

GRADE LEVEL BOX PRODUCT SPECIFICATION AND SELECTION GUIDE

With over 100 years experience in global (OSP) infrastructure, Channell has developed the most advanced vault and handhole technology in the world. Channell's BULK and SHIELD patented designs with the complement of SUPER BULK for non-deliberate H-20 applications offer global users, consumer, and craft installers safety benefits never before contemplated, but critical when considering new global health and safety standards.



PRODUCT SUMMARY

BULK's lightweight design enhances installation efficiency and load capacity compared to concrete and polymer concrete, ensuring installer safety and reducing installation time. It also prevents harmful dust during field duct cutting, protecting respiratory health.

SHIELD covers meet or exceed ANSI/ SCTE 77 Tier 22 (33,750lb) load ratings, are 50%-70% lighter than concrete, polymer concrete, and cast iron, reducing injuries and improving safety. They feature anti-slip and anti-trip designs, offering 20% better slip resistance when compared to polymer concrete, concrete, and steel covers. Together, BULK and SHIELD meet high industry standards, including DOT, Rail, FTTH, Power & Utility, and Broadband, and are tested for durability with Channell's Endurance Stress Testing (EST™). These innovations make them a preferred choice for global OSP infrastructure.



FEATURES

- Upgradeable
- Lightweight/Strong (TIER 22)
- Patented Anti-Slip Technology
- Anti-Seize Bolt Technology
- Industry Leader in Anti-Trip Hazard Prevention
- Superior Fatigue Resistance (EST)™
- Vertical and Horizontal Rib Design
- Embedded Vertical Racking
- Reduced Installation Cost
- Highest Load Rating to Weight Ratio in the Industry

TESTING CRITERIA

Covers meet or exceed:

- ANSI/SCTE 77 2013-TIER 22
- Telcordia GR-902-CORE
- Western Underground Committee Guide 3.6
- EST™ 3 Million Cycles

BULK Bodies meet or exceed:

- ANSI/SCTE 77 2013-TIER 22
- Telcordia GR-902-CORE
- Western Underground Committee Guide 3.6
- AASHTO M-306 (H-20/25)
- AS3996 Slip Resistance
- ASTM-457

BODY DESIGN



Straight wall design improves lid load strength.

Flush mounted racks enhance sidewall and vertical strength of pit while increasing usable space.



Ribbed sidewall design secures body into backfill soil and eliminates sidewall deflection.

LID OPTIONS



SPECIFICATION	PROOF LOAD	PRODUCTS
Pedestrian/Light Duty	3,000 lbf (13.5 kN)	A BULK
ANSI/SCTE 77 TIER 22	33,750 lbf (150 kN)	BULK
AASHTO M-306-10 H 20	40,000 lbf (178 kN)	BULK
AASHTO M-306-10 H 25	50,000 lbf (222.4 kN)	BULK
ASTM-457	46,000 lbf (205 kN)	BULK

FEATURES



HDPE bodies

Provide easy field alteration while eliminating water absorption and material degradation while maintaining structural integrity, and eliminating toxic fiberglass dust.



Never Seize

Simply the quickest, most effficient field replacement system in the industry. This Channell patent-pending fastening system allows bolts to be securely fastened through sand, dirt and mud.



SELF_LOCK

Our BULK family of vaults now come with the **Self-Lock** cover protection option. Self-Lock covers close quickly with a simple push from your foot and eliminates the worry of lids being thrown off by lawnmowers or floating away. The system is designed to meet the specific fiber, coax and copper needs of the broadband, telecommunications and utilities industries.

Design and specifications may vary.



BULK SIZES AND OPTIONS

Size	Depth (in)	Available Lids	Bolt Type	Composite Ring
12" x 12"	12	Tier 22	Hex/Penta/Johnny	N
11" x 18"	12/18	Tier 22	Hex/Penta/Johnny	N
13" x 24"	12/18/24	LD/Tier 22/H-20	Hex/Penta/Self-Lock/L-Bolt/Johnny	N
17" x 30"	12/18/24/36	LD/Tier 22/H-20	Hex/Penta/Self-Lock/L-Bolt/Johnny	Υ
24" x 36"	12/18/24/30/36/48	LD/Tier 22/H-20	Hex/Penta/Self-Lock/L-Bolt/Johnny	Υ
30" x 48"	18/24/30/36/50	LD/Tier 22/H-20	Hex/Penta/L-Bolt*/Johnny	Υ
36" x 60"	24/36/48	Tier 22	Hex/Penta/Johnny	N
48" x 60"	36/48	Tier 22	Hex/Penta/Johnny	N

- LD (Light Duty) = 3,000lb Test Load Tier 22 = 33,750lb Test Load H-20 (Ductile Iron) = 56,200lb Test Load
 - Hex = 9/16"
 - Penta = 7/8"
 - Self-Lock = 7/16" Hex
 - L-Bolt = 7/16" Hex

 - "Johnny" = 1/2" Security Hex L-Bolt* = 3048 LD Lid Only.

AVAILABLE FEATURES



Anti-Slip Tread Design



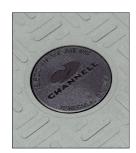
Anti-Trip Cover



Recessed Lifting Pin with Cover



Flush Mounted Sidewall Racks Increase Usable Space



Logo Puck (Custom Options Available)



L-Bolt Security System (SHIELD Cover Shown)



Marker Locator Device



Swing-Arm with Butterfly Mounting Plate

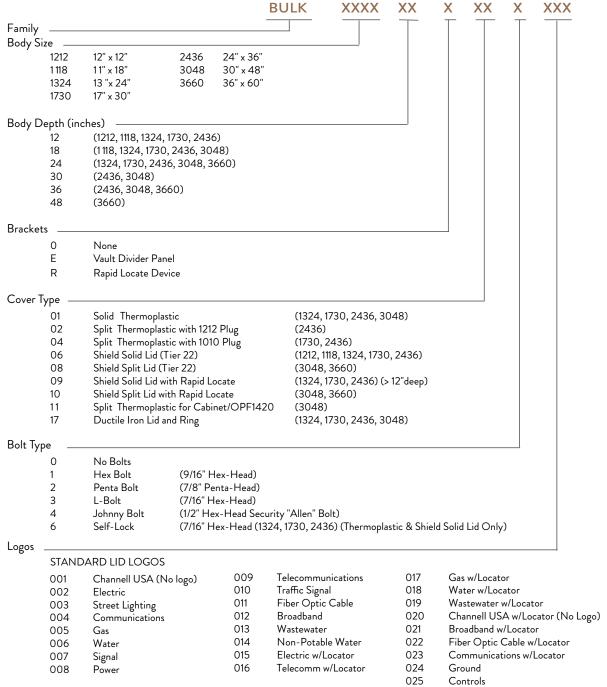


Cable Hook Bracket



Step Bracket with Wedge

BULK PART NUMBER MATRIX



- 101 999 "Specials" (i.e. non-standard logos, custom brackets, etc)
- NOT ALL COMBINATIONS ARE AVAILABLE IN ALL SIZES
- NOT ALL OPTIONS RELEASED FOR PRODUCTION



BULK WEIGHT COMPARISON

Assembly Size	"Polymer Concrete Nominal Assembly (lbs)"	"SHIELD/BULK Nominal Assembly (lbs)"
12"x 12"x 12"	48	22
11"x 18"x 12"	69	32
11"x 18"x 18"	80	33
13"x 24"x 12"	104	37
13"x 24"x 18"	123	48
13"x 24"x 24"	155	58
17" x 30"x 12"	155	51
17"x 30"x 18"	177	56
17"x 30"x 24"	202	71
24"x 36"x 24"	311	105
24"x 36"x 30	355	121
24"x 36"x 36"	407	132
30"x 48"x 24"	464	188
30"x 48"x 36"	600	229
36"x 60"x 36"	1058	389
36"x 60"x 48"	1320	454

Box Size	"Polymer Concrete Nominal Box (lbs)"	"BULK Nominal Box (lbs)"
12"x 12"x 12"	36	14
11"x 18"x 12"	41	21
11"x 18"x 18"	52	22
13"x 24"x 12"	54	21
13" x 24"x 18"	73	32
13" x 24"x 24"	105	42
17" x 30"x 12"	70	25
17" x 30"x 18"	92	30
17"x 30"x 24"	117	45
24"x 36"x 24"	181	55
24"x 36"x 30"	225	71
24"x 36"x 36"	277	82
30"x 48"x 24"	244	88
30"x 48"x 36"	380	129
36"x 60"x 36"	588	209
36"x 60"x 48"	850	274

Cover Size	"Polymer Concrete Nominal Cover (lbs)"	"SHIELD Nominal Cover (lbs)"
12" x 12"	12	8
11" x 18"	28	11
13" x 24"	50	16
17" x 30"	85	26
24" x 36"	130	50
30" x 48"	220	100*
36" x 60"	470	180**

^{* 50}lbs per 1/2 cover ** 90lbs per 1/2 cover

Contact Your Local Channell Representative



