

# ANSI/SCTE Tier Selection Guide

## Load Ratings – Steadfast Reliability

Many Hubbell underground enclosures are designed to meet or exceed the load requirements set forth in the American National Standards Institute’s ANSI/SCTE 77 2013 “Specification for Underground Enclosure Integrity.” ANSI tier designations represent the minimum allowable load requirements in the industry to ensure underground enclosures are always secure and reliable.

The ANSI application tier number relates to a nominal design load multiplied by 1,000 pounds. For example, Tier 8 is 8 x 1,000 pounds, or 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 a half-inch for vertical tests and a quarter-inch per foot of length for lateral tests.

### Application Tiers & Static Vertical Wheel Load Ratings per ANSI/SCTE 77 2013 “Specification for Underground Enclosure Integrity”

*NOTE — Quazite® products are not intended for use in deliberate traffic areas.*

Application Tiers	Loading Requirements			UL Listed to meet ANSI 77 Requirements
<b>Light Duty</b> Pedestrian Traffic Only	<b>Vertical</b>	<b>Test Load</b>	13.3kN 3,000 lbs.	
<b>Tier 5</b> Sidewalk applications with a safety factor for occasional non-deliberate vehicular traffic	<b>Vertical</b>	<b>Design Load</b> <b>Test Load</b>	22.2 kN 33.3 kN 5,000 lbs. 7,500 lbs.	PC 13"x24" or PC 17"x30" style enclosure and cover assemblies with standard covers <b>(CA)</b> and standard covers w/o bolts <b>(WA)</b> .
	<b>Lateral</b>	<b>Design Load</b> <b>Test Load</b>	28.7 kPa 43.1 kPa 600 lbs./sq. ft. 900 lbs./sq. ft.	
<b>TIER 8</b> Sidewalk applications with a safety factor for non-deliberate vehicular traffic	<b>Vertical</b>	<b>Design Load</b> <b>Test Load</b>	35.6 kN 53.4 kN 8000 lbs. 12,000 lbs.	PG and PT style enclosure and cover assemblies up to 30"x 48" and PC style in sizes 6"x 8", 8"x18", 11"x18" and 12"x12" with standard covers <b>(CA)</b> and standard covers w/o bolts <b>(WA)</b> .
	<b>Lateral</b>	<b>Design Load</b> <b>Test Load</b>	28.7 kPa 43.1 kPa 600 lbs./sq. ft. 900 lbs./sq. ft.	
<b>TIER 15</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	<b>Vertical</b>	<b>Design Load</b> <b>Test Load</b>	66.7 kN 100.1 kN 15,000 lbs. 22,500 lbs.	PG, PT and PC style enclosure and cover assemblies up to 30"x48" with heavy duty covers <b>(HA)</b> .
	<b>Lateral</b>	<b>Design Load</b> <b>Test Load</b>	38.3 kPa 57.5 kPa 800 lbs./sq. ft. 1,200 lbs./sq. ft.	
<b>TIER 22</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	<b>Vertical</b>	<b>Design Load</b> <b>Test Load</b>	100.1 kN 150.1 kN 22,500 lbs. 33,750 lbs.	PC, PD, PG and PT style enclosure and cover assemblies up to 30"x 48" with extra heavy duty covers <b>(HH)</b> .
	<b>Lateral</b>	<b>Design Load</b> <b>Test Load</b>	38.3 kPa 57.5 kPa 800 lbs./sq. ft. 1,200 lbs./sq. ft.	

**AASHTO H-20**  
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. BUYER BEWARE!*



## Three-Position Testing – Proven Endurance.

A key requirement outlined in ANSI/SCTE 77 2013 is three-position testing for enclosures. Three-position testing is a method to verify product performance, and is accomplished by test loading at three pre-designated critical points. Quazite products have been tested at each of the three positions and all have met or surpassed requirements.

- The latest copy of the standard may be purchased from ANSI. It may also be viewed in PDF form on SCTE's website at [http://www.scte.org/documents/pdf/Standards/ANSI\\_SCTE%2077%202013.pdf](http://www.scte.org/documents/pdf/Standards/ANSI_SCTE%2077%202013.pdf)

