Plasti-Fab® INC.

PHONE 503-692-5460 **FAX** 503-692-1145 **E-MAIL** SALES@PLASTI-FAB.COM **WEB** WWW.PLASTI-FAB.COM

9665 SW TUALATIN-SHERWOOD ROAD | PO BOX 100 | TUALATIN, OR 97062

WHY PLASTI-FAB SHELTERS?

EXPERIENCE

Plasti-Fab has been building fiberglass shelters for the water, wastewater and general industrial use for over 20 years. Based on this experience we believe that a fiberglass enclosure should fulfill two primary purposes to provide long term protection and superior corrosion resistance. A good quality FRP shelter should look as good in 15 to 20 years as it did when it was installed.

Plasti-Fab shelters meet this standard. What sets Plasti-Fab apart from everyone else; and why should you be willing to spend more to get the Best?

QUALITY

1. Plasti-Fab's shelter design differs from many of our competitors. Experience and a thorough understanding of the different requirements for many common applications require some simple design options to meet the goals of long term protection and corrosion resistance. A chlorinator shelter accessories should not be the same as a sampler shelter that will not be exposed to toxic or corrosive gases.

2. Plasti-Fab builds two distinct types of shelters. Many are custom built to meet specific installation and job-site requirements.

- **a.** Models #1 through #5XL are smaller walk-in enclosures with smooth flat exterior wall and roof, an integral floor and a raised sill with coaming style door. The shelters are fully insulated.
- **b.** The larger Ribbed Wall shelters are also insulated and are normally intended to bolt down on a concrete pad. An FRP insulated floor is available for skid mounted units and special applications. The ribbed walls provide added structural integrity and a pleasing architectural style. Most have a peaked roof, but flat roof, hip roof or shed roof is available. Door styles range from the raised coaming style to standard doors with flush threshold, double doors, and overhead doors.

3. Basic construction is designed to last.

- **a.** The structural foam insulation bonds tightly to the 1/8" thick FRP skins to form a very strong structural sandwich. No internal wood or metal framing is needed or used, thereby reducing the possibility of structural breakdowns due to delamination, separation, dry rot, moisture contamination or rusting.

b. All gel coat and resin is UV protected. In addition, Plasti-Fab uses a specially formulated high pigment gel coat on the exterior surfaces to resist weathering and discoloration.

c. All interior walls and surfaces are smooth finished and protected with a high quality gel coat. This increases corrosion resistance and makes wash down and maintenance an easy job.

d. The raised threshold coaming style door provides the tightest seal available on the market today, and allows it to be hosed down without water getting inside the shelter. This type of door has a continuous neoprene seal on all four sides which is drawn securely down onto the raised coaming by a 3-point stainless steel latch.

e. Spills caused by leaks or careless handling are contained by the raised threshold,

f. All door hardware is stainless steel. The hinges are a custom made heavy duty long tang style with 1/2" diameter pins and nylon sleeves designed for strength and security. We avoid riveted piano hinges. A spring loaded stainless steel door holder prevents the door from being caught in the wind and slamming open or closed unexpectedly.

g. The door holder in combination with the locking handle and 3-point latching mechanism act as natural panic hardware. With the spring holder in place the door latchment mechanism does not automatically latch and can not be closed unintentionally. When specified, the handle can be modified so it can be locked in the open position making it impossible for a person to be trapped inside by accident.

h. Vents and exterior penetrations are designed for the intended shelter use and NEMA classification. Vents can be either aluminum or fiberglass, and can be screened, louvered or gravity shutter style. Fiberglass will be used in all aggressive atmospheres.

i. Most shelters have mounting strut laminated to at least one wall for attachment of panel boards, instrumentation or other wall mounted equipment.

j. The insulated shelters have some acoustical sound dampening capability, and additional decibel reduction has been provided for blowers, generators or pumps being housed in residential areas.

k. When required fire retardant resins are available, and we have built shelters with internal fire suppression systems ranging from simple canister extinguishers to complex alarmed CO_2 systems.

l. Structural tests have been run a number of times to provide quality control and assure product integrity. Plasti-Fab can also provide local P.E. stamps where required. Calculations will be done by and independent consultant and the cost will be added to the price of the shelter.

4. Electrical components and considerations

   a. The shelter NEMA ratings most often apply to the smaller instrument and chlorinator shelters. This is intentional because the smaller enclosures are designed and built to resemble a walk-in electrical cabinet. NEMA 3R is our standard and refers to a shelter that will not allow water penetration under heavy storm conditions. Also any internal electrical equipment is isolated from outside contact through any wall openings. NEMA 4X indicates that the shelter is water tight, dust tight, and corrosion resistant, and that the shelter will stay dry inside even when sprayed at close range by a fire hose. For all practical purposes this means that the shelter can not have any exterior vents or openings.

   b. An Exhaust Fan is typically used in instrument and sampling shelters. This is mounted high on the shelter wall and is either switch or thermostatically controlled.

   c. For shelters that house chlorine and other heavy corrosive gases or chemicals Plasti-Fab will install a Purge Fan near the top of one wall and locate the vent on the opposite wall near the floor. A Purge fan draws fresh air from outside the enclosure and pushes the contaminated air that has settled near the floor out through the low vent. This method assures that the fan and its critical electrical wiring is not exposed to premature failure due to excessive contact with the corrosive gases.

   d. Plasti-Fab is also experienced with Class I, Division I & II Explosion Proof requirements, and has supplied a number of shelters meeting these codes.

   e. Standard electrical packages normally include a NEMA rated service panel, light & switch, heater with thermostat, fan, convenience outlet and wiring. Other components available include: air conditioners, warning lights, alarms, junction boxes, etc.

CAPABILITY

Plasti-Fab has the specialized capability to take standard shelter units and add customized features to satisfy a wide variety of site and application requirements. Wall height from 7 ft. to 12 ft. are available. Roof style can be flat, gabled or sloping and can be fitted with lift-off panels or completely detachable for crane access to pumps and heavy equipment. Windows and lifting eyes are common accessories. Larger shelters up to 20 feet square can be shipped as knock-down units for quick assembly at the job-site.

Fiberglass shelters and covers can be acoustically lined and tested to limit noise of pumps. They can also be insulated to any degree necessary. Shelters can be made with fire retardant resins, fitted with fire suppression systems, detectors, alarms, shelves and explosion-proof electrical features. Plasti-Fab can add any desired accessory and meet any design requirements.

Fiberglass shelters are light weight and easy to transport, and can be skid mounted to increase their mobility. Plasti-Fab shelters are currently being used to house: liquid and dry chlorine systems; chemical feed/storage; medical & biohazardous wastes; instrumentation and water sampling equipment; air quality monitoring equipment; communication systems and equipment; telemetry systems; blowers, generators & pump enclosures; on piers, docks & offshore stations.

If corrosion resistance and long service life are important, expect to see a Plasti-Fab fiberglass shelter handling the job.

REPRESENTED BY:
CCLYNCH & ASSOCIATES
The Water Monitoring People
Phone: 1-800-333-2252
Fax: 228-452-2563
info@cclynch.com
www.cclynch.com