



Composite Manhole Covers

A Solution to Your Sanitary Sewer Overflow Problems

Technical Data Sheet

Revision: January, 2022

Description:

SuperCover is a polymer matrix, non-metallic, fiber reinforced, composite, manhole cover; capable of withstanding traffic loading requirements that meet or exceed H-20 & H-25 rating. SuperCover offers features such as: self-aligning design, antirotating construction, secure bolting into manhole, and compatibility with inflow dish for maximum I&I prevention. SuperCover also comes compatible with the 3M locator dish for manhole identification and location (SSO only). SuperCover has been approved by Texas Department of Transportation (TXDoT).

Specification:

SuperCover is offered in most common size in municipal manholes 30" clear opening and 24" clear opening. OSHA has adopted 30" clear opening for human entry confined spaces. SuperCover fully meets and complies with the requirements for OSHA for entry confined spaces. SuperCover features Sanitary Sewer Overflow (SSO) non-hinged series. Non-hinged SSO series covers bolted down into place with double gaskets for maximum locking and I&I protection. All SuperCover's are compatible with our fully composite SureSeal inner dish and double gasketed for complete I&I prevention.

Strength & Durability:

SuperCover has been tested by Trenchless Technology Center at Louisiana Tech University and signed off by a US registered licensed professional engineer. The US Department of Transportation requires gratings and manhole covers to be tested for load ratings under AASHTO M-306-10. In order to be classified H-20 Heavy Duty Product must withstand 16,000 lbs. for 60 seconds without cracking or breaking. A 2.5 times safety factor is required which brings the total proof load to 40,000 lbs. SuperCover was able to average 76,000lbs total force weight before initial signs of cracking or destruction. SuperCover is able to perform 60,000lbs over the requirement for H-20 & H-25 rating; and 0.0 gallons per hour in I&I testing.

Installation:

SuperCover is installed using conventional methods as classic manhole covers. Only SuperCover approved tooling should be used when assembling and disassembling the ring and cover. Supercover bolts must only be hand tightened to fasten in place cover to ring.

The bottom of the composite manhole cover shall sit flush with the top of the manhole cone or the adjustment riser ring. Since the composite manhole cover is water tight the top of the cover should be flush and level with the ground, street, sidewalk, or paved area. A concrete pad is recommended to secure and anchor the composite manhole cover in place. A detail sheet shall be furnished as part of construction drawings (see detail sheet portion of submittal).

In the event that the composite manhole cover is being installed on an elevated raised manhole, concrete anchor bolts, J-hooks, and grout/concrete may be used to secure the composite cover to the manhole opening.

Features:



Exceeds 50,000lb Proof
Load Test AASHTO



Water Tight



Anti-Corrosive Inert
Composite Materials



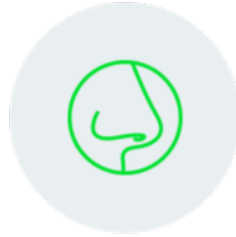
No Scrap
Metal Value



Locate with: 3M™ iD
Disk Marker 1414-XR/iD



Self-Extinguishing



Odor-Eliminating



Bolted Down to Frame,
Cover & Inner Dish



Manufactured at an
ISO 9000 Certified Plant



NO Unlawful Entry:
Bolt & Locking System



Anti-Theft



5 Year Warranty

Performance Data:

ASTM D790-17 Flexure Strength Cover	20,393 psi
ASTM D790-17 Flexure Strength Retention After UV Exposure Cover	Pass, >85% Retention
ASTM D790-17 Flexure Strength Frame	19,728 psi
ASTM D790-17 Flexure Strength Retention After UV Exposure Cover	Pass, >85% Retention
ASTM C1028-07e1 Static Coefficient of friction	0.674
ASTM D256-10 Izod Impact Testing	1,473 J/m
ASTM D635-18 Rate of Burning in Horizontal	Samples Self-Extinguish
ASTM D4060-14 Taber Abrasion Testing 10,000 cycles Cover	60.2 milligrams
ASTM D4060-14 Taber Abrasion Testing 10,000 Cycles Frame	72.3 milligrams
ASTM C501-84 Wear & Abrasion Testing 1,000 cycles Cover	Pass, <300
ASTM C501-84 Wear & Abrasion Testing 1,000 cycles Frame	Pass, <300
ASTM D570-98 Water Absorption	0.37%
ASTM G154-16 UV Testing Cover & Frame	No deformation
AASHTO Proof Load Testing 40,000 lbs. H-25	Pass, no cracking or deformation
AASHTO Proof Load Testing 70,000 lbs. H-25	Pass, no cracking or deformation
Infiltration & Inflow 24-Hrs	0.0

*Testing results were conducted with Sureseal inner dish in unit.

Specs:

	ID	OD	Rim Thickness	Inner Dish	Ring	Cover	Ring & Cover
NH SSO 24"	24"	36"	4.0"	8.6 lb.	61.8 lb.	72.6 lb.	143 lb.
NH SSO 30"	30"	41"	4.0"	13.2 lb.	66.4 lb.	72.6 lb.	185 lb.
DH 30"	30"	41"	4.0"	13.2 lb.	66.4 lb.	72.6 lb.	185 lb.

NH SSO: Non-Hinged Sanitary Sewer Overflow

ID: Inner Diameter (Opening)

OD: Outer Diameter Ring & Cover

DH: Hinged Supercover



Sanitary Sewer Overflow Series

Manufacturing Process:

SuperCover is designed and distributed by Wastewater Rehabilitation Professionals. Supercover is produced using Sheet Molding Compounding (SMC) in order to meet the stringent manufacturing standards that municipalities demand. SuperCover is molded using state of the art machine and tool technology in a manufacturing facility that is ISO certified by IQNet to conform to ISO 9000 and ISO 1400 standards. SuperCover's non-metallic unique composition is fiber reinforced to ensure maximum strength and durability. SuperCover is also enhanced by the compatibility with Sureseal inner dish for maximum I&I protection. Before the finished product is promoted to the quality assurance phase it is meticulously analyzed for imperfections.

Quality Assurance Process:

Each SuperCover is examined for defects or inconsistencies prior to being distributed.

Packaging:

SuperCover comes stacked with five covers on a pallet, shrink-wrapped and banded for extra protection.

Warranty:



SuperCover comes with a 5-year fabrication defect warranty. If SuperCover is delivered with defects contact Supercover for warranty information.

Precautions:

SuperCover weights range from 117 to 185 lbs. always proceed with caution when lifting or moving supercovers. Do not attempt to lift a supercover without assistance; or improper handling of weight distribution. BlueGreen Municipal is not responsible for injuries when installing or transporting SuperCover.

In accordance with C.F.R 1910.1200, this product is an "article" and therefore not subject to the HCS 2012 SDS labeling and Requirements.

TXDOT Approval & Third-Party Certification:

Approved by TXDoT for use in municipal road ways.



*NOT AN ENDORSEMENT