

A. GENERAL DESIGN CRITERIA:

Heat transmission coefficients:

- Wall Panels: $K = 0.4 \text{ kcal/m}^2\text{h}^\circ\text{C}$
- Roof: $K = 0.5 \text{ kcal/m}^2\text{h}^\circ\text{C}$

Sound Insulation: 33-44 Db

Load Bearing Capacity:

- Floor load: max. load capacity 1.5 kN/m^2 (150kg/m²)
- Snow load: max. load capacity 1.0 kN/m^2 (100kg/m²)
- Wind load: 25 m/s (90 km/h)

In case of strong winds an additional anchoring of the cabins is required (Bracings, bolting, supports, etc.)

B. TECHNICAL SPECIFICATIONS:

1. Floor:

Frame construction:

- 3.2mm Vinyl flooring European classification 34/43 (suitable for very heavy and light industrial use), anti-slip, electrical resistance, bacterial resistance and fire proof/fire retardant material
- Secondary steel framing made of cold roll formed galvanized steel sheets (Omega section of depth 10cm and thickness of 1.5mm running at every 61 cm from center to center).

Floor finishing:

- 18mm moisture resistant wood planks floors (Marine plywood) mounted with self-threading screws to the secondary beams covered with:
- 18mm moisture resistant wood planks floors (Marine plywood) mounted with self-threading screws to the secondary beams covered with:
 - ✓ Aluminum-checked plate for wet areas
 - ✓ Full PVC for dry areas.

2. Roof:

Frame construction:

- Main and secondary surrounding steel framing made of cold roll formed galvanized steel profile of thickness 2.5 mm.
- Secondary steel framing made of cold roll formed steel of profile thickness 1.5mm

Roof cover:

- **Option 1:** Stackable type with 5% slope, mechanically seemed steel sheets

Insulation: 100 mm blanket fiberglass insulation (R-13) with vapor barrier

Ceiling: made of galvanized, pre-painted, roll-formed steel sheets of 0.5 mm thickness.

Gutter: 2mm steel gutter with rectangular steel tube downspouts

The roof shall have the same specifications as the external sandwich panel walls 50mm thick also should be fire proof/fire rated.

3.Exterior, Interior and partition Wall Panels:

Composed of insulated composite panels as per the following:

- Wall thickness: 50mm (width 114cm)
- Outer Skin: 0.5mm thick pre-painted steel sheets RAL 9002, off-white color of low ribbed.
- Insulation: 50mm thick injected polyurethane foam of 42kg/m³ density, having a “u” value 0.46 W/m²°C, with a compressive strength of 0.2 NN/mm² and a flexural strength of 0.64 N/mm², having 93% closed cell.
- Inner skin: 0.5mm thick pre-painted steel sheets Ral 9002, off-white color with low ribbed.
- Panels are groove-and-tongue jointed
- No. 4 corner up-rights are provided in order to connect the roof to the base.
- The sandwich panel walls should be fire proof/fire retardant

4.Doors:

Custom dimension:

- D1: Single Leaf size – 90x202.5cm (main Door)
 - D2: Single Leaf size – 80x202.5cm (main or internal Door/sanitation facilities)
 - D3: Single Leaf size – 70x202.5cm (internal Door/sanitation facilities)
- Above doors shall be made of two layers of galvanized steel, off-white color, injected with polyurethane with steel frame equipped with 3 hinges adjustable in height, handled with standard lock, rubber sealant and door stoppers.
- Canopy is included for the external door
 - The doors should be fire retardant

5.Windows:

Made of extruded aluminum sliding profile-glazed with 5mm glass and with 6mm plexi-glass, mosquitoes net and wrought iron protection:

- With or without exhaust fan.
- With vertical steel bars in front from the outer side
- Dimension as per drawings

6.Checked steel walkways with minimum width of 1200mm along with steel hollow tubes handrails, vertical steel bars are to be installed between the handrail and the floor walkway with a maximum gap of 140 mm (to price / 1sqm)

7.Steel steps (to price / 1 Lm)

8.Steel canopies above walkways with the same width, supported by a steel structure sloped to a water gutter on the side and a water collector pipe (to price / 1sqm)

9.Electrical Installation

- Electrical supply voltage provided 200V
- 50 Hz, 1 phase
- Main panel board: an electrical distribution system that supports all electrical items:
- Circuit breakers: differential, light, socket, AC and water heater
- Internal light: 2 Fluorescent lighting (2x26W) in each unit size, warm white light LED energy efficient ceiling fixtures of 150 lumens/m², water proof lamp in wet areas
- External light: 1 globe 1x18W, warm white energy efficient LED, above the entrance door. Water proof lamp in wet areas
- Switches and Electrical Outlets: 15 Amp power socket

- For safety reasons and to protect from fire, All exposed electrical conduits shall be covered with metal U shape channels
- Water proof Electrical plugs to be installed at max 1.8 meters apart spanning the unit.
(*) Brand names requested for all accessories: Osram, LeGrand, Gewiss,etc.

10. Sanitary installation (optional):

- Lavatory Lecico – Nova Type Size: 44.5cm x 35cm
- Water closet Lecico – Atlantis type size: 68cm x 35.5cm
- Shower Tray: Size: 80x80cm
- Stainless Steel Sink: Length: 80cm

Including related plumbing works at unit size level.