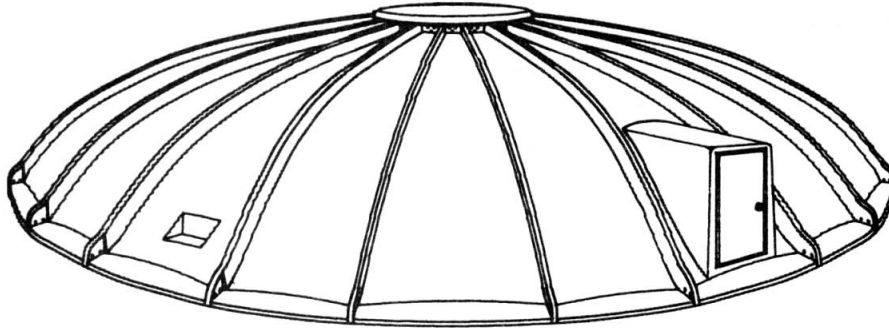


# FIBERGLASS REINFORCED PLASTIC (FRP)

## DOME COVER SYSTEM

### SCALLOPED SEGMENT DESIGN



FRP is most advantageous in meeting structural requirements in hostile environments. SynTechnics free-spanning domes are structurally designed to handle appropriate live, wind, and unbalanced loading conditions. Various accessories such as windows, duct connections, vents, personnel doors and equipment hatches are readily available, sized to meet operating conditions.

#### BENEFITS OF FRP

- Non-corrosive
- Self-supporting
- Minimum number of panels
- Ease of erection
- Non-conductive
- Minimum Maintenance

#### DESIGN GUIDE

Applications

- Clarifiers
- Digesters
- Sludge Thickeners
- Water Storage Tanks
- Trickling Filters
- Bulk Storage Tanks
- Other clear span applications

Basic Design is per ASCE7

#### BASIC DESIGN

Size Range	No. of Segments	Weight per Segment
54 - 70'	22	500 - 900 lbs
71 - 85'	28	600 - 1000 lbs
85 - 100'	34	700 - 1100 lbs
101 - 130'	40	850 - 1600 lbs

SynTechnics offers a variety of structural enclosures for applications ranging from weather protection to odor control. SynTechnics designs are available for both standard and customized structural systems based on customer requirements. These systems provide durable monolithic members which complement field erection procedures and structural integrity.

### TYPICAL DETAILS

1. Laminate thickness and fiberglass reinforcing type to be determined by exact loading conditions.
2. The panels are joined by an interlocking weathertight joint and can be adapted with a compatible gasket for limiting air transfer.
3. Stainless Steel anchor bolts are recommended.
4. Panels are fabricated in shippable lengths.

SynTechnics actively solicits inquiries on special requirements. The SynTechnics organization is geared to design and manufacture FRP custom structural systems where the material has a cost effective benefit versus other materials. SynTechnics' experienced engineering staff is well versed in structural analysis of FRP structures.

