

Electrical Enclosure (E-House) Guide Spec

Building

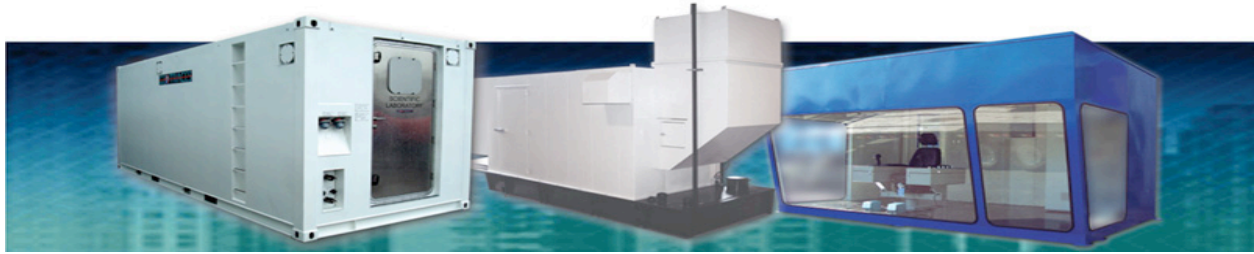
- Walls shall be **4" thick**, made of formed **12 gauge** satin coat panels to ASTM A653
- Walls shall be insulated with mineral wool insulation to **R16 insulation** value and lined with 18 gauge satin coat steel sheets (liner to be riveted, teck screws are not permitted)
- Walls shall be stitch welded and caulked before paint
- Roof shall be fully seam welded, **4" thick, 12 gauge** satin coat to ASTM A653
- Roof shall be insulated with mineral wool insulation to **R16 insulation** value and lined with 18 gauge satin coat steel sheets
- **Roof shall have a 2" slope to reduce ponding of water --OR-- Roof shall have 4" peak to reduce ponding of water**
- Enclosure to be designed to meet **British Columbia / Alberta** Building Code
- **Cable entry penetrations provided in the floor as required with 10 gauge aluminum gland plates**
- One (1) only Exterior 16ga Steel Man Door, 30" x 80", c/w Thumb latch, Panic Hardware, heavy duty door closer, bulb seal weather seals, threshold, and drip rail.
- One (1) only Exterior 16ga Steel Double Door, 72" x 96", c/w Thumb latch, Panic Hardware, heavy duty door closer, bulb seal weather seals, threshold, and drip rails.
- One (1) only Steel Desk, 30" x 72"
- **Enclosure construction for one (1) hour fire rating**
- All fabrication shall be performed by CWB certified welders in a CWB certified facility

Base / Floor

- Base shall be fabricated using **C15** structural channel steel c/w integral lifting lugs and **C6** channel cross members
- Floor shall be insulated to **R21 insulation** value with **3"** of mineral wool insulation with 18 gauge G-90 belly pan
- Floor penetrations and gland plates as required
- Floor plate is 3/16" thick, continuous welded seams. Floor is painted with anti-skid high wear epoxy paint.
- Base shall come with weld-tested integral lift lugs

Fire Protection System

- One (1) only fire alarm panel (2-zone, addressable) shall be supplied
- Two (2) only non-addressable heat detectors & two (2) only pull stations are required
- One (1) only interior and two (2) only exterior horn/strobe units are required
- Two (2) only dry chemical fire extinguishers are required, 10lb capacity, with wall-mounted brackets



Exterior Paint System

- Base Frame Structural Surface Preparation shall be to SSPC-SP6
- Enclosure Surface Preparation shall be to SSPC-SP1
- Two Coats shall be International Paints Epoxy Interseal 670, 4-8 mils DFT each coat
- Top Coat shall be International Paints Polyurethane Interthane 870, 3-5 mils DFT
- Exterior Colour TBD, Finish: Semi-Gloss with Spackle

Enclosure Interior Paint System

- Surface Preparation shall be to SSPC-SP1
- Self-Priming Enamel Required, Interior Colour: Off-White 3-5 mils DFT
- Finish shall be Semi-Gloss smooth

Floor Paint System

- Surface Preparation shall be to SSPC-SP1
- Primer shall be International Paints Epoxy Interseal 670 4-8 mils DFT
- Top Coat shall be International Paints Epoxy Interseal 670, with Anti-Skid
- Colour shall be ANSI Grey, Finish: Semi-Gloss

HVAC & Pressurization System

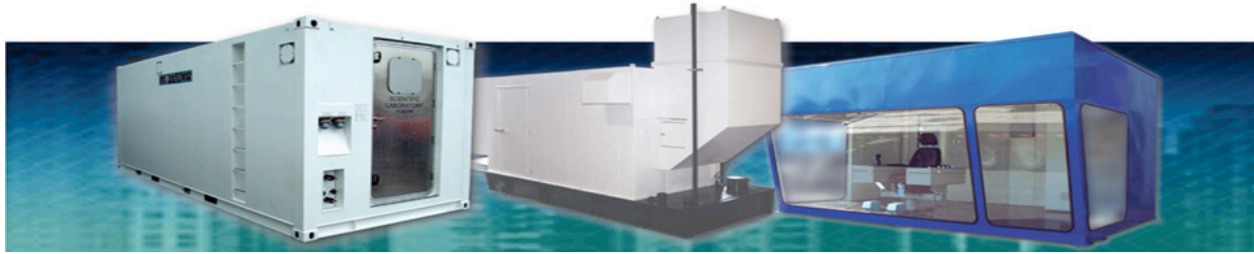
- System shall be designed to maintain 20°C in ambient temperatures based on **xxx** location
- **Two (2) only 6 Ton** Wall Mounted BARD HVAC Units and **one (1) only 3 Ton** Unit shall be supplied, include Interior Ducting with registers
- **Include a Pressurization/Filtration Module**
- **HVAC sizing to be confirmed based on equipment loads and site conditions**

E-House Electrical

- House electrical loads shall be powered via one (1) only **18CCT, 120/208V, three phase, 100 Amp** distribution panel board connected to the following items
- **Ten (10)** only 120V vapor proof fluorescent lights c/w two (2) only 3-way light switches
- **Four (4)** only 120V, 20A GFCI convenience receptacles installed inside enclosure
- **Two (2) only 70W HPS lights with photocell**
- **Two (2) only emergency lights c/w 2hr battery back-up, installed inside enclosure**
- Two (2) Ground Pads shall be provided, welded to exterior corners of skid base
- All E-House electrical wiring is in surface mount EMT
- All components shall be CSA or ULC listed and bear the CSA or ULC Label
- All electrical work shall be performed by ticketed (journeyman) electricians

Electrical Equipment Installation

- **As required, please specify**



Quality Control, Testing, & Project Management

- Structural Design by Structural P.Eng Licensed in **British Columbia / Alberta**
- All fabrication and packaging to be performed by an ISO 9001:2008 certified company
- Fabrication to be performed by CWB Certified Welders IAW CWB Standards
- Mechanical Installations to be inspected by In-House Project Manager
- All Electrical Installations shall be by Licensed Electricians, supervised by in House Electrical Engineer.
- QA Inspection reports to be provided if required
- Progress reporting shall be provided as required, complete with digital pictures and MS project schedule.

Packaging/Loading

- Craning shall be provided to load E-House at enclosure manufacturer's facility
- **E-House shall be covered in heavy duty shrink wrap before pick-up at enclosure manufacturer's facility**