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

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

50% to 75% less weight than comparable volume enclosures

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



Amphenol 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, Amphenol 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, Amphenol 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 usable volume polymer concrete alternatives.

Amphenol's 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 usable 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 usable 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.





Standard Colors

Gravstone

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





Utility

Green

| Cover Size | Depth | | | |
|--------------------|----------|---------------------|---------|-----|
| | 18" | 24" | 30" | 36" |
| Volume | | 7.8 ft ³ | | |
| Cover Weight (T15) | | 26 lbs | | |
| Base Weight (T15) | | 52 lbs | | N/A |
| Total Weight (T15) | \ \X | 78 lbs | NA | |
| Cover Weight (T22) | | 26 lbs | | |
| Base Weight (T22) | | 58 lbs | | |
| Total Weight (T22) | | 84 lbs | | |
| Pallet Quantity | 8/pallet | | _ | |
| Split Cover | | Av | ailable | |

| Cover Size | 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 Quantity | 8/pa | allet | 6/pa | allet | |
| Split Cover | | | Available | | |

| <u> </u> | | | | | | | |
|--------------------|-----------|----------------------|-----|----------------------|--|--|--|
| Cover Size | Depth | | | | | | |
| | 18" | 24" | 30" | 36" | | | |
| Volume | | 20.0 ft ³ | | 30.2 ft ³ | | | |
| Cover Weight (T15) | | 82 lbs | | 82 lbs | | | |
| Base Weight (T15) | | 87 lbs | | 120 lbs | | | |
| Total Weight (T15) | N N | 169 lbs | N N | 202 lbs | | | |
| Cover Weight (T22) | | 82 lbs | | 82 lbs | | | |
| Base Weight (T22) | | 94 lbs | | 130 lbs | | | |
| Total Weight (T22) | | 176 lbs | | 212 lbs | | | |
| Pallet Quantity | 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 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 | | | | |



| Cover Size | Depth | | | | |
|--------------------|------------------|-------------|------------|----------------------|--|
| | 18" | 24" | 30" | 36" | |
| Volume | | | | 41.4 ft ³ | |
| Cover Weight (T15) | | | | 94 lbs | |
| Base Weight (T15) | | | | 161 lbs | |
| Total Weight (T15) | \ Z | × ∀ X | A/N | 255 lbs | |
| Cover Weight (T22) |] _ | | | 100 lbs | |
| Base Weight (T22) | 1 | | | 161 lbs | |
| Total Weight (T22) | | | | 261 lbs | |
| Pallet Quantity | - | _ | - 6/pallet | | |
| Split Cover | Split Cover Only | | | | |

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 usable volume under a given industry standard cover size

 Improved Ergonomics Covers can be removed with little physical effort, and usable 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 (AmphenolTier 15 Series vs. Competitors)

| Amphenol 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 ft ³ | 115 | 270 | 18 | 24"x36" |
| 24"x36" | 24 | 116 | 50 | 12.0 ft ³ | 8.1 ft³ | 115 | 310 | 24 | 24"x36" |
| 24"x36" | 30 | 134 | 50 | 15.4 ft ³ | 11.2 ft³ | 115 | 320 | 30 | 24"x36" |
| 24"x36" | 36 | 129 | 50 | 18.6 ft ³ | 14.4 ft³ | 115 | 370 | 36 | 24"x36" |
| 30"x48" | 24 | 174 | 80 | 20.2 ft ³ | 18.5 ft³ | 206 | 444 | 24 | 30"x48" |
| 30"x48" | 36 | 212 | 80 | 30.2 ft ³ | 24.5 ft ³ | 206 | 600 | 36 | 30"x48" |
| 30"x60" | 36 | 253 | 94 (47x2) | 41.4 ft³ | 34.9 ft ³ | 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









Optional nameplate/ customer ID insets

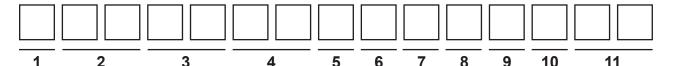
Lift pins aid in safe and quick cover removal





LIGHTWEIGHT

TRUE 15 Series and TRUE 22 Series Part # Nomenclature



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

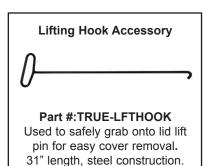
XX = Blank (Filler)

**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 your sales representative for assistance and additional product information; including availability of custom lid colors, pedestal mount lids, interior mounting brackets and other options and accessories.

Amphenol 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.

Amphenol 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.



Please contact your ABS sales representative for availability of additional sizes and configurations.

