



Virtual Polymer Compounds LLC.
Composite Manhole Cover and Frame Set

General

- Materials: Fiber Reinforced Plastic
- Containing 45%- 70% fiber reinforcement
- Resin matrix must be thermoset

Use-ability

- Product must facilitate easy removal by one person
- Minimum strength the weight ratio = 750:1
- There shall be no possibility of corrosion welding between the cover and the frame, preventing damage to the infrastructure during opening
- Integrated gasket system to reduce traffic shock and abatement of noise and malodors

Pedestrian Safety

- Non-conductivity of electricity
- Heat insulating
- Skid slip performance greater than 0.6, ASTM standard C1028

Load Carrying Capacity

- US Load Specification: AASHTO M306-05 H-20 & H-25 traffic requirements of 50,000 lbs, with 100,000 lbs ultimate load bearing
- EU and International Load Specification: EN 124 Class A-D, Class D must meet 400kN load requirements and set requirements

Fatigue Performance

- 2 million cycles at 16,000 lbs.
- No visible damage
- Must meet allowable permanent set for the applicable class
- Performed in a manner approximating the field installation as accurately as possible
- Must then pass the proof load requirements U.S. AASHTO M306-05 H-20 & H-25 or EN 124 Class A-D

Corrosion Performance

- Superior performance in aggressive environments
- Sewer
- Petrochemical
- De-icing solutions
- Salt water

Markings

- AASHTO M 306-05
- Country of Origin

Quality & Warranty

- Warranty products for 5 years
- Dimensional tolerances of 1/16 of an inch
- Random Sampling production

Locking Mechanism

- Quarter Turn Paddle Lock
- Cam Lock
- T-handle lock