



TECHNICAL SPECIFICATIONS

SHIELD™ Trench Covers



CC30

FEATURES

- High strength-to-weight ratio
- Over 30% weight reduction when compared to polymer concrete
- SHIELD's lighter weight cover design reduces craft injuries while improving health and safety specifications
- Meets or exceeds AASHTO HS20 Design Load
- No mechanical lifting equipment is required
- Superior impact resistance to chipping and breakage
- Greater resistance to water, fuel or oil absorption
- SHIELD lids are non-conductive with no internal steel reinforcement; no grounding is required

TESTING CRITERIA

Meets or exceeds:

- EST™ 3 Million Cycles
- AASHTO HS20

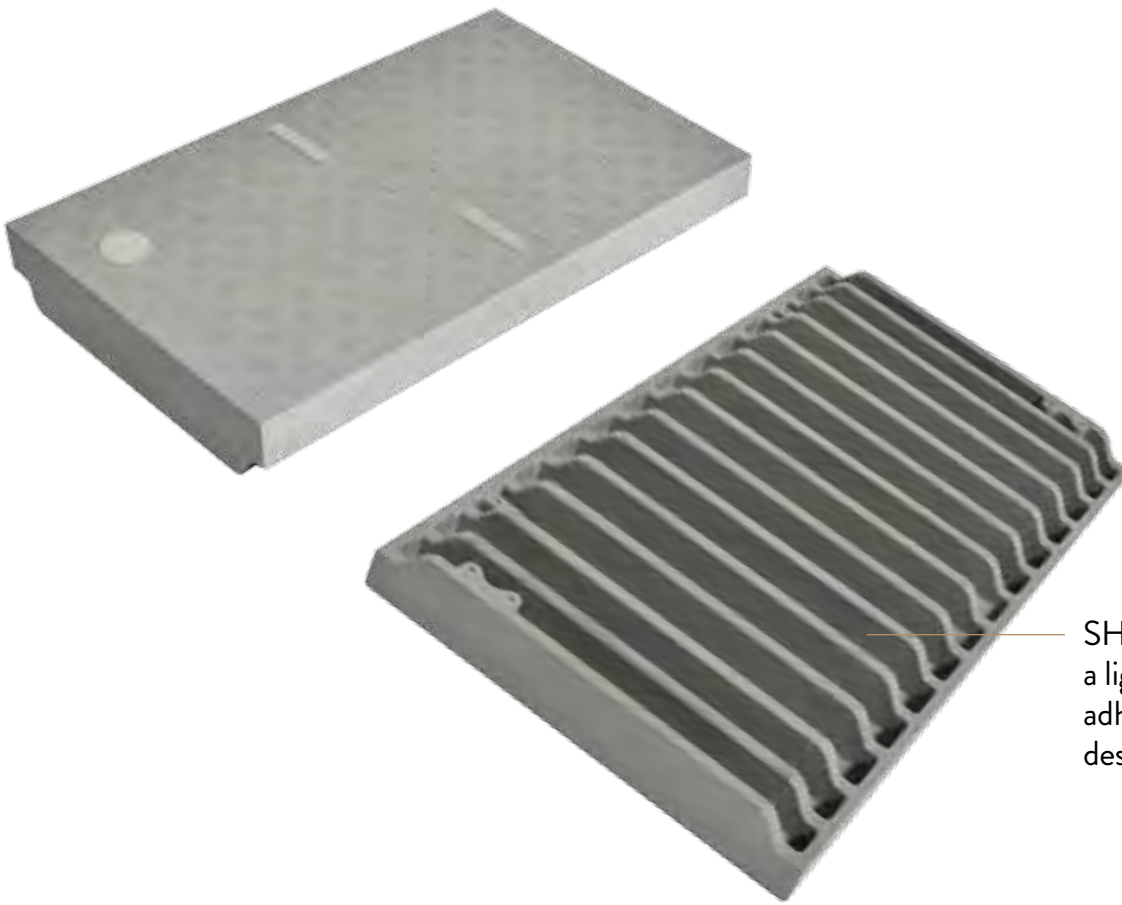
PRODUCT SUMMARY

Channell's SHIELD™ covers offer a universal solution to meet and exceed every company's needs. Safety always comes first, and that's why SHIELD covers are tested to the highest standards available in the global market. Channell is proud to have pioneered Endurance Stress Testing (EST™) which analyzes cover fatigue in the field. EST™ provides essential data on the life expectancy of a SHIELD lid in the field and confirms its potential life expectancy. Product design, product innovation, safety attributes, and new manufacturing technology

is why global customers are specifying Channell's SHIELD products for their new OSP infrastructure requirements.

Consumers also benefit from SHIELD's patented anti-slip design and anti-trip features. SHIELD's cover tread design raises global industry standards by offering 20% greater slip resistance when compared to concrete, polymer concrete and steel.



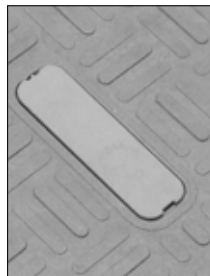


SHIELD's structural ribs allow a lighter weight solution while adhering to AASHTO HS20 design loads

STANDARD FEATURES



Anti-Slip Tread Design



Anti-Trip Cover



Recessed Lifting Pin with Cover



Logo Puck
(Custom Options Available)

Design and specifications may vary.

SHIELD™ MATERIAL TESTING

ASTM TEST PROTOCOL	FACILITY / DATE	RESULT
D 790-10, Flexural Testing	UL, December 17, 2015	Control Samples
D 543-06 Chemical Resistance*	UL, January 25, 2016	Compliant ¹
G 154-06 Simulated Sunlight Exposure	UL, March 21, 2016	Compliant ¹
D 570-10 Water Absorption	UL, March 22, 2016	Compliant ¹
D 635-06 Flammability	UL, March 29, 2016	Compliant ¹
D 2444-10 Cover Impact	UL, October 7, 2015	Compliant ²
C 1028-06 Coefficient of Friction	UL, October 7, 2015	Compliant ³

*CHEMICAL RESISTANCE TEST (CHEMICAL REAGENTS)	CONCENTRATION IN WATER SOLUTION
Sodium Chloride	5%
Sulfuric Acid	0.1N
Sodium Carbonate	0.1N
Sodium Sulfate	0.1N
Hydrochloric Acid	0.2N
Sodium Hydroxide	0.1N
Acetic Acid	5%
Kerosene	Per ASTM D3699, Type K1
Transformer Oil	Per ASTM D3487, Type II

¹ Compliant – Indicates that post exposure to reagent or test condition, specimens retained at least 75% of the original control value (established by “Flexural Testing Control Specimens”) for stress and deflection and did not have more than a 2% change in weight.

² Compliant with ANSI/ SCTE 77-2013 requirement for Impact resistance with a type “C” tup, 70-foot pound.

³ Compliant with ANSI/ SCTE 77-2013 requirement for Coefficient of Friction, > 0.5 (Dry).

DESIGN

Shield covers are exposed to 10,000 hours of Xenon Arc Light which detects fiber blooming—so your hands won't get shredded.



SHIELD covers do not absorb moisture like concrete, polymer concrete, or fiberglass

Hit it.

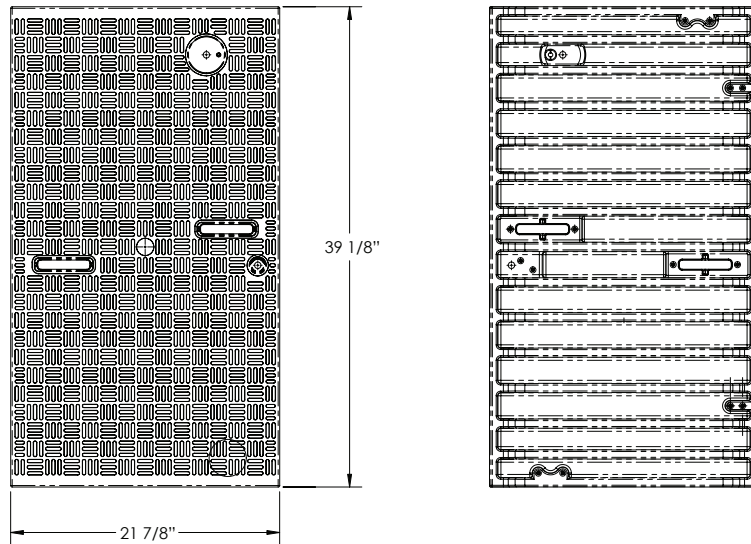
We did—over and over again! With SHIELD, you never need to worry about breakage and it's virtually maintenance free. It's super strong, lightweight, seldom chips, and doesn't break.

Fact is, when compared to concrete covers, nobody can beat a SHIELD.

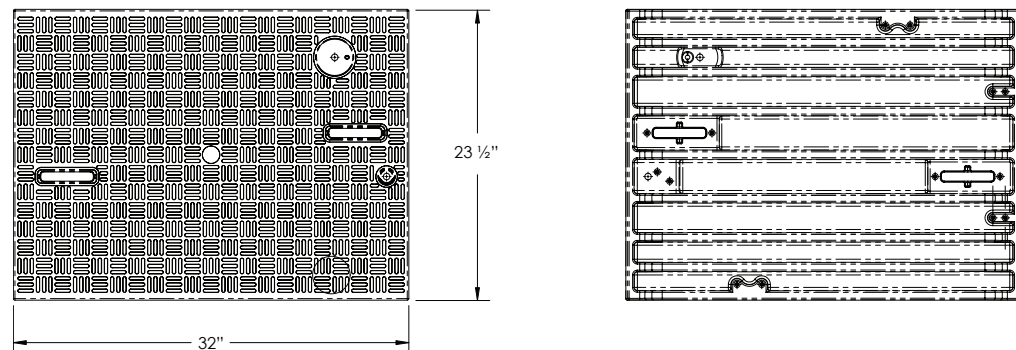


SPECIFICATIONS

CC20 Weight 82 lbs [37 kg]



CC30 Weight 87 lbs [39 kg]



MADE IN USA

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