

# UNDERGROUND ENCLOSURES AND PADS



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## Underground Enclosure Performance Specifications

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Enclosures, boxes and covers are required to conform to all test provisions of the most current ANSI/SCTE 77 “Specification For Underground Enclosure Integrity” for Tier\_\_\_\_\_ (specify Tier 5, 8, 15 and/or 22) applications. When multiple “Tiers” are specified the boxes must physically accommodate and structurally support compatible covers while possessing the highest Tier rating. All covers are required to have the Tier level rating embossed on the surface. In no assembly can the cover design load exceed the design load of the box. All components in an assembly (box & cover) are manufactured using matched surface tooling. Independent third party verification or test reports stamped by a registered Professional Engineer certifying that all test provisions of this specification have been met are required with each submittal.

## Warranty

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### Warranty - Material

Hubbell Power Systems, Inc. warrants all products sold by it to be merchantable (as such term is defined in the Uniform Commercial Code) and to be free from defects in material and workmanship. Buyer must notify the Company promptly of any claim under this warranty. The Buyer's exclusive remedy for breach of this warranty shall be the repair or replacement, F.O.B. factory, at the Company's option, of any product defective under the warranty which is returned to the Company within two months from the date of shipment. NO OTHER WARRANTY, WHETHER EXPRESS OR ARISING BY OPERATION OF LAW, COURSE OF DEALING, USAGE OF TRADE OR OTHERWISE IMPLIED, SHALL EXIST IN CONNECTION WITH THE COMPANY'S PRODUCTS OR ANY SALE OR USE THEREOF. The Company shall in no event be liable for any loss of profits or any consequential or special damages incurred by Buyer. The Company's warranty shall run only to the first Buyer of a product from the Company, from the Company's distributor, or from an original equipment manufacturer reselling the Company's product, and is non-assignable and non-transferable and shall be of no force and effect if asserted by any person other than such first Buyer. This warranty applies only to the use of the product as intended by Seller and does not cover any misapplication or misuse of said product.

### Warranty - Application

Hubbell Power Systems, Inc. does not warrant the accuracy of and results from product or system performance recommendations resulting from any engineering analysis or study. This applies regardless of whether a charge is made for the recommendation, or if it is provided free of charge.

Responsibility for selection of the proper product or application rests solely with the purchaser. In the event of errors or inaccuracies determined to be caused by Hubbell Power Systems, Inc. , its liability will be limited to the re-performance of any such analysis or study.

NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

## **QUAZITE® Products for Underground Construction**

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### **Introduction**

Since 1971, QUAZITE® precast polymer concrete products have been used by utilities and contractors for durable, cost-effective applications. QUAZITE® encompasses a broad range of underground utility products including: service boxes and hand-holes, electrical equipment pads, telephone cabinet pads, CATV enclosures, water meter boxes, box pads and traffic signal cabinet bases.

QUAZITE® manufacturing/distribution centers are in Lenoir City, Tennessee and San Jose, California providing nationwide service and prompt delivery.

### **Engineering**

Registered professional engineers are on hand to assist with design, specification development and review. Full CAD capabilities are available and can be used to electronically transmit drawings and files to you. Product drawings can be accessed from our website:

**[www.quazite.com](http://www.quazite.com)**

### **Quality Assurance**

The Quality Assurance staff at each QUAZITE® manufacturing facility assures product consistency and conformance to customer specifications. The test labs and manufacturing processes at all QUAZITE® facilities are accepted by Underwriters Laboratories, Inc. (UL).

QUAZITE® underground products solve problems in thousands of specific applications in many industries. If one or more of the products described here could be the right solution for you, please contact your local QUAZITE® representative for more information.



*QUAZITE® switchgear box pads are used for easier, quicker and less expensive installations.*



## Precast Polymer Concrete

### What Is Polymer Concrete?

Polymer concrete is made from selectively-graded aggregates in combination with a polymer resin system. When combined through a process of mixing, molding and curing, an extremely powerful cross-linked bond is formed. Precast polymer concrete is reinforced with fiberglass for exceptional strength and rigidity.

### Why Use Polymer Concrete?

- **Lightweight** — 1/10 to 1/3 the weight of concrete
- **High Strength** — compressive, flexural and tensile strengths three to five times higher than traditional concrete
- **Reduced Installation Costs** — easy to handle, no special equipment required
- **Stable Under Freeze/Thaw Conditions**
- **Impact Resistant** — tested per ASTM D-2444
- **Low Water Absorption** — less than 1% per ASTM D-570
- **Corrosion Resistant** — resistant to alkalines, acids, weathering and other forms of deterioration
- **Cost Effective** — outperforms conventional materials for longer service and lower life cycle costs
- **Nonflammable** — will not support combustion
- **Nonconductive** — no grounding required for the box or cover

### Design Possibilities

Precast polymer concrete offers a variety of design possibilities.

- **Development of New Parts** — Years of experience enable QUAZITE<sup>®</sup> engineers to produce custom designed parts to your specifications.
- **Size** — Monolithic boxes are being made up to 4' x 8' x 4'. Pads for cabinets or equipment enclosures are currently being made as small as 25" x 38" and as large as 93" x 93" and even larger when bolted together. If other sizes are required, contact your local QUAZITE<sup>®</sup> representative.
- **Composite Design** — An experienced staff is available to assist in the development of specifications and design of products.
- **Custom Accessories** — Many options are available for QUAZITE<sup>®</sup> products, including racking and struts, knockouts, holes, logos, terminators, gaskets, pulling eyes, and numerous other options. Please see pages 53 - 59 in the Quazite catalog for a complete listing of options.



The strong polymer concrete construction allows QUAZITE<sup>®</sup> enclosures to be stacked for even greater depths.

### Typical Properties of Polymer Concrete

#### Mechanical Properties

Modulus of elasticity	1 to 2.4 x 10 <sup>6</sup> psi
Compressive strength	9,000-15,000 psi
Flexural strength	3,000-6,000 psi
Impact energy	30-72 ft.-lbs.
Tensile strength	800-1,100 psi

#### Physical Properties

Freeze/thaw resistance (2,500 cycles)	No significant change
Density	85-150 lbs./cu. ft.
Barcol hardness	45
Coefficient of friction (covers)	Greater than 0.5
Water absorption	Less than 1%

#### Chemical Resistance - per ANSI/SCTE 77, Section 4

Tested according to the requirements of ASTM Method D-543, Section 7, Procedure 1 for chemical resistance, using the following chemicals in the concentrations noted:

CHEMICAL	CONCENTRATION
Sodium Chloride	5%
Sulfuric Acid	0.1N
Hydrochloric Acid	0.2N
Sodium Hydroxide	0.1N

Properties will vary depending upon the particular formulation. Customized properties can be achieved by using nonstandard resins, by changing or adding reinforcements, and by tailoring the overall composite design.

## The Product Line



QUAZITE® has a broad product line for the underground construction industry.

### Enclosures

For use as splice boxes, pull boxes or equipment enclosures for any application requiring easy access to an underground service (i.e. electrical, telephone, fiber optics, CATV, water, gas, etc.). Available in a large variety of sizes and styles with either standard, heavy duty or optional overlapping covers. No grounding is required for the box or cover. Fits flush with sidewalk or grass area. Covers are skid resistant. Replacement covers and meter lids, hardware, inserts and grade adjustable extensions are available options. Boxes and covers are ANSI/SCTE 77 compliant for intended applications.



### Electrical Equipment and Telecommunications Cabinet Pads

Used under transformers and telephone cabinets to add stability, prevent corrosion of metal cabinets, provide a fire break, and protect cabinets from damage caused by mowing equipment. Available as a solid pad or as a Splitt-Pad® for easy retrofits.

### Box Pads and Traffic Signal Cabinet Bases

Precast polymer concrete box pads and traffic signal cabinet bases eliminate forming and pouring and are lightweight, resulting in easy handling and a lower installed cost. Excavation and installation of the entire unit can be done in one day. Can be reused in other locations.



## National Electric Code, ANSI/SCTE 77, and UL Listing

### NEC and Underground Enclosures

The National Electric Code states in article 314.30 that enclosures “shall be designed and installed to withstand all loads likely to be imposed,”<sup>1</sup> and addresses issues related to enclosure size, wiring entries, enclosures without bottoms, and bonding requirements for covers.

The Code references the ANSI/SCTE 77<sup>2</sup> “Specification for Underground Enclosure Integrity” National Standard<sup>3</sup>, which outlines various tests that enclosures must pass to meet the standard. ANSI/SCTE 77 also provides load charts with Tier ratings to help end users determine the appropriate enclosure to select depending on the loadings expected in the application.

### QUAZITE<sup>®</sup> Enclosures UL Listed to ANSI Standard

All QUAZITE<sup>®</sup> enclosures meet or exceed the test provisions of ANSI/SCTE 77 2007 and most enclosures sized 30” x 48” and smaller are UL Listed to the ANSI National Standard as referenced in the 2005 & 2008 NEC. This means that QUAZITE<sup>®</sup> enclosures have undergone rigorous physical, environmental and internal equipment protection tests and have been found by UL, a neutral third party, to meet the test requirements of the ANSI National Standard.

No one wants to be responsible for an accidental electrocution from a collapsed enclosure or energized cover. By using the NEC, ANSI/SCTE 77, and UL Listing requirements in the enclosure

selection process, end-users will help ensure long service life, increased safety and reduced potential liability associated with failed underground enclosures.

### Testing Requirements for ANSI/SCTE 77 2007

Underground enclosures must successfully pass numerous material and product performance tests before they can meet ANSI/SCTE 77 2007. These tests include:

- Three Position Load Testing to Simulate Actual Application
- UV Degradation per ASTM G-154
- Fire Resistance per RUS 7CFR 1755.910 (PE-91) and WUC 3.6 Section 5.2.7
- Chemical Resistance per ASTM D-543
- Water Absorption per ASTM D-570
- Impact Resistance per ASTM D-2444
- Accelerated Service per ASTM D-756, Procedure E

**NOTE:** Quazite recommends testing by third party organizations such as UL to verify that enclosures meet all test provisions of ANSI/SCTE 77.

*UL Listing Card*

- 1 National Fire Protection Agency, 2005 & 2008 National Electric Code.
- 2 Subsequent to the issuance of the 2005 NEC, ANSI approved an updated version of the standard, ANSI/SCTE 77 2007.
- 3 The latest copy of the standard may be purchased from ANSI. It may also be viewed in PDF form on SCTE’s website at [www.scte.org/documents/pdf/ANSISCTE%2077%202007.pdf](http://www.scte.org/documents/pdf/ANSISCTE%2077%202007.pdf).

**BGHL**  
Boxes, Enclosures, Handholes and Vaults, Underground, Utility Specification  
**HUBBELL - LENOIR CITY** **E190048**  
**3621 INDUSTRIAL PARK DR, LENOIR CITY TN 37771**

Underground boxes investigated in accordance with Western Underground Committee Guide 3.6, the Society of Cable Telecommunication Engineers Recommended Practices for Coaxial Cable Construction and Testing, Issue 1, Section 5 and the American National Standards Institute/Society of Cable Telecommunication Engineers Standard ANSI/SCTE 77 2002.

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**LOOK FOR LISTING MARK ON PRODUCT**

Underwriters Laboratories Inc. Card 1 of 1

## Enclosure Selection Guide

To Select the Enclosure You Need for Your Application:

- 1 .... Determine UL Requirements**
- 2 ..... Determine Load Ratings
- 3 ..... Determine Handhole Opening Size
- 4 ..... Select Cover Series & Style
- 5 ..... Select Box Style
- 6 ..... Determine Options & Hardware

### Using The Selection Guide

Follow the steps outlined in this guide to select the enclosure for your application. These steps will take you through the typical decisions necessary to determine the proper size and style enclosure for your application. **The UL Listed enclosures are highlighted throughout this selection guide to help in identifying them.**

A detailed product information listing follows the selection guide. All QUAZITE® products are listed here by size and style with dimensions and ordering information.

For more information or for answers to any questions you might have, call your local QUAZITE® representative. Detailed product drawings can be viewed from our website:

[www.quazite.com](http://www.quazite.com)

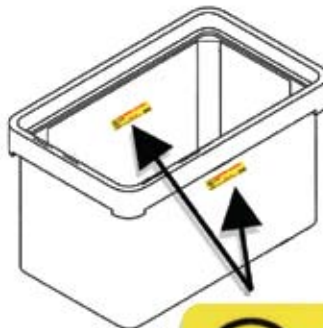
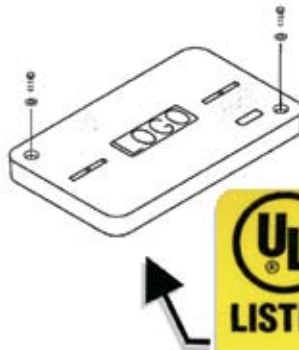


Most QUAZITE® underground enclosures in sizes through 30" x 48" are UL Listed.

### 1 UL Listed Enclosures

Determine if a UL Listed enclosure is required for your installation. Federally funded electrical and telecom projects, as well as many state and municipal projects, generally require the use of a UL Listed product whenever one is available.

Most QUAZITE® underground handhole enclosures in sizes through 30" x 48" are UL Listed. These products are clearly marked with the UL label on both the box and underneath the cover. Special order boxes with holes and mouseholes may also qualify for UL Listing as long as the holes do not exceed 25% of the area of each sidewall.



Highlighted areas indicate UL Listing

# Enclosure Selection Guide

To Select the Enclosure You Need for Your Application:

- 1..... Determine UL Requirements
- 2..... Determine Load Ratings**
- 3..... Determine Handhole Opening Size
- 4..... Select Cover Series & Style
- 5..... Select Box Style
- 6..... Determine Options & Hardware

## 2 Load Ratings

QUAZITE<sup>®</sup> QUAZITE<sup>®</sup> underground handhole enclosures are designed to meet or exceed the tier loadings set forth in the American National Standards Institute's ANSI/SCTE 77 2007 "Specification for Underground Enclosure Integrity"<sup>1</sup>. ANSI tier designations are minimum specifications used by the industry to ensure the safe and reliable performance of underground handhole enclosures.

The ANSI application tier number relates to a nominal design load times 1,000 pounds (i.e.: Tier 8 = 8 x 1,000 lbs. = 8,000 lbs.). All ANSI tier loadings will have a corresponding test load which is 50% greater than the design load. The maximum deflection at the indicated design load shall be 1/2 inch for vertical tests and 1/4 inch per foot of length for lateral tests.

### Application Tiers & Static Vertical Wheel Load Ratings per ANSI/SCTE 77 2007 "Specification for Underground Enclosure Integrity"

*NOTE - QUAZITE<sup>®</sup> products are not intended for use in deliberate traffic areas.*

Application Tiers	Loading Requirements				UL Listed to meet ANSI 77 Requirements <sup>2</sup>
	Vertical	Design Load	Test Load		
<b>TIER 5'</b> Sidewalk applications with a safety factor for occasional non-deliberate vehicular traffic	Vertical	Design Load	22.2 kN	5,000 lbs.	PC 13"x24" or PC 17"x30" style enclosure and cover assemblies with standard covers (CA) and standard covers w/o bolts (WA).
		Test Load	33.3 kN	7,500 lbs.	
Lateral	Design Load	28.7 kPa	600 lbs./sq. ft.	PG and PT style enclosure and cover assemblies up to 30" x 48" and PC style in sizes 6"x8", 8"x18", 11"x18" and 12"x12" with standard covers (CA) and standard covers w/o bolts (WA).	
	Test Load	43.1 kPa	900 lbs./sq. ft.		
<b>TIER 8'</b> Sidewalk applications with a safety factor for non-deliberate vehicular traffic	Vertical	Design Load	35.6 kN	8,000 lbs.	PG, PT and PC style enclosure and cover assemblies up to 30"x48" with heavy duty covers (HA).
		Test Load	53.4 kN	12,000 lbs.	
Lateral	Design Load	28.7 kPa	600 lbs./sq. ft.	PG, PT and PC style enclosure and cover assemblies up to 30"x48" with heavy duty covers (HA).	
	Test Load	43.1 kPa	900 lbs./sq. ft.		
<b>TIER 15'</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	Vertical	Design Load	66.7 kN	15,000 lbs.	PC, PD, PG and PT style enclosure and cover assemblies up to 30" x 48" with extra heavy duty covers (HH).
		Test Load	100.1 kN	22,500 lbs.	
Lateral	Design Load	38.3 kPa	800 lbs./sq. ft.	PC, PD, PG and PT style enclosure and cover assemblies up to 30" x 48" with extra heavy duty covers (HH).	
	Test Load	57.5 kPa	1,200 lbs./sq. ft.		
<b>Tier 22'</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	Vertical	Design Load	100.1 kN	22,500 lbs.	PC, PD, PG and PT style enclosure and cover assemblies up to 30" x 48" with extra heavy duty covers (HH).
		Test Load	150.1 kN	33,750 lbs.	
Lateral	Design Load	38.3 kPa	800 lbs./sq. ft.	PC, PD, PG and PT style enclosure and cover assemblies up to 30" x 48" with extra heavy duty covers (HH).	
	Test Load	57.5 kPa	1,200 lbs./sq. ft.		
<b>AASHTO H-20</b> Deliberate vehicular traffic applications ONLY. Quazite does not currently offer any enclosures for this application tier.	Certified precast concrete, cast iron or other AASHTO recognized materials.*				*There are no AASHTO design or test provisions for polymer composites. Therefore there is no recognized method of testing for qualification. Applying other material testing methods to polymer composites is not recognized by AASHTO. <b>BUYER BEWARE!</b>

### Three Position Testing

A key requirement outlined in ANSI/SCTE 77 2007 is three position testing for enclosures. Three position testing is required to determine how a product will perform in actual use.

In order to qualify a product's performance, test loading should be performed at the lateral center of the longest sidewall, at the vertical center of the longest sidewall, and at the vertical in the center of the cover. QUAZITE<sup>®</sup> products have been tested to each of the three positions as required by ANSI and all have met or exceeded the requirements.

- 1 Electronic file available at [www.scte.org/documents/pdf/ANSISCTE%2077%202007.pdf](http://www.scte.org/documents/pdf/ANSISCTE%2077%202007.pdf).
- 2 Some QUAZITE<sup>®</sup> products are currently not UL Listed. Refer to pg. 15 for a complete listing of products.

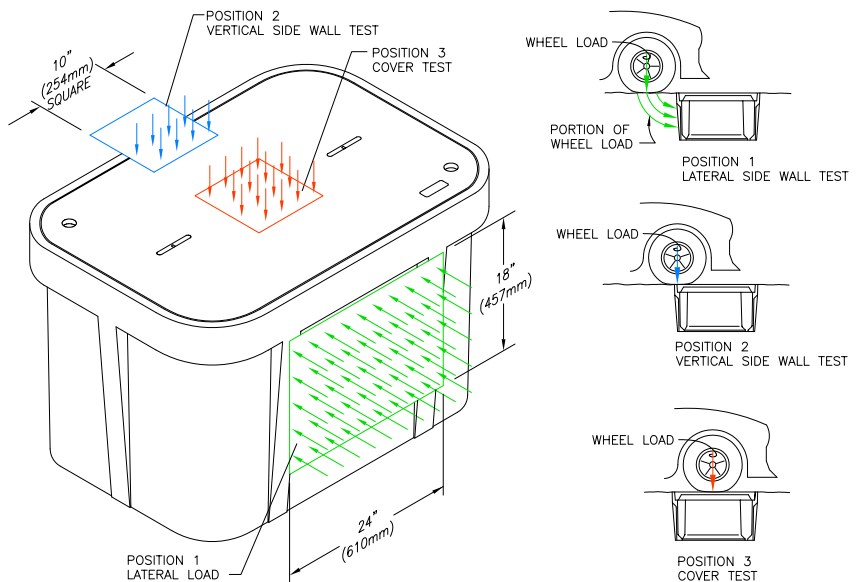


Figure 4.1 from ANSI/SCTE 77 2007



## Enclosure Selection Guide

### 3 Handhole Opening Sizes

Box & Cover	
Style Available	Size
PC	6" x 8"
PC	8" x 8"
PC	8" x 18"
PT	10" x 15"
PG & PC	11" x 18"
PC & LX	12" x 12"
PG, PC, & PT	13" x 24"
PG, PC, PD & PT	17" x 30"
PG	24" x 24"
PG & PD	24" x 36"
PG & PD	30" x 48"
PG	30" x 60"
PG	36" x 36"
PG	36" x 60"
PG	36" x 72"
PG	48" x 48"
PG	48" x 72"
PG	48" x 96"

To Select the Enclosure You Need for Your Application:

- 1 ..... Determine UL Requirements
- 2 ..... Determine Load Ratings
- 3 .... Determine Handhole Opening Size**
- 4 ..... Select Cover Series & Style
- 5 ..... Select Box Style
- 6 ..... Determine Options & Hardware



QUAZITE® enclosures are used for underground fiber optics and electric cable.



Hubbell keeps a large inventory of QUAZITE® enclosures to ensure immediate availability.

Highlighted areas indicate UL Listing



QUAZITE® enclosures are lightweight for easy installation.

## Enclosure Selection Guide

### 4 Cover Series & Styles

#### CA/WA/CG Series Covers

CA covers are designed to bolt down. WA covers do not have provisions to bolt the covers in place. CG covers feature a grommet package to reduce incoming fluids into the enclosure. CG covers must be used with gasketed boxes.

- Design Load: 8,000 lbs. over a 10" square with a minimum test load of 12,000 lbs. (ANSI Tier 8)  
(For PG, PT, PR and smaller PC styles)
- Design Load: 5,000 lbs. over a 10" square with a minimum test load of 7,500 lbs. (ANSI Tier 5)  
(For PC 13" x 24" and PC 17" x 30" styles and all LG styles)

#### HA/HG Series Covers

Heavy duty covers (available for PG, PD, PC and PR box styles) are designed for driveways, parking lots and off-roadway applications where subject to occasional non-deliberate vehicular traffic. HG covers feature a grommet package to reduce incoming fluids into the enclosure. HG covers must be used with gasketed boxes.

- Design Load: 15,000 lbs. over a 10" square with a minimum test load of 22,500 lbs. (ANSI Tier 15)

To Select the Enclosure You Need for Your Application:

- 1 ..... Determine UL Requirements
- 2 ..... Determine Load Ratings
- 3 ..... Determine Handhole Opening Size
- 4 .... Select Cover Series & Style**
- 5 ..... Select Box Style
- 6 ..... Determine Options & Hardware

#### HH Series Covers

Extra heavy duty HH covers are designed for driveways, parking lots and off-roadway applications where subject to occasional non-deliberate traffic by heavy vehicles. Contact your local QUAZITE<sup>®</sup> representative for availability of sizes.

- Design Load: 22,500 lbs. over a 10" x 20" area with minimum test load of 33,750 lbs. (ANSI Tier 22)

### Cover Load Rating

QUAZITE<sup>®</sup> Cover Performance Chart (Wheel Loads)\*

Cover		Design (lbs.)	Test Load (lbs.)	Test Area	ANSI Tier
Style	Series				
LG	CA/WA	5,000	7,500	10" x 10"	5
PC1324 & PC1730	CA/WA	5,000	7,500	10" x 10"	5
PC all other sizes	CA/WA	8,000	12,000	10" x 10"	8
PG/PT	CA/WA	8,000	12,000	10" x 10"	8
PC	HA	15,000	22,500	10" x 10"	15
PG/PT	HA	15,000	22,500	10" x 10"	15
PG	HH	22,500	33,750	10" x 20"	22
PR	CA/WA	8,000	12,000	10" x 10"	8
PR	HA	15,000	22,500	10" x 10"	15

\* Not all products are UL Listed. For specific UL Listed products, please refer to individual drawings.

## Cover Numbering System

Cover Style	Cover Size	Cover Series	Cover Variation	Cover Logo #	Bolt Option
<b>PC</b>	<b>1730</b> (width x length) example: 17" x 30"	<b>CA</b>	<b>00</b>	<b>09</b>	<b>P</b>
<ul style="list-style-type: none"> <li>PC</li> <li>PG</li> <li>PR</li> <li>PT</li> <li>LG</li> </ul>		<ul style="list-style-type: none"> <li>CA-standard cover</li> <li>HA-heavy duty cover</li> <li>WA-standard/no bolts</li> <li>CG-standard cover w/gasket</li> <li>HG-heavy duty cover w/gasket</li> <li>CS-split cover</li> <li>HS-heavy duty split cover</li> <li>CT-torsion assist cover</li> <li>HH-extra heavy duty</li> <li>CC-overlapping cover</li> <li>HC-heavy duty overlapping cover</li> </ul>	Standard Cover - No Variation Contact your local QUAZITE <sup>®</sup> representative for more information on cover variations.	09 - Blank (See chart on next page for a listing of commonly used cover logos)	Penta-head (Hex head bolts standard, no designation needed)
<p><b>Highlighted areas indicate UL Listing</b></p>					

## Enclosure Selection Guide

### 4 Other Cover Styles

To Select the Enclosure You Need for Your Application:

- 1 ..... Determine UL Requirements
- 2 ..... Determine Load Ratings
- 3 ..... Determine Handhole Opening Size
- 4 .... Select Cover Series & Style**
- 5 ..... Select Box Style
- 6 ..... Determine Options & Hardware

### LG Style Covers

32% lighter in weight as compared to the PG covers.

- Design Load: 5,000 lbs. over a 10" square with a minimum test load of 7,500 lbs. (ANSI Tier 5)

### Overlapping Covers

Available in sizes 30" x 48", 30" x 60", and 36" x 60". Eliminates soil infiltration and allows for easy cover removal. Not recommended for sidewalks.

- Design Load: Available in either CA or HA ratings. (ANSI Tier 5, 8 or 15)



### Meter Reading Lids

Available in PG style covers.

- Adding a meter lid to a Tier 8 cover reduces the rating to a Tier 5. A Tier 5 cover will be reduced to a pedestrian traffic only rating.



### Replacement Covers

Covers that are interchangeable with several manufacturers' products include: PG1324, PG1730, PG2436, and PG3048. Other styles and sizes are also available.

- Design Load: Load Ratings will vary. Contact your local QUAZITE® representative for more information.

### Commonly Used Cover Logos

- |                   |                    |
|-------------------|--------------------|
| 09 Blank          | 26 High Voltage    |
| 10 C.A.T.V.       | 29 Lighting        |
| 12 Communications | 41 Street Lighting |
| 14 Controls       | 43 Telephone       |
| 17 Electric       | 44 Traffic         |
| 21 Fiber Optics   | 46 Traffic Signal  |
| 24 Ground         | 50 Water           |

(See pg. 58 in the Quazite catalog for additional logos)

## Meter Reading Lid Numbering System

Cover Style	Cover Size	Cover Series	Cover Variation	Lid Position	Cover Logo #
<b>PG</b>	<b>1730</b>	<b>CA</b>	<b>L</b>	<b>0</b>	<b>50</b>
(Meter reading lids available only in PG style)	(width x length) example: 17" x 30"	CA - bolt down cover WA - standard/no bolts	R - Cast iron 4 1/2" x 7 1/2" lid P - Cast iron 6" x 9" lid Q - Cast iron 9" x 12" lid K - Polymer concrete 6" x 9" drop-in lid L - Polymer concrete 7" x 13" drop-in lid S - Through slot (no meter lid)	2 - Opens under 90° 0 - Used with drop-in lid (As standard, all meter lids are centered on the cover)	50 - Water (See chart above for a listing of commonly used cover logos)

Highlighted areas indicate UL Listing

## Enclosure Selection Guide

To Select the Enclosure You Need for Your Application:

- 1 ..... Determine UL Requirements
- 2 ..... Determine Load Ratings
- 3 ..... Determine Handhole Opening Size
- 4 ..... Select Cover Series & Style
- 5 .... Select Box Style**
- 6 ..... Determine Options & Hardware

### 5 Box Styles

#### PG Style

For use as a splice box, pull box, equipment enclosure or for any application requiring easy access to an underground service. Stackable for increased depth. Straight sides for easy adjustment of box to grade.



- Available in sizes:

11" x 18"	24" x 24"	30" x 60"	36" x 72"	48" x 96"
13" x 24"	24" x 36"	36" x 36"	48" x 48"	
17" x 30"	30" x 48"	36" x 60"	48" x 72"	

- Loadings comply with ANSI/SCTE 77. These boxes, with a design load of 22,500 lbs. and a test load of 33,750 lbs., meet ANSI Tier 22 test provisions.
- 12" - 48" depths
- Lightweight versions are also offered. Contact your local QUAZITE<sup>®</sup> representative for availability.

#### PD Style

Enclosures with 1° (degree) flare for maximum strength. Flared design optimizes internal volume and prevents frost heave.



- Available in sizes:  
13" x 24 x 18", 13" x 24" x 26", 17" x 30" x 18", 17" x 30" x 26",  
24" x 36" x 18", 24" x 36" x 26", 24" x 36" x 48", 30" x 48" x 24",  
30" x 48" x 48"
- Design load: 22,500 lbs. Test load: 33,750 lbs. (ANSI Tier 22)

## Box Numbering System

QUAZITE<sup>®</sup> products are referred to by an identifying part number. An example of the numbering system is shown below to help you understand how to identify the product you need for your application. Contact your local QUAZITE<sup>®</sup> representative if you have any questions.

Box Style	Nominal Size	Box Variation	Box Depth																		
<b>PG</b>	<b>1730</b> (width x length) example: 17" x 30"	<b>BA</b>	<b>12</b> 12" deep																		
<table border="1"> <tr><td>PC</td><td>PT</td></tr> <tr><td>PG</td><td>PX</td></tr> <tr><td>PR</td><td>PR</td></tr> <tr><td>PD</td><td></td></tr> </table>	PC	PT	PG	PX	PR	PR	PD			<table border="1"> <tr><td>BA-box w/open bottom</td><td>DG- gasketed box w/solid bottom</td></tr> <tr><td>BB-box w/mouse holes</td><td>JA-footed box</td></tr> <tr><td>BC-divided box</td><td>EA-extension</td></tr> <tr><td>BG-gasketed box w/open bottom</td><td>RA-solid base extension</td></tr> <tr><td>DA-box w/solid bottom</td><td></td></tr> </table>	BA-box w/open bottom	DG- gasketed box w/solid bottom	BB-box w/mouse holes	JA-footed box	BC-divided box	EA-extension	BG-gasketed box w/open bottom	RA-solid base extension	DA-box w/solid bottom		
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DA-box w/solid bottom																					

Highlighted areas indicate UL Listing

## Enclosure Selection Guide

To Select the Enclosure You Need for Your Application:

- 1 ..... Determine UL Requirements
- 2 ..... Determine Load Ratings
- 3 ..... Determine Handhole Opening Size
- 4 ..... Select Cover Series & Style
- 5 .... Select Box Style**
- 6 .... Determine Options & Hardware**

### 5 Box Styles

#### PC Style

Straight sides permit easy movement of box should grade level change. Gasketing also available. All sizes are stackable.

- Sizes: 6" x 8", 8" x 18", 11" x 18" and 12" x 12"  
Design load: 15,000 lbs. Test load: 22,500 lbs. (ANSI Tier 15)
- Sizes: 13" x 24" and 17" x 30"  
Design load: 5,000 lbs. Test load: 7,500 lbs. (ANSI Tier 5)
- Sizes: 8" x 8"  
Design load: 22,500 lbs. Test load: 33,750 lbs. (ANSI Tier 22)
- 6" - 18" depths



#### PX Style

Service box assemblies with flared sides. Nestable for compact storage.

- Size: 12" x 12" x 24"  
Design load: 15,000 lbs.  
Test load: 22,500 lbs. (ANSI Tier 15)



#### PT Style (previously called PE style)

Flared design prevents frost heave. Covers are interchangeable with many precast concrete parts. Nestable for compact storage.

- Sizes: 10" x 15", 13" x 24", 17" x 30"
- Design load: 15,000 lbs. Test load: 22,500 lbs. (ANSI Tier 15)
- 18" deep



#### PR Style

Round enclosures. Cover cannot fall into the box.

- Available in sizes:  
27" dia. x 36" deep  
39" dia. x 18", 24", 36" & 48" depths.
- Design load: 22,500 lbs. Test load: 33,750 lbs. (ANSI Tier 22)



### 6 Hardware and Options

See Hardware and Options Section, Quazite catalog pages 53 - 59.

Highlighted areas indicate UL Listing

## Index of Enclosure Drawings

Box Size	ANSI/SCTE* Tier (for Box)	Box Vertical Design/Test Load #	CA Cover Design/Test Load #	HA Cover Design/Test Load #	HH Cover Design/Test Load#	Box Style	Cover Style	Page No.
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### SMALL ENCLOSURES

Ⓛ 6 x 8	15	15,000 / 22,500	—	15,000 / 22,500	—	PC	PC	16
8 x 8	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PC	PC	17
Ⓛ 8 x 18	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PC	PC	18
10 x 15	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PT	PG	19
Ⓛ 11 x 18	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PG	PG	20
Ⓛ 11 x 18	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PC	PC	21
Ⓛ 12 x 12	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PC	PC	22
12 x 12	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PX	PC	23
Ⓛ 13 x 24	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PG	PG	24 - 25
13 x 24	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PD	PG	24 - 25
Ⓛ 13 x 24	5	5,000 / 7,500	5,000 / 7,500	—	—	PC	PC	26
Ⓛ 13 x 24	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PT	PG	27
Ⓛ 17 x 30	5	5,000 / 7,500	5,000 / 7,500	—	—	PC	PC	28
17 x 30	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PD	PG	29 - 30
Ⓛ 17 x 30	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PG	PG	29 - 30
Ⓛ 17 x 30	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PT	PG	31

### LARGE ENCLOSURES

24 x 24	15	15,000 / 22,500	8,000 / 12,000	15,000 / 22,500	—	PG	PG	32
Ⓛ 24 x 36	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PG	PG	33 - 34
24 x 36	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PD	PG	33 - 34
Ⓛ 30 x 48	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PG	PG	35 - 36
30 x 48	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PD	PG	35 - 36
30 x 60	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PG	LG / PG	37
36 x 36	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PG	PG	38
36 x 60	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PG	LG / PG	39
36 x 72	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PG	LG / PG	40
48 x 48	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PG	LG / PG	41
48 x 72	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PG	LG / PG	42
48 x 96	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PG	LG / PG	43

### ROUND ENCLOSURES

27" Dia.	22	22,500 / 33,750	8,000 / 12,000	15,000 / 22,500	22,500 / 33,750	PR	PR	45 - 46
39" Dia.	22	22,500 / 33,750	5,000 / 7,500	15,000 / 22,500	22,500 / 33,750	PR	PR	47 - 48

\* Loadings comply with ANSI/SCTE 77 (see Quazite catalog page 9).

### EXTENSIONS

PG1324	Pg. 24 - 25
PG1730	Pg. 29 - 30
PG2424	Pg. 32
PG2436	Pg. 33 - 34
PG3048	Pg. 35 - 36
PD3048	Pg. 35 - 36
PG3636	Pg. 38
PG3660	Pg. 39
PG4872	Pg. 42
PG4896	Pg. 43
Grade adjustable extensions	Pg. 44

### REPLACEMENT COVERS

Pgs. 49 - 51

### METER READING COVERS & LIDS

Pg. 52

**NOTE: Page numbers on this page refer to Quazite Catalog.**





**POWER SYSTEMS, INC.**



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