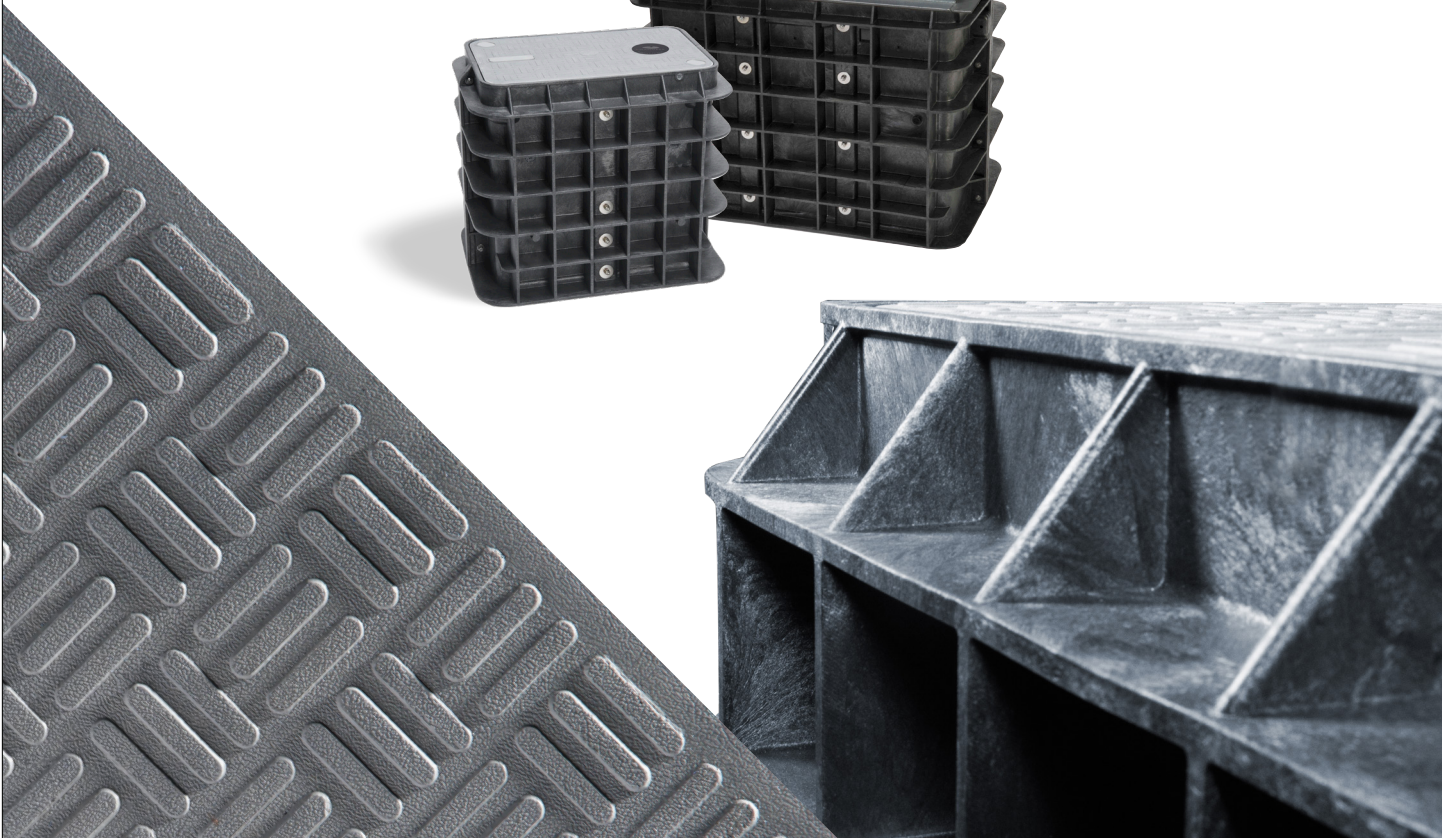




CHANNELL

# 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)<sup>™</sup>
- Vertical and Horizontal Rib Design
- Embedded Vertical Racking
- Reduced Installation Cost
- Highest Load Rating to Weight Ratio in the Industry

## TESTING CRITERIA

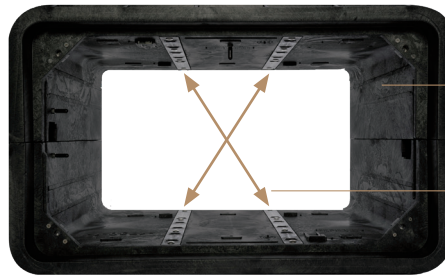
Covers meet or exceed:

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

**BULK Bodies** meet or exceed:

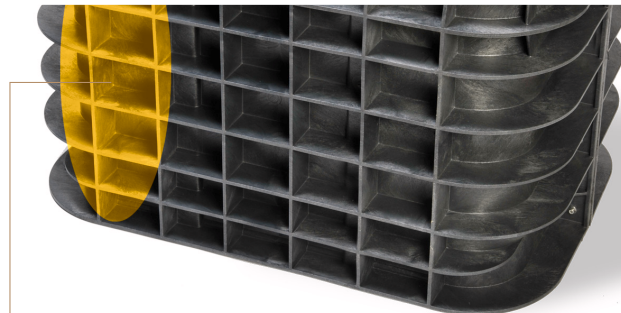
- ANSI/SCTE 77 2013-TIER 22
- Telcordia GR-902-CORE
- Western Underground Committee Guide 3.6
- AASHTO M-306 (H-20/25)
- AS3996 Slip Resistance
- ASTM-457

## 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

**3 covers**

Composite Ring  
Optional

**1 body**




**HDPE Plastic Cover**  
Light Duty 3,000 lbf (13.5 kN)










**Composite Cover**  
33,750 lbf (150kN)



**Ductile Iron Cover and Ring**  
56,200 lbf (250 kN)



**BULK Vault Body**  
60,000 lbf (267 kN)

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

## 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 efficient 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

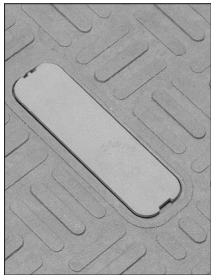
Size	Depth (in)	Available Lids	Bolt Type	Composite Ring
12" x 12"	12	Tier 22	Hex/Penta/Johnny	N
11" x 18"	12/18	Tier 22	Hex/Penta/Johnny	N
13" x 24"	12/18/24	LD/Tier 22/H-20	Hex/Penta/Self-Lock/L-Bolt/Johnny	N
17" x 30"	12/18/24/36	LD/Tier 22/H-20	Hex/Penta/Self-Lock/L-Bolt/Johnny	Y
24" x 36"	12/18/24/30/36/48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

		BULKU	XXXX	XX	X	XX	X	XXX
Family	_____							
Body Size	_____							
1212	12" x 12"	2436	24" x 36"					
1118	11" x 18"	3048	30" x 48"					
1324	13" x 24"	3660	36" x 60"					
1730	17" x 30"							
Body Depth (inches)	_____							
12	(1212, 1118, 1324, 1730, 2436)							
18	(1118, 1324, 1730, 2436, 3048)							
24	(1324, 1730, 2436, 3048, 3660)							
30	(2436, 3048)							
36	(2436, 3048, 3660)							
48	(3660)							
Brackets	_____							
0	None							
E	Vault Divider Panel							
R	Rapid Locate Device							
Cover Type	_____							
01	Solid Thermoplastic		(1324, 1730, 2436, 3048)					
02	Split Thermoplastic with 1212 Plug		(2436)					
04	Split Thermoplastic with 1010 Plug		(1730, 2436)					
06	Shield Solid Lid (Tier 22)		(1212, 1118, 1324, 1730, 2436)					
08	Shield Split Lid (Tier 22)		(3048, 3660)					
09	Shield Solid Lid with Rapid Locate		(1324, 1730, 2436) (> 12" deep)					
10	Shield Split Lid with Rapid Locate		(3048, 3660)					
11	Split Thermoplastic for Cabinet/OPF1420		(3048)					
17	Ductile Iron Lid and Ring		(1324, 1730, 2436, 3048)					
Bolt Type	_____							
0	No Bolts							
1	Hex Bolt		(9/16" Hex-Head)					
2	Penta Bolt		(7/8" Penta-Head)					
3	L-Bolt		(7/16" Hex-Head)					
4	Johnny Bolt		(1/2" Hex-Head Security "Allen" Bolt)					
6	Self-Lock		(7/16" Hex-Head (1324, 1730, 2436) (Thermoplastic & Shield Solid Lid Only)					
Logos	_____							

## STANDARD LID LOGOS

001	Channell USA (No logo)	009	Telecommunications	017	Gas w/Locator
002	Electric	010	Traffic Signal	018	Water w/Locator
003	Street Lighting	011	Fiber Optic Cable	019	Wastewater w/Locator
004	Communications	012	Broadband	020	Channell USA w/Locator (No Logo)
005	Gas	013	Wastewater	021	Broadband w/Locator
006	Water	014	Non-Potable Water	022	Fiber Optic Cable w/Locator
007	Signal	015	Electric w/Locator	023	Communications w/Locator
008	Power	016	Telecomm w/Locator	024	Ground
				025	Controls

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**

\* 50lbs per 1/2 cover

\*\* 90lbs per 1/2 cover

**Contact Your Local Channell Representative**



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