# TRUE<sup>™</sup> 15 and TRUE<sup>™</sup> 22 Series Advanced Composite Material Enclosures



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<sup>™</sup> (TRUE) are made from advanced composite material using a proprietary molding and gelcoat process. The resulting enclosures are uniquely lighweight 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.





### 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





Cover Size	Depth				
17"x30"	18"	24"	30"	36"	
Volume		7.8 ft <sup>3</sup>			
Cover Weight (T15)		26 lbs			
Base Weight (T15)		52 lbs			
Total Weight (T15)	N/A	78 lbs	N/A	N/A	
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	Depth					
24"x36"	18"	24"	30"	36"		
Volume	9.0 ft <sup>3</sup>	12 ft <sup>3</sup>	15.1 ft <sup>3</sup>	18.3 ft <sup>3</sup>		
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			allet		
Split Cover	Available					

Cover Size	Depth				
30"x48"	18"	24"	30"	36"	
Volume		20.0 ft <sup>3</sup>		30.2 ft <sup>3</sup>	
Cover Weight (T15)	1	82 lbs	N/A	82 lbs	
Base Weight (T15)		87 lbs		120 lbs	
Total Weight (T15)	AN	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<sup>™</sup>, 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		Two-Piece Split Cover			10" Sq. Ped Cut-Out	12" Sq. Ped Cut-Out
17"x30"	Х	х	х					
24"x36"	х	х	х	х	х	х	х	
30"x48"	х	х	х	х	х	х	х	х
30"x60"	х	Х		х				

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.



Depth				
18"	24"	30"	36"	
			41.4 ft <sup>3</sup>	
		N/A	94 lbs	
			(47x2)	
	N/A		161 lbs	
N/A N/A			255 lbs	
			100 lbs	
			(50x2)	
			161 lbs	
			261 lbs	
— 6/pallet			pallet	
Split Cover Only				
	N/A	18" 24" ¥Z ¥Z	18" 24" 30"	

#### Standard Colors



Utility Graystone Green

#### 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 (Ibs)	Cover Weight (Ibs)	Useable Space	Useable Space	Cover Weight (Ibs)	Weight (Ibs)	Depth (in)	Cover Size
17"x30"	24	78	26	7.8 ft <sup>3</sup>	5.4 ft <sup>3</sup>	83	190	24	17"x30"
24"x36"	18	94	50	9.7 ft³	6.4 ft <sup>3</sup>	115	270	18	24"x36"
24"x36"	24	116	50	12.0 ft <sup>3</sup>	8.1 ft <sup>3</sup>	115	310	24	24"x36"
24"x36"	30	134	50	15.4 ft <sup>3</sup>	11.2 ft <sup>3</sup>	115	320	30	24"x36"
24"x36"	36	129	50	18.6 ft <sup>3</sup>	14.4 ft <sup>3</sup>	115	370	36	24"x36"
30"x48"	24	174	80	20.2 ft <sup>3</sup>	18.5 ft <sup>3</sup>	206	444	24	30"x48"
30"x48"	36	212	80	30.2 ft <sup>3</sup>	24.5 ft <sup>3</sup>	206	600	36	30"x48"
30"x60"	36	253	94 (47x2)	41.4 ft <sup>3</sup>	34.9 ft <sup>3</sup>	346	911	36	30"x60"



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



Lift pins aid in safe and quick cover removal



**Optional nameplate/** customer ID insets



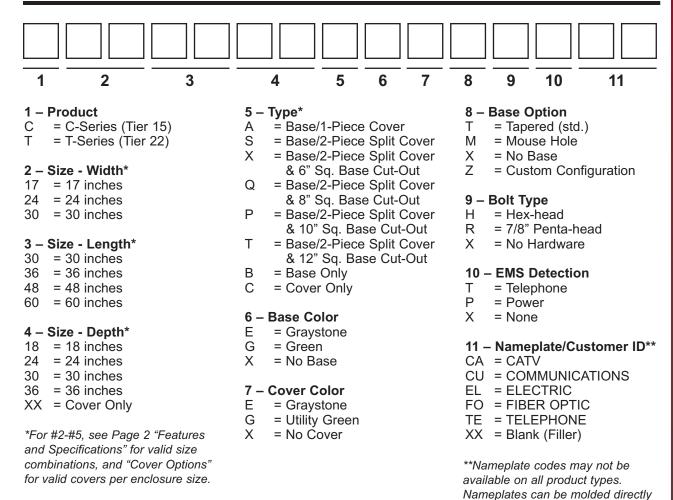
**✓ RUGGED** 

✓ **STACKABLE** 

✓ SECURE

✓ MORE USABLE VOLUME

#### TRUE 15 Series and TRUE 22 Series Part # Nomenclature



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.



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# MADE IN THE

#### Charles Industries, Ltd. Telecommunications Group

Voice: (847) 806-6300 Fax: (847) 806-6231 E-mail: mktserv@charlesindustries.com

into cover upon request.

Lifting Hook Accessory

Part #:TRUE-LFTHOOK31 Used to safely grab onto lid lift

pin for easy cover removal.

31" length, steel construction.





D-OSP153-A17