

## SECTION 13000

### MODULAR BUILDING

#### PART 1 - GENERAL

- 1.01 The San Miguel Fire Protection District desires to purchase (3) new 24' x 60' manufactured buildings. These buildings include permanent foundation system, lighting, plumbing, air-conditioning, partitions, carpeting or vinyl covering and finish features all in accordance with this specification and floor plan. The manufactured building shall conform to the International Building Code as a Type V, non-rated structure. Foundation design and shop drawings shall be submitted to County for approval. Contractor shall obtain, at his own expense, all permits and approvals from regulatory agencies and pay all fees. No work shall be covered before inspection by the jurisdictional inspector and the owner's representative.
- 1.02 Coordination with new construction: Contractor shall verify that new manufactured buildings are compatible with proposed construction.
- 1.03. SPECIAL CONDITIONS
- A. Site Preparation: General Contractor will provide a clear, accessible area for installation of this manufactured building. Successful bidder will furnish and install all supports, footings, or structural bracing to provide the building with an acceptable system of support. Building must be capable of being relocated after set in place. Plans for the structural components, including footings, shall be submitted to and approved by the County of San Diego Building Inspection Department and owner's representative. Utilities will be run by General Contractor to a designated point of connection for distribution to the manufactured building by successful bidder.
- B. Heating, Ventilating and Air-Conditioning: The building construction and energy system shall comply with the California Administrative Code Title 24 and Title 25 "Energy Conservation Standards". ASHRAE Standard "Natural and Mechanical Ventilation Recommended Ventilation Rates and Practices" shall also apply. All space shall be provided with treated air so that its temperature, velocity and quality will not constitute a health hazard or discomfort to the occupants. The building shall have packaged gas heating/electric cooling units or equivalent unit, to provide required filtered supply air heated or cooled to comfort levels. Outside air amounts shall be adjustable, but in no case be less than 5 cfm per person based on IBC requirements. Supply and return air in ceiling shall be installed to assure ventilation to all spaces. Thermostat control shall be Accustat type without adjustable control tabs 2 stage-auto change over feature located to provide the average temperature sensing for the spaces involved and include fan control, on, off and a dead banding feature.
1. Successful bidder's plans shall show schematic layout of system, including equipment and operating data. Upon completion of installation, the system shall be tested and balanced to assure satisfactory operation in accordance with Associated Air Balance Council Standards and Procedures. Units shall be sized a minimum of three tons per 12X60 module; they shall be gas fired 3-phase wall or ground mounted units with return air system; ducting shall be aluminum where exposed to the exterior and flex fiber glass at interior. All ductwork shall be insulated.
- C. Power and Light: All power and lighting systems shall comply with the National Electric Code and State of California Title 24 and Title 25. Where applicable, all electrical components shall be U.L. listed. Ambient lighting shall not require power levels exceeding those allowed by Title 24 for specified task areas. Interior lighting shall be recessed in T-bar ceiling fluorescent fixtures with bi-level switching as required by Title 24. Separate controlled wall switches shall be installed in each room. Electric circuit panels shall be over sized to provide 20% spare capacity for additional circuits.

- D. Telephone and Data: Provide phone and data outlets in all office areas and as indicated.
- E. Additional Requirements:
1. Floor structure: The floor structure shall be a perimeter chassis type and designed to comply with IBC. "Uniform and Concentrated Loads" minimums such as: Exit Facilities - 100 lbs/SF; Offices - 50 lbs/SF, 2000 lb. concentrated load placed upon any space 2 1/2 feet square.
  2. Finish Floor: Flooring shall be carpet as specified in Section 09680, "Carpet". Under floor insulation shall be R-30. Provide 4" rubber base around the perimeter of all rooms. Flooring material in restrooms shall be sheet vinyl flooring.
  3. Ceiling: Ceiling shall be 2' X 4' T-bar acoustical ceiling as specified in Section 09510, "Acoustic Ceilings". Ceiling height shall be 8 foot minimum.
  4. Roof Structure: Built Up roofing shall be as standard with the Manufacturer. Roof frame shall be constructed of 2X6 on 16" center with minimum 1/2" per foot slope on roof. Provide clear span structure utilizing space between ceiling and roof for duct work, conduit, insulation, plumbing and other fixtures. Insulation shall be R-30 or equal with vapor barrier. Roof sheathing shall be 1/2" CDX plywood minimum. Roof shall be provided with gutters and downspouts.
  5. Windows: Windows shall be anodized extruded aluminum horizontal sliding 4030 or equivalent, dual glazed, with sash lock and weather stripping. When in locked position, vent shall not be removable from outside. Screens shall be wired with fiberglass wire mesh and removable from interior of building without tools. Provide mini-blinds for all windows. Submit color samples for approval.
  6. Glass and Glazing: Glass shall be tinted. Additional requirements are as specified in Section 08800, "Glazing".
  7. Doors: Exterior doors shall be hollow metal steel doors with 6" X 12" wire glass vision panel, in steel jambs. Exterior doors shall have 1 3/4-inch mortise dead-bolt type lock, to match hardware specified elsewhere on the project and automatic closers. Interior doors shall be solid core wood doors complete with hardware. Finish hardware for exterior doors shall be heavy duty, vandal proof, all other doors shall be provided with passage sets only. Two master keys shall be turned over to District upon acceptance.
  8. Stairs and Ramps: Stairs and accessible ramps shall be provided as indicated. Handrails and guardrails shall be provided as required and indicated.
  9. Walls and Partitions: Exterior finish shall be metal siding over building paper over 2 X 4 studs @ 16" on centers. Interior partitions shall be 1/2" gypsum wall board over 2 x 4 @ 16" O.C. complying with I.B.C. Bottom skirting must reach the ground, be trimmed along the ground in a straight line, and shall match the building finish. Provide a minimum of six lockable access panels through skirting. All framing must comply with International Building Code, current edition, including amendment(s). Install R-13 fiberglass insulation on all exterior walls.
  10. General Requirements: The General Conditions, Supplemental Conditions and Division 1 of this specification will apply to all material and equipment provided and installed as part of the manufactured building provided under this specification.
  11. Earthquake Tie-Downs: All manufactured buildings shall have earthquake tie-downs in accordance with the most recent industry standards applicable to this type of modular building.

END OF SECTION