plumb and to its designated locations. Field connections bolted or welded as indicated on the drawings.
D. NAILS, BOLTS, SCREWS, NUTS, etc. - for exterior work shall be minimum plated or galvanized.
E. HANDRAILS - Fabricated as detailed, welds ground smooth.
F. SHOP PAINT -
1. Exposed steel coated with one shop coat.
2. Non-exposed steel coated with one shop coat.
3. All surfaces thoroughly cleaned by effective means prior to application of shop coats.
G. TESTS -
1. Provide test certificates or test all members.
2. Welds shall be inspected and/or tested per T-24 Section 221A.3.

SECTION 6A CARPENTRY

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to install carpentry.

2. MATERIALS

- Lumber grade marked in accordance with "Standard grading and Dressing Rules No. 1" of the Central Lumber Inspection Bureau or "Grading Rules for Western Lumber, 3rd Edition" of Western Wood Products Association. Plywood grade marked in accordance with "Product Standard PS 1-49 for Softwood Plywood" of American Plywood Association, complying with UBC Standard 237.2.
A. HEADERS - Hem Fir Stud Grade or better.
B. PLATES - Hem Fir Stud Grade or better.
C. JOISTS AND LUMBER IN CONTACT WITH CONCRETE, MASONRY OR GRAVEL - Minimum 2" x 4" treated lumber, grade No. 2, grade 1 or otherwise approved preservative, per UBC Standard 237.2.
D. PLYWOOD ROOF DECKING - APA C-D grade, Group 1, Exposure 1, 1/2" thick.
E. PLYWOOD FLOOR DECKING - APA SURE-4-FLOOR 48" x 8" x 1-1/8" E.C., siding, Sheathing 1/2" CDX.
F. STUCCO AND POSTS - Hem Fir Stud Grade.
G. FASTENERS - All nails shall be corrosion resistant per U.B.C. Standard 2322.
H. DOOR/WINDOW TRIM - 1st Review H.F.

3. WORKMANSHIP

- A. FRAMING - securely nailed, bridged and blocked to form rigid structure. Work on, fitted and assembled level, plumb and true to line. Trim in line with finished wall surface. Standing trim in one piece. Trim sealed at all edges.
B. MILLING - in accordance with the 24 C.C.R. - California Building Code.
C. EXTERIOR TRIM - factory fabricated. Caulking provided between perimeter of wall and structural members providing weatherproof and water-tight seal. Necessary closures, seals and fasteners shall be installed in accordance with manufacturer's instructions.
D. FINISHING - shall have prior demonstration and approval by DSA field representative and the architect. The approved is subject to continued satisfactory performance.
E. Not used.
F. Trim sealed at all edges. Seams pointed to match trim or siding.
G. Realign of bolts before chinking.
H. The design moisture content of lumber is 19% or less before fabrication, other written change order will be required.

SECTION 7B SHEET METAL

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to install indicated sheet metal.

2. MATERIALS

- A. SHEET METAL - Steel sheets not dip galvanized with 1.25 Oz. per sq. ft. zinc coating conforming to ASTM A123. Minimum 28 Oz. unless otherwise noted on the drawings.
B. GALVANIZED - of standard length, Grade "X" of equal parts lead and tin ASTM B32.
C. FLUX - Zinc saturated muriatic acid.

3. WORKMANSHIP

- Sheet metal accurately formed to dimensions and shapes detailed with true straight lines, corners and angles. Flashings installed in longest lengths possible. Exterior work formed, fabricated and installed so that it adequately provides for expansion and contraction in the completed work and finishes water and weather tight. Aluminum shall be separated from ferrous metal by polyethylene or flood coat of asphalt paint.

SECTION 7C METAL ROOFING

1. GENERAL

- Metal roofing to be 22 Ga. interlocking panels with standing seam. Steel deck shall be galvanized and conform to ASTM A-446 grade A. All fasteners to have neoprene washers. Metal roofing to be 28 Ga. ribbed gal. steel metal interlocking panels installed over cap sheet base sheet over 3/4" plywood roof deck. All fasteners shall not penetrate metal roof panels.

SECTION 7J SEALANT

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to seal buildings.

2. MATERIALS

- "Muller" brand, polyurethane, manufactured by MAMECO INTERNATIONAL, approved brand.
Sealant applied to dry clean surfaces, wherever indicated on details and as needed to make building watertight, in accordance with manufacturer's specifications.

SECTION 8B HOLLOW METAL DOORS AND FRAMES

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to install hollow metal doors & frames.

2. MATERIALS

- A. DOORS - Type I full flush, manufactured by Stearns Manufacturing company or approved equal, 18 Ga. 1-3/4" thick.
B. FRAMES - 18 Ga. cold rolled, 2" faces.

3. WORKMANSHIP

- Sheet metal accurately formed to dimensions and shapes detailed with true straight lines, corners and angles. Flashings installed in longest lengths possible. Exterior work formed, fabricated and installed so that it adequately provides for expansion and contraction in the completed work and finishes water and weather tight.

SECTION 8D FINISH HARDWARE

1. SCOPE OF WORK

Contractor shall supply and install finish hardware as specified and as required.

2. DOOR SCHEDULE See site 1 and 2.

3. SPECIAL REQUIREMENTS

- A. Exit doors shall be operable from the interior without key or special knowledge or effort.
B. Cleaners for exterior doors shall be set for a maximum opening pressure of 8.5 lbf; interior doors shall be set for maximum opening pressure of 5 lbf.
C. Deadlocks not permitted unless operable with a single effort using ball handle.
D. Hardware shall be centered between 30" and 44" above finished floor.

SECTION 8E PAINTING

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to paint buildings. All exposed surfaces including window frames and thresholds shall be painted except aluminum window frames and thresholds.

2. MATERIALS

- A. For Exterior Work:
Vista Prime 6000
Finish
B. For Interior Work:
Vista 7000
Finish
C. For Metal:
Vista 7000
Finish

3. WORKMANSHIP

- A. EXTERIOR - Wood siding, trim and shingles - apply two coats of exterior flat acrylic paint sprayed on.
B. EXTERIOR TRIM - Trim not pre-painted shall be primed with two coats of semi-gloss latex over primer.
C. METAL - All metal surfaces shall be primed with two coats of ethyl finish coat over zinc primer.
D. PAINT - One coat of semi-gloss varnish.

SECTION 13F SITE ASSEMBLY

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to prepare the building elements, transport them from the plant to the site and to complete the assembly of the site.

The condition of the site, such as drainage and soil bearing capacity, shall be the responsibility of the School District. Unless specifically called for in the contract, slope, ramps, walkways or handrails shall not be the responsibility of the contractor.

2. ASSEMBLY OF ELEMENTS

- A. In a location on the site as determined by the School District, the contractor shall place concrete leveling strips or other suitable supports as detailed on the drawings.
B. The elements shall be brought to the site on steel assembly and transferred to the prepared site. Great care shall be taken to avoid damage to the elements by racking or bumping.
C. Connections of the elements together shall be done according to instruction on the drawings. Flashings, trim and other loose items shall be installed per details on the drawings.

SECTION 15A AIR CONDITIONING

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services to install the air conditioning system as shown on the drawings and specifications, including A/C units and accessories, remove fluorescent, grille and power wiring complete to load center, contractor shall instruct owner's operators on operation and maintenance of A/C system.

2. EQUIPMENT - See A/C information schedule for size and type.

3. WORKMANSHIP

- Units shall be installed complete and operating with all accessories in accordance with the manufacturer's instructions.

SECTION 18A ELECTRICAL

1. SCOPE OF WORK

Contractor shall provide all labor, materials and services for electrical installation complete with associated equipment and future in operating conditions ready for use. The work includes: light and power systems, lighting fixtures complete with lamps, connections and disconnects to A/C equipment.

2. MATERIALS

- All new complying with requirements of Calif. Building Code and National Fire Protection Association.
A. ELECTRIC METALLIC TUBING - couplings and flex conduit galvanized or aluminum.
B. PANELBOARDS - flush mounted with hinged doors and indexed cord holders.
C. CONDUCTORS - copper, insulated for 600 volts, type THHN for sizes #12 to #6, type THW for larger sizes. Minimum size - #12.
D. RECEPTACLES - General Electric S243-2 or equal +15".
E. CLOCK RECEPTACLE - Eagle or equal.
F. SWITCHES - General Electric 5001-2 or equal +15".
G. LIGHTING FIXTURES - 2' x 4' fluorescent drop in type fixture with 35 watt lamps and energy saving ballast.

3. WORKMANSHIP

Materials and equipment installed in a secure, neat, workmanlike manner in accordance with code requirements. Panel board cords filed out. Conduit and cable installed in wall and ceiling spaces. Work placing waterproofed areas finished and sealed to a watertight condition.

NAILING SCHEDULE

Table with columns for nail type and quantity per square foot. Includes entries for joists, studs, blocking, double studs, continuous header, ceiling joists, face nail, and built up corner studs.

PLYWOOD

Table with columns for nail type and quantity per square foot. Includes entries for 1/2" and less, 10/32" - 3/4", 7/8" - 1", and 1-1/8" - 1-1/4".

Table with columns for nail type and quantity per square foot. Includes entries for 3/4" or less, 7/8" - 1", and 1-1/8" - 1-1/4".

Panel siding to framing:

Table with columns for nail type and quantity per square foot. Includes entries for 5/8" and 1/2" or less.

1. Common or bar nails may be used except where otherwise stated.

2. Deformed shank.

3. Common.

4. Not used.

5. Nails spaced at 6" o.c. at all edges and 12" o.c. at intermediate supports (10" at intermediate supports for floors), except 8" o.c. at all supports where spans are 48" or more. For nailing of plywood diaphragms and shear walls, refer to Section 2314A.

Nails for wall sheathing may be common or bar.

6. Corrosion resistant siding or coating nails conforming to the code of Section 2320A.

7. Fasteners spaced 3" o.c. at all edges and 6" o.c. at intermediate supports.

8. Corrosion resistant roofing nails with 7/16" dia. head and 1-1/2" length for 1/2" sheathing and 1-3/4" length for 25/32" sheathing conforming to the requirements of Section 2322.2.

9. Corrosion resistant staples with nominal 7/16" crown and 1-1/8" length for 1/2" sheathing and 1-1/2" length for 25/32" sheathing conforming to the requirements of Section 2317.

10. When possible, nails driven perpendicular to the grain shall be used instead of loaneels.

NOTE: PREPARATION FOR SUB FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. 7/8" PLYWOOD SUB-FLOOR IS PLUGGED AND TOUCH SCAINED, ANY DEFECTS SHALL BE FILLED AND SANDED BY THE FLOORING CONTRACTOR. THE JOINT AT THE JOIST JOINTING SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SCAINED BY FLOORING CONTRACTOR.

SPECIAL NOTE: ALL FINISHES SHALL COMPLY WITH C.A.C. CHAPTERS 4.7.4. & 10 C.C.R. & TILE 18 C.C.R.

GBC 1998 PC

D.S.A. IDENTIFICATION STAMP OF THE STATE ARCHITECT. Includes name, title, and date.

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STRUCT. ENGINEER IDENTIFICATION STAMP OF THE STATE ARCHITECT. Includes name, title, and date.

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CHANGE ORDER

CHECKED BY

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT. APP#5 116978. Date: MAY 8 2016.

BUILT-UP ROOFING SPECIFICATION. Includes diagrams of roof assembly, material specifications, and nailing schedules.

TURORA MODULAR INDUSTRIES. GENERAL NOTES AND SPECIFICATIONS. SHEET 10.