TRUE™ 15 and TRUE™ 22 Series
Advanced Composite Material Enclosures

Tier Rated Underground Enclosures
for Driveway / Parking Lot /
Off-Roadway Applications

MADE IN THE USA

50% to 75% less weight than comparable volume enclosures*

✓ RUGGED CONSTRUCTION
✓ STACKABLE
✓ LIGHTWEIGHT
✓ MORE USABLE VOLUME
✓ EASY TO INSTALL

Charles Industries has achieved a major breakthrough in material science as applied to grade level enclosures. Utilizing a process first proven and perfected in the manufacture of wind turbine blades, marine vessels and aircraft, Charles has developed an Advanced Composite Material (ACM) formulation that, when molded, provides superior performance and integrity exceeding industry tier loading standards. Through the use of its proprietary ACM formulation, Charles has developed grade level enclosures that are certified to meet and exceed all the requirements of ANSI/SCTE-77, including Tier 15 and Tier 22 loading. The revolutionary aspect of all of this performance is that it is accomplished while weighing up to 50-75% less than equivalent useable volume polymer concrete alternatives.

Charles' Tier Rated Underground Enclosures™ (TRUE) are made from advanced composite material using a proprietary molding and gelcoat process. The resulting enclosures are uniquely lightweight and rugged, providing superior performance with ease of handling and installation. TRUE grade level enclosures have a tapered wall design that provides greater useable volume compared to competitive polymer concrete cover sizes. The grade level enclosure industry has long focused on product sizes based on cover or lid size. However, the majority of grade level enclosure usages are for bulk volume applications (i.e. cable storage, splicing, drop management, valve control and metering). TRUE 15 and TRUE 22 grade level enclosures provide more useable volume than competitive models with the same cover size. Their tapered wall design also allows units to be stacked for shipping and storage, greatly reducing freight charges and handling in the warehouse.

The exterior surfaces of TRUE are finished with gelcoat, which cures to a durable, smooth finish resistant to ultraviolet degradation and hydrolysis. TRUE grade level enclosures are available in two standard colors, Utility Green or Graystone. The molding process is flexible for color customization for unique branding or identification requirements, please call for custom lid color options.

TRUE 15 and TRUE 22 Series grade level enclosures meet and exceed the Society of Cable Telecommunications Engineers' ANSI/SCTE-77 2013 "Specification for Underground Enclosure Integrity" Tier 15 Rated Loadings, while TRUE 22 Series enclosures meet and exceed Tier 22 Rated Loadings. ANSI tier loading designations establish minimum industry specifications for the safe and reliable performance of underground/grade level enclosures. Tier loadings measure supported weight loads and maximum deflection, both laterally and vertically.

*Typical findings from competitive product comparisons of like-sized fiberglass enclosures with polymer concrete lids conducted 2013.

Charles an **Amphenol** company

Features & Specifications

- Designed to meet or exceed ANSI/SCTE-77 Tier 15 ratings (TRUE 15 Series) or Tier 22 ratings (TRUE 22 Series) for various traffic applications
- Structurally rugged, non-metallic advanced composite material construction produces enclosures that are durable, lightweight, easy to install, and resistant to chemicals and water
- Tapered wall sides create maximum usable interior space
- Interior walls can support splice case and other mounting brackets using epoxy adhesive kits
- Deep well bottom edges provide long-term stability in grade level placements
- Units are available in two standard molded-in colors: Utility (Munsell) Green and Graystone, with many other special-order colors available
- Stainless steel hardware, including hex-head or penta head bolts
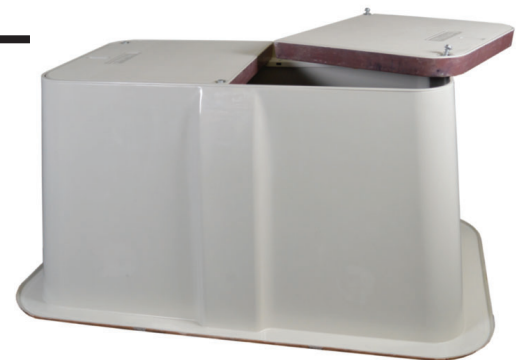- Integrated EMS detection available

Standard Colors

Utility Green   Graystone

Cover Size 17"x30"	Depth 18"	24"	30"	36"
Volume	N/A	7.8 ft^3	N/A	N/A
Cover Weight (T15)		26 lbs		
Base Weight (T15)		52 lbs		
Total Weight (T15)		78 lbs		
Cover Weight (T22)		26 lbs		
Base Weight (T22)		58 lbs		
Total Weight (T22)		84 lbs		
Pallet Qty	8/pallet		—	
Split Cover	Not Available			

Cover Size 24"x36"	Depth 18"	24"	30"	36"
Volume	9.0 ft^3	12 ft^3	15.1 ft^3	18.3 ft^3
Cover Weight (T15)	50 lbs	50 lbs	50 lbs	50 lbs
Base Weight (T15)	44 lbs	66 lbs	71 lbs	79 lbs
Total Weight (T15)	94 lbs	116 lbs	121 lbs	129 lbs
Cover Weight (T22)	50 lbs	50 lbs	50 lbs	50 lbs
Base Weight (T22)	48 lbs	72 lbs	82 lbs	89 lbs
Total Weight (T22)	98 lbs	122 lbs	132 lbs	149 lbs
Pallet Qty	8/pallet		6/pallet	
Split Cover	Available			

Cover Size 30"x48"	Depth 18"	24"	30"	36"
Volume	N/A	20.0 ft^3	N/A	30.2 ft^3
Cover Weight (T15)		82 lbs		82 lbs
Base Weight (T15)		87 lbs		120 lbs
Total Weight (T15)		169 lbs		202 lbs
Cover Weight (T22)		82 lbs		82 lbs
Base Weight (T22)		94 lbs		130 lbs
Total Weight (T22)		176 lbs		212 lbs
Pallet Qty	8/pallet		6/pallet	
Split Cover	Available			

Applications

- Fiber optic, copper and coaxial slack cable coiling and storage
- Access to sealed cases (splice cases, repeaters, load coils, SmartCoils™, etc.)
- Meter boxes / junction boxes
- Irrigation system and other waterway control valves
- Traffic and railway signal controls
- Ground rods

Cover Options

Cover Size	Tier 15	Tier 22	One-Piece Cover	Two-Piece Split Cover	6" Sq. Ped Cut-Out	8" Sq. Ped Cut-Out	10" Sq. Ped Cut-Out	12" Sq. Ped Cut-Out
17"x30"	X	X	X					
24"x36"	X	X	X	X	X	X	X	
30"x48"	X	X	X	X	X	X	X	X
30"x60"	X	X		X				

Cover Size 30"x60"	Depth 18"	24"	30"	36"
Volume	N/A	N/A	N/A	41.4 ft^3
Cover Weight (T15)				94 lbs (47x2)
Base Weight (T15)				161 lbs
Total Weight (T15)				255 lbs
Cover Weight (T22)				100 lbs (50x2)
Base Weight (T22)				161 lbs
Total Weight (T22)				261 lbs
Pallet Qty	—			4/pallet
Split Cover	Split Cover Only			

Please contact Charles Industries at (847) 806-6300 for availability of additional sizes and configurations. See back page for ordering information, accessories and full part numbers.

The TRUE Advantage!

- **Strength and Durability**   TRUE 15 Series meets ANSI/SCTE-77 Tier 15 Rated Loadings specifications, TRUE 22 Series meets ANSI/SCTE-77 Tier 22 Rated Loadings specifications

- **Significantly Lighter Weight**   Ease of handling and placement, less risk of worker injury

- **Stackability**   Lowers transportation cost and reduces storage space in warehouse or garage

- **Mobility**   Heavy machinery is not required to move units around at the warehouse or the job-site

- **Space**   Comparable or more useable volume under a given industry standard cover size

- **Improved Ergonomics**   Covers can be removed with little physical effort, and useable volume is closer to the surface for easier and safer access and retrieval of internal equipment; meets 2010 ADA Standards for Accessible Design

Usable Volume Comparison (Charles Tier 15 Series vs. Competitors)

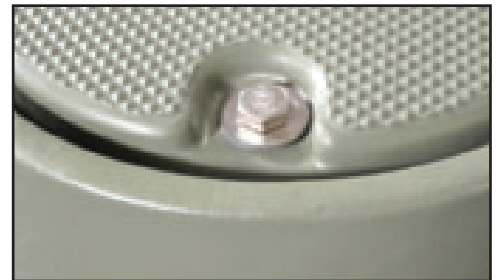| Charles TRUE-15					Competitive Polymer Concrete T-15*				
Cover Size	Depth (in)	Weight (lbs)	Cover Weight (lbs)	Useable Space	Useable Space	Cover Weight (lbs)	Weight (lbs)	Depth (in)	Cover Size
17"x30"	24	78	26	7.8 ft³	5.4 ft³	83	190	24	17"x30"
24"x36"	18	94	50	9.7 ft³	6.4 ft³	115	270	18	24"x36"
24"x36"	24	116	50	12.0 ft³	8.1 ft³	115	310	24	24"x36"
24"x36"	30	134	50	15.4 ft³	11.2 ft³	115	320	30	24"x36"
24"x36"	36	129	50	18.6 ft³	14.4 ft³	115	370	36	24"x36"
30"x48"	24	174	80	20.2 ft³	18.5 ft³	206	444	24	30"x48"
30"x48"	36	212	80	30.2 ft³	24.5 ft³	206	600	36	30"x48"
30"x60"	36	253	94 (47x2)	41.4 ft³	34.9 ft³	346	911	36	30"x60"

*Average findings from competitive offerings of OldCastle® H-Series, Quazite® and NewBasis PC (2013 study).
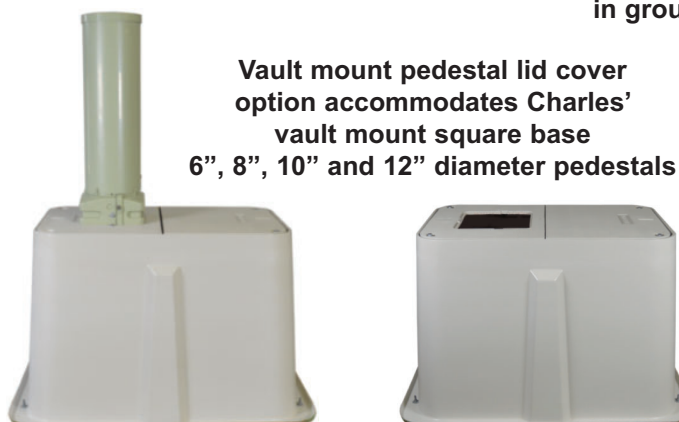

Optional split lid covers facilitate lid removal, access, and technician safety

Stability flange keeps enclosure firmly planted in ground and level

Recessed bolt locks with multiple stainless steel bolt types

Vault mount pedestal lid cover option accommodates Charles' vault mount square base 6", 8", 10" and 12" diameter pedestals

MADE IN THE USA

Lift pins aid in safe and quick cover removal

Optional nameplate/ customer ID insets

✓ **LIGHTWEIGHT**   ✓ **RUGGED**   ✓ **STACKABLE**   ✓ **SECURE**   ✓ **MORE USABLE VOLUME**

TRUE 15 Series and TRUE 22 Series Part # Nomenclature

1	2	3	4	5	6	7	8	9	10	11

1 – Product
C   = C-Series (Tier 15)
T   = T-Series (Tier 22)

2 – Size - Width*
17   = 17 inches
24   = 24 inches
30   = 30 inches

3 – Size - Length*
30   = 30 inches
36   = 36 inches
48   = 48 inches
60   = 60 inches

4 – Size - Depth*
18   = 18 inches
24   = 24 inches
30   = 30 inches
36   = 36 inches
XX   = Cover Only

For #2-#5, see Page 2 "Features and Specifications" for valid size combinations, and "Cover Options" for valid covers per enclosure size.

5 – Type*
A   = Base/1-Piece Cover
S   = Base/2-Piece Split Cover
X   = Base/2-Piece Split Cover & 6" Sq. Base Cut-Out
Q   = Base/2-Piece Split Cover & 8" Sq. Base Cut-Out
P   = Base/2-Piece Split Cover & 10" Sq. Base Cut-Out
T   = Base/2-Piece Split Cover & 12" Sq. Base Cut-Out
B   = Base Only
C   = Cover Only

6 – Base Color
E   = Graystone
G   = Green
X   = No Base

7 – Cover Color
E   = Graystone
G   = Utility Green
X   = No Cover

8 – Base Option
T   = Tapered (std.)
M   = Mouse Hole
X   = No Base
Z   = Custom Configuration

9 – Bolt Type
H   = Hex-head
R   = 7/8" Penta-head
X   = No Hardware

10 – EMS Detection
T   = Telephone
P   = Power
X   = None

11 – Nameplate/Customer ID**
CA = CATV
CU = COMMUNICATIONS
EL = ELECTRIC
FO = FIBER OPTIC
TE = TELEPHONE
XX = Blank (Filler)

**Nameplate codes may not be available on all product types. Nameplates can be molded directly into cover upon request.

Additional sizes/configurations available per custom order. Please call (847) 806-6300 for sales assistance and additional product information; including availability of custom lid colors, pedestal mount lids, interior mounting brackets and other options and accessories.

Charles TRUE 15 Series grade level enclosures are for use in driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic as defined by NSI/SCTE-77 2013 "Specification for Underground Enclosure Integrity" Tier 15 Rated Loadings. Design load 15,000 lbs. & minimum failure load of 22,500 lbs.

Charles TRUE 22 Series grade level enclosures are for use in driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic as defined by NSI/SCTE-77 2013 "Specification for Underground Enclosure Integrity" Tier 22 Rated Loadings. Design load 22,500 lbs. & minimum failure load of 33,750 lbs.

Lifting Hook Accessory

Part #:TRUE-LFTHOOK
Used to safely grab onto lid lift pin for easy cover removal**.**
31" length, steel construction.

Dependable Solutions, Superior Support
- Field-proven and unequaled 24-hour technical support
- Individualized application consultation
- Superior quality (ISO 9001/TL 9000 registered)

Visit our website at http://www.charlesindustries.com