

120 Man Modular Living Quarters Modules

5 Level – 6 Modules Wide

Overall Dimensions of Camp 60'W x 40'L x 50'-4 ¼"H

Approximate Total Weight of Camp – 613 Tons

PROJECT SUMMARY: Fabricate 120 Man Offshore Living Quarters Modules

- Level-1** Total of 6-Modules 10'W x 40'L x 11'-6"H Nominal Height; **0-Men**
Module A01 – (2) Fresh Water Tanks 145 bbls. Ea. with Water Maker
Module A02 – Fresh Water Tanks 465 bbls. with (2) Pressure Sets
Module A03 – Electrical Room
Module A04 – Gym & Locker Room
Module A05 – Laundry / Community Restroom
Module A06 – Conference & Recreation Room
- Level-2** Total of 6-Modules 10'W x 40'L x 11'-6"H Nominal Height; **4-Men**
Module A07 – Dry Storage & 4-Man Sleeper
Module A08 – Freezer & Cooler
Module A09 – Galley, & Serving
Module A10 – Dining Room #1 (48 Man Sitting Area Total Both Dinings)
Module A11 – Dining Room #2
Module A12 – Medic Office & Treatment Room
- Level-3** Total of 6-Modules 10'W x 40'L x 11'-6"H Nominal Height; **48-Men**
Module A13 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A14 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A15 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A16 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A17 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A18 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
- Level-4** Total of 6-Modules 10'W x 40'L x 11'-6"H Nominal Height; **48-Men**
Module A19 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A20 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A21 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A22 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A23 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A24 – (2) 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
- Level-5** Total of 6-Modules 10'W x 40'L x 11'-6"H Nominal Height; **20-Men**
Module A25 – Radio Room & 4-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A26 – Office & 1-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A27 – Office & 2-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A28 – Office & 1-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A29 – 4-Man & 2-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)
Module A30 – 4-Man & 2-Man Sleeper w/ Bathroom (Ea. Rm, App. 8'9"W x 17'3"L)

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Fabrication:

Fabrication and outfitting to be performed to meet supplied drawings. All materials and equipment, fixtures, appliances and furniture shall be new and free of defect.

Fabrication shall be per below listed details.

1. Architectural

- a. Walls:
The interior bulkheads shall be constructed using 18 gauge galvanized studs covered with 1/2" thick 4' x 8' Thermax laminated panels; Color to be selected by client; Panels are USCG Approved.
- b. Flooring:
Steel deck to be prepped and primed Ameron PPG Coatings. Epoxy Floor System; custom color sand, flexible seamless epoxy flooring system.
- c. Ceiling:
Shall be constructed using 2' x 2' Armstrong Prelud3e XL Grid system with 2' x 2' Armstrong Fine Fissured Tiles installed in the grid.
- d. Insulation:
Insulation shall be Delta Marine board, or Firemaster Marine Plus Blanket secured with weld pins and washers, as specified on drawings.
- e. Doors
 1. Interior: A-60 Rated, B-15 Rated, or C Class as per Door Schedule
 2. Exterior: A60 Rated; as per Door Schedule
- f. Windows
 1. Exterior: A-60 Rated; as per Window Schedule

2. Structural (Steel Fabrication)

- a. Exterior wall panels shall be "B" crimped; 3/16" or 1/4" thick steel plate as per drawing requirements.
- b. Wide Flange Steel Skid Members.
- c. 1/4" steel plate for floor included.
- d. Tubular framing structural members for exterior walls with ISO connectors located at each corner.
- e. Steel roof and floor joists framing members.
- f. Lifting eyes in Module roof framing pull tested w/ post pull NDE.
- g. All welded construction as per AWS D1.1

3. Electrical:

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A. Lighting System

1. Interior

- a. 2'x4' Fluorescent Lay-in fixtures, 2x32w T8 lamps, electronic ballast, 120/277V (Qty. As required)
- b. 2'x2' Fluorescent Lay-in fixtures, 2x32w T8 lamps, electronic ballast, 120/277V (Qty. As required)
- c. 18" Fluorescent Bunk lights, 1x15W T8 Lamp, electronic ballast
- d. LED Exit lights with 90 min battery backup Simkar SLED Series
- e. Emergency Lights wired into customer supplied battery rated for 18 hr power supply

2. Exterior Lighting:

- a. LED, 120V Class 1, Div 2 marine type, to be installed on each main exit door.

3. Exterior Junction Boxes:

- a. Ex"d" Rated

B. Switches and Receptacles

1. 20A, 120V Duplex Receptacles industrial grade (Qty. to be supplied as required)
2. 20A, 120V GFI Duplex Receptacles industrial grade to be installed in wet area locations such as: bathrooms, galley and laundry
3. 20A, 120V, Single and 3w switches (Qty. to be supplied as required)

C. GEAR

1. Each building must have a lighting panel with MCB different sizes based on the load per building, the panels shall be 1 ph, 208/120V, 60Hz.
2. Galley Module shall have a 200A, 3PH, 4w Panel board
3. Laundry Modules shall have a 150A, 3PH, 4w Panel board

D. Proposed Main Distribution Equipment:

1. (1) 1000A, 600V, 3PH Distribution Panel board with power receptacles and plugs installed
2. (1) 600V, 60Hz, 3Ph 480 Step Down Transformer
2. (2) 225KVA, 480-208/120VAC, 3PH NEMA 3R Dry Type Ventilated Transformers
3. (2) 800A, 208/120VAC, 3PH, 4W Distribution Panels boards
4. (1) 208/120V Plug board with Power receptacles and Plugs Installed

4. Fire and Gas Detection System

Make Ready for Industry Standard Addressable Fire & Gas Detection System provided by customer. LSEF will pre-wire all LQ Modules as per customer provided drawings. Equipment Installation, Termination, and Commissioning will be customer responsibility, or LSEF to quote as per customer specifications.

5. Fire-Fighting System

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- a. Dry Chemical Powder Extinguishers (minimum of 10 lb or 20 lb as req)
- b. CO2 Extinguishers (as req)
- c. ANSUL System in Galley
- d. Fire canister in each room

6. Paging System

Make Ready for Industry Standard Paging System provided by customer. LSEF will pre-wire all LQ Modules as per customer provided drawings. Equipment Installation, Termination, and Commissioning will be customer responsibility, or LSEF to quote as per customer specifications.

7. Voice, Data, TV, Intercom, Music, Telephone, WiMax, CCTV, and UPS

Voice, Data, TV, Intercom, Music, Telephone, WiMax, CCTV, and UPS Power Systems provided by customer. LSEF will quote equipment as per customer provided drawings.

Electrical Note:

All indoor and outdoor electrical cabling shall be Marine P-Type

8. Mechanical - HVAC

- a. General Sleeper Modules; Mini Split-Units; Multi Zone; 36,000 BTUs
- b. Galley Module; Mini-Split Units; Dual Zone; 36,000 BTUs
- c. Laundry Module: Mini-Split Units; Dual Zone; 36,000 BTUs
- d. 4-Men and Office Module; Mini-Split Units; Multi Zone; 36,000 BTUs
- e. HVAC units are ductless; air Handlers shall be installed in their respective rooms
- f. Compressor Unit Shall be installed the module exteriors as per drawings
- g. HVAC are Non-Classified

9. Plumbing

- a. Black & Gray Sanitary Drain Line: Schedule 80 steel - Exterior of module
- b. Black & Gray Drain lines: PVC Schedule 80 - Interior
- c. Interconnection Sanitary Piping at ends of modules: Schedule 80 PVC
- d. Potable Water: copper - Interior
- e. Interconnection Potable Water Piping at ends of modules: Reinforced poly tubing
- f. Toilet salt water flush piping: CPVC - Interior
- g. Interconnection Salt Water Piping at ends of modules: Reinforced poly tubing
- h. Floor drains where required
- i. Fixtures:
 1. Toilets: complete with flush valves and partition as per drawings
 2. Sinks: complete with fixtures
 3. State Water Heaters - as per drawings
 4. Showers - complete with fixtures

10. Auxiliary Equipment

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- a. (2) 60m³ H2O Water Makers (Provided by Other)
- b. (2) Pressure Sets for Fresh Water Supply (Provided by Other)

Note: Service and Transfer Pumps, are not included

11. Coating System

- a. Steel shall be blasted to a near white immediately prior to application of primer
- b. Exterior Coating:
Painted with PPG three coat epoxy and urethane system for offshore service.
- c. Interior:
Primer – 5 mills epoxy

12. Other

- a. Office, Recreation Room Furniture, Gym Equipment, Washer/Dryers, Galley Equipment, Serving Tables, Refreshment Dispensers, Water Heaters, Lockers, Bunk Beds, and Mattresses shall be furnished per drawings.
- b. Audible Freezer/Cooler Man Trapped Alarm.
- c. Modules to be pre-slug with 4 leg bridle slings with master link.

13. Exclusions:

- a. USCG/ABS or Other Third Party Regulatory Agency Surveillance, Inspection, or Certification
- b. Emergency Generator (supplied by others)
- c. Drill Water Pumps, Motors, Controllers/Starters, and Piping (supplied by others)
- d. Transfer Pumps, Motors, and Controllers/Starters for potable/drill water (supplied by others)
- e. Stair Towers – (supplied by others)
- f. Walkways and Handrails - (supplied by others)
- g. Helideck, support structure and means of access
- h. On-site Installation/Assembly
- i. Transportation
- j. Life Boats, Davits Muster Area (supplied by others)
- k. Equipment for Fire and Gas Detection, Voice, Data, TV, Intercom, Music, Telephone, WiMax, CCTV, UPS and 48VDC Power Systems, GMDSS, (supplied by others).
LSEF to quote based on customer requirements
- l. Radio Systems (supplied by others)
- m. Access Control other than Keyed Locks on Office Doors
- n. Linens, Misc. Galley/Dining Utensils, and Medical Instruments
- o. Sewage Treatment Plant