

DETAILED SITE REQUIREMENTS FOR QUICK TREAD EDGE FLUSH INSTALLATION (SINGLE-POUR TUB INSTALLATION METHOD)

Use this document to determine the suitability of a given site for the installation of QTEF using the single-pour tub.

- For installation details, refer to *QTEF Installation, Form 7616-T*.
- For a list of all possible pertinent documents (such as Quick ID cameras, QCD), refer to Form 7638-T.

 **NOTE:** QTE is intended for covered installation only. Outdoor installation is prohibited.

 **CAUTION:** When excavating, make certain to assess individual site conditions (groundwater level, hydraulic pressure, soil saturation, etc). Some sites may require provisions beyond local code requirements (e.g. sump pump).

FLOOR REQUIREMENTS

QTEF's concrete preparation must compensate for any excessive slope on the installation site's floor. Maximum longitudinal slope is 1/4 in. per ft. (2%). Maximum lateral slope is 1/16 in. per ft. (0.5%).

Tread measuring sensors need placed in Hunter supplied frame placed in the floor with a required sump beneath. Current design frame and tub assembly can be placed in floor and then pour slab, allowing concrete to flow around frame and tub.

Concrete specification when using the tub form for a single pour is different than Hunter's usual spec. For single pour tub, use 3500 PSI (24,132 kPa) rated concrete with max. slump of 5 inches (127 mm).

This document is not an engineered drawing. Contractor/engineer is responsible for design of installation per existing conditions and local codes.

 **NOTE:** Contact local Hunter rep to verify installation prior to pouring concrete. Visit hunter.com/find-a-rep or call 800-448-6848.

POWER REQUIREMENTS

QTE is powered by the console via a PoE injector. The customer must furnish 115/230VAC, 50/60 HZ, 15 amp, single-phase power for the console.

AIR REQUIREMENTS

Air is required for the mechanical shutter and cleaning system. The unit is provided with a standard 1/4 in. industrial quick disconnect plug. The air supply must be capable of providing 90-150 psi (6.2-10.3 bar).

The table below outlines the recommended maximum lengths of the air line from the site's hard pipe to the control box.

Air Line Type	Nominal ID	Maximum Recommended Length from Hard Line
3/8 in. (10 mm) Tubing	0.275 in. (7 mm)	Not Recommended
1/2 in. (13 mm) Tubing	0.375 in. (10 mm)	50 ft. (15240 mm)
3/8 in. (10 mm) Hose	0.375 in. (10 mm)	50 ft. (15240 mm)
1/2 in. (13 mm) Hose	0.500 in. (13 mm)	150 ft. (45720 mm)

EQUIPMENT SPECIFICATIONS

Air	
Air Pressure Requirements	90-150 psi (6.2-10.3 bar)
Operation	
Drive Over Speed Range	2-8 mph (3-13 kph)
Maximum Vehicle Weight	3500 lbs (1588 kg) per wheel
Atmospheric	
Temperature:	+32°F to +122°F (0°C to +50°C)
Relative Humidity:	Up to 95% Non-condensing
Altitude:	Up to 10,000 ft. (3048 m)



These standards enable use of the product in garages and hazardous locations (Class I, Division 2). The product can be used in a location classified as Class I, Division 1 (recessed in a pit) by reclassifying the pit to Division 2 by use of ventilation per NEC.

CONSTRUCTION PROCESS (CURRENT, SINGLE-POUR TUB METHOD)

Construction of the sump with Hunter-supplied tub typically consists of two steps.

1. Excavate

2. Place tub / sub-frame and surround with concrete



Figure 1

QTEF FRAME

A 93 x 51 x 8 inch (2362 x 1295 x 203 mm) frame houses tread sensor above the sump created by the single-pour tub.

The steel frame should be flush with the surrounding floor before pouring concrete around it. If there is to be an epoxy or other floor coating, allow for the thickness of that coating when positioning the steel structure.

Frame is already attached onto the single-pour tub. Additional step to anchor frame is not required.

SLAB POUR (CURRENT, SINGLE-POUR TUB METHOD)

The minimum excavation width and length of 109 x 67 in. (2769 x 1702 mm) creates a slightly larger perimeter than minimum to allow for work room. The minimum excavation depth is 26 in. (660 mm). Total sump depth is approximately 20 1/4 inches (514 mm) below the bay floor. The lowest point in tub is located at the center of either the approach or exit side (depending on tub orientation) and approximately 6 inches (152 mm) from side wall.

See “Appendix - Use of Tub Sump (Form 7782-T)” on page 6.

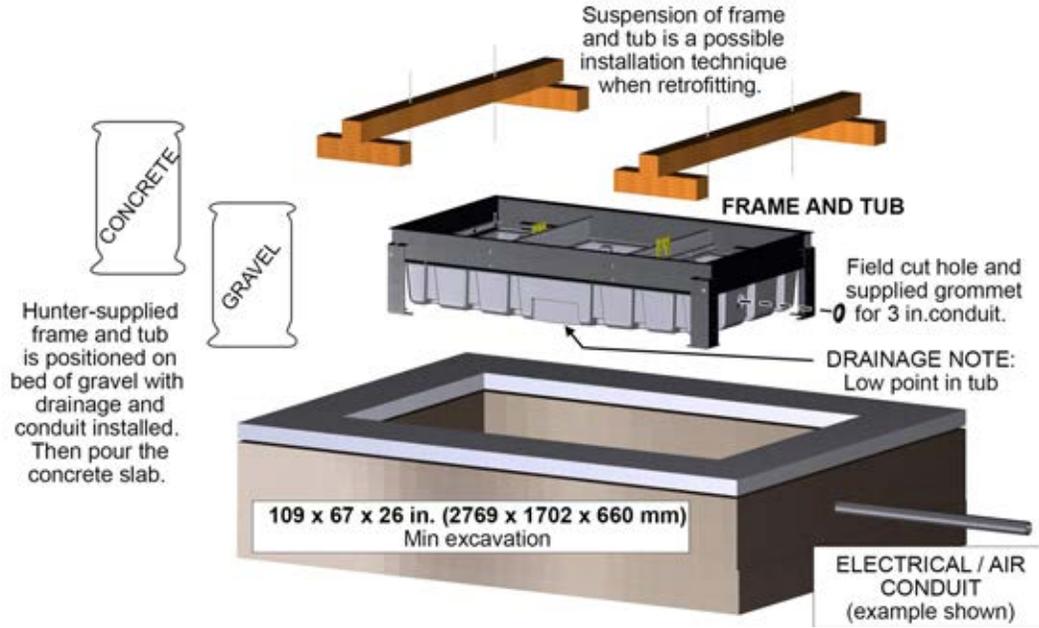


Figure 2

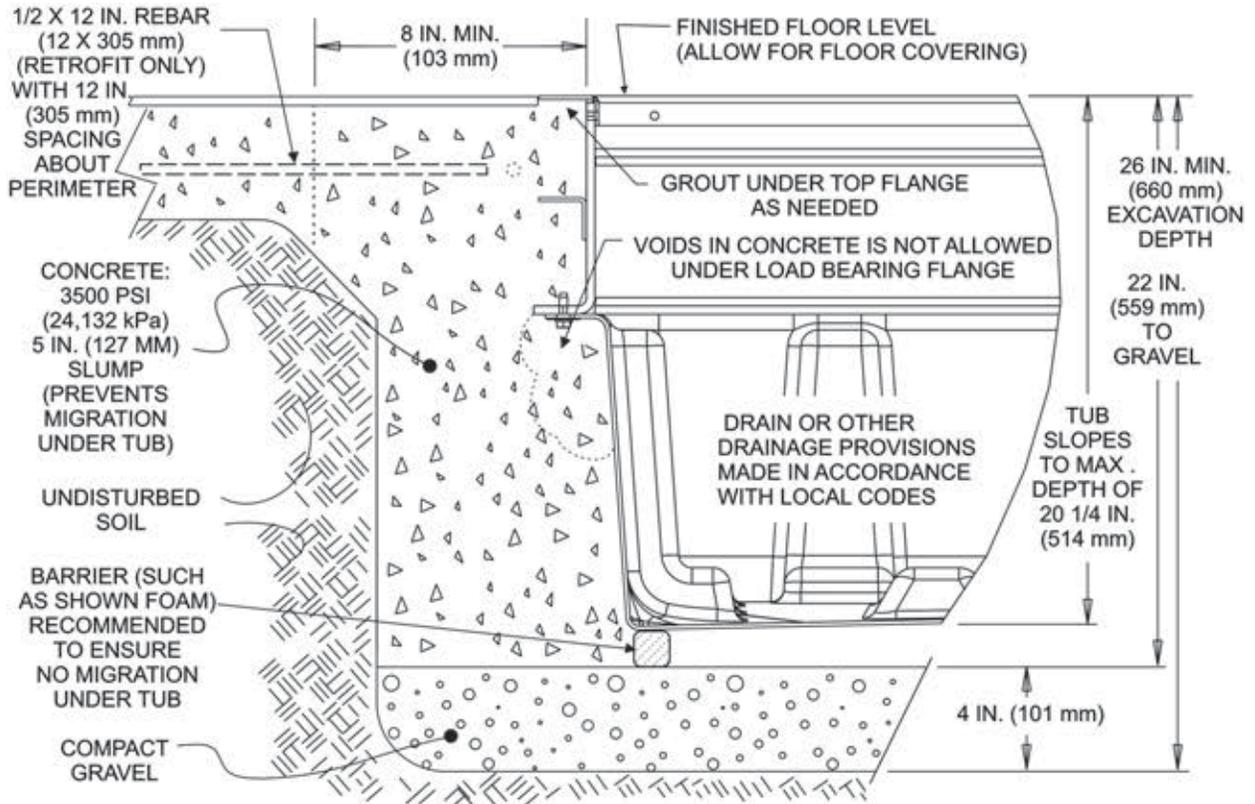


Figure 3

IN-GROUND CONDUIT ROUTING

Trenched conduit for communication cables and air lines is required between thread sensors and console. Optional Quick Check Drive® towers will require addition conduit consideration. Conduit size of 3 inches (76 mm) is recommended. Exact placement of conduit will vary. Refer to Form 7615-T. Verify location with Hunter representative.

Placement of the conduit should be considered with initial excavation of the space that QTE will occupy. The conduit must be in place when concrete is poured.

When using the tub sump, enter tub at flat portions of tub side walls. On the sides (typically route for QDC and console conduit), flats are located 7 ± 2 in. (178 ± 50 mm) to left and right of center and at a depth of 14 ± 2 in. (356 ± 50 mm).

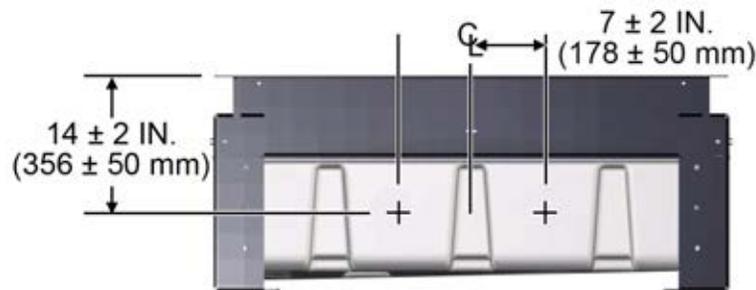


Figure 4



NOTE:

If installing QCD with QTEF, take care to plan the conduit installation before concrete is poured. Conduit for QCD and QTEF can be shared to best utilize the space. For more information, see QCD Spec Sheet, Form 7560-T.

Conduit at the console will be routed according to the following diagrams.

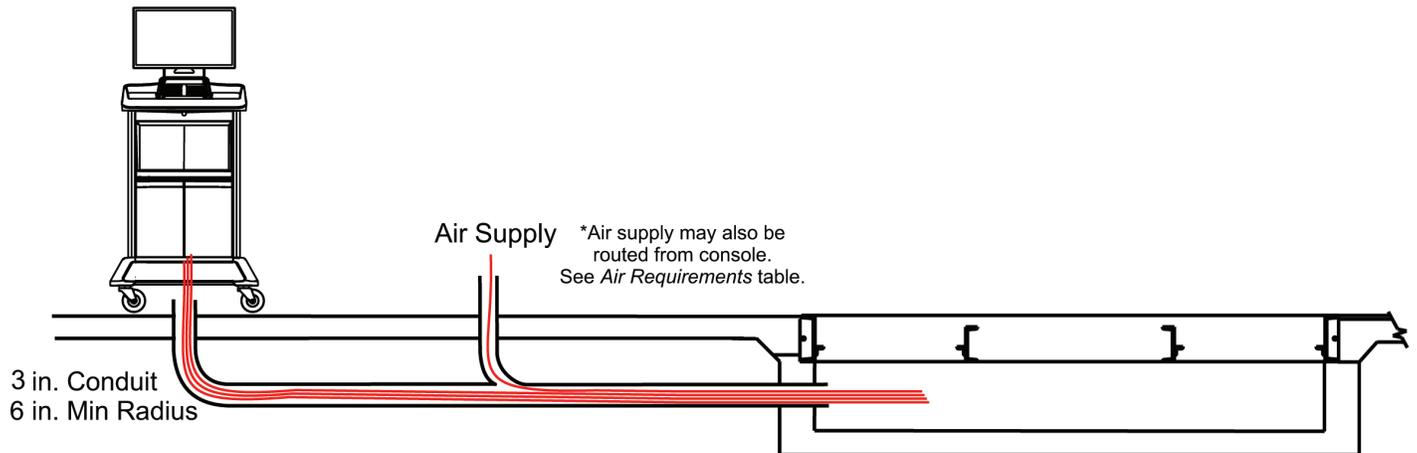
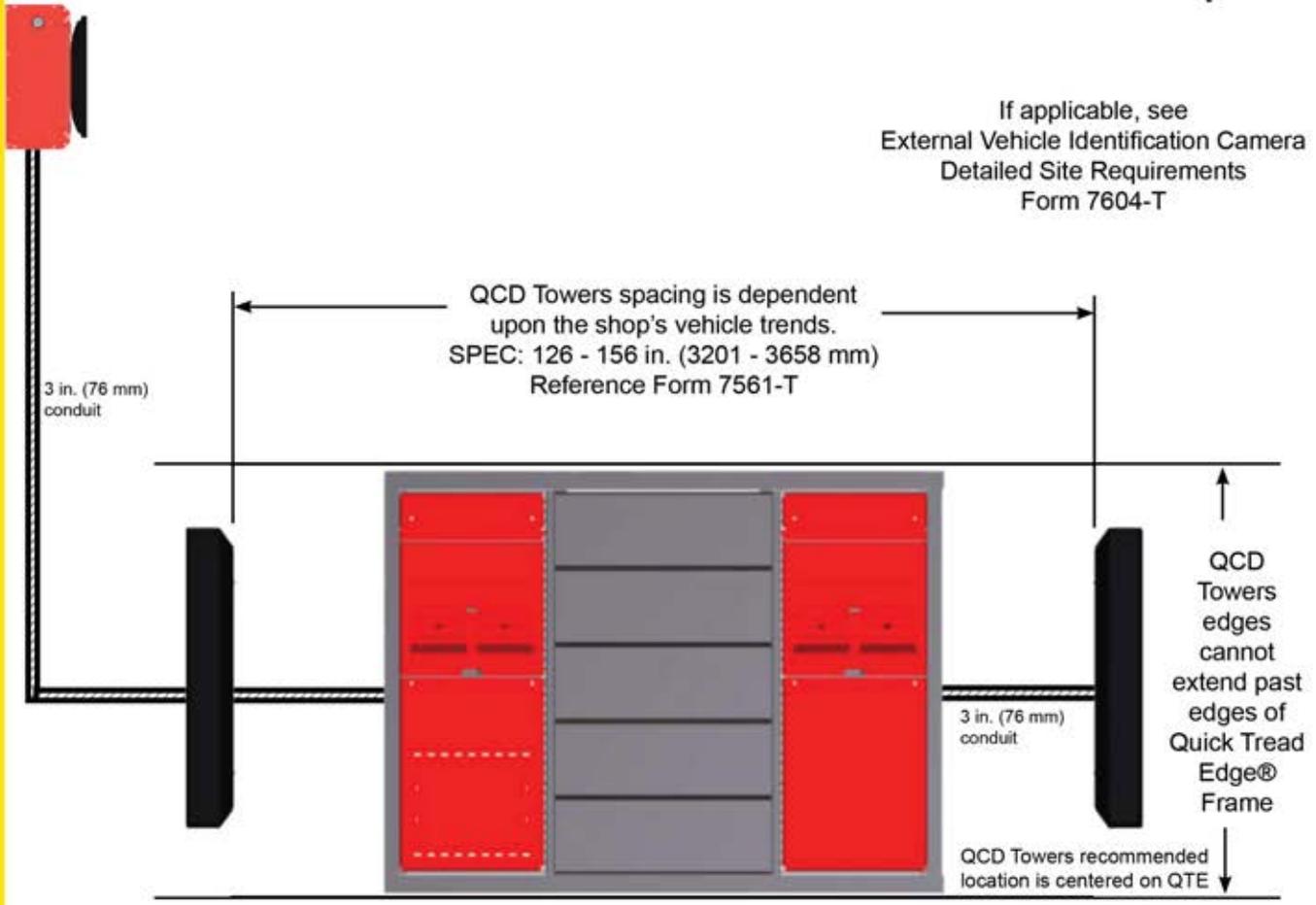


Figure 5

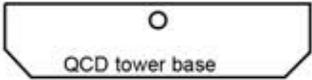
QUICK CHECK DRIVE® / QUICK TREAD EDGE IN-GROUND CONDUIT ROUTING EXAMPLE

The following is an example of conduit layout using the specifications from this document. The actual distance of the QCD conduit will be based each sites determined face-to-face distance. See form 7561-T, detailed site requirements for the QCD, for the minimum and maximum distance that the QCD towers can be spaced apart.

Top View



QCD Base Details



The QCD tower base has an ethernet cable access hole, centered and 5 1/2 in. (140 mm) from the front face. Each base is approximately 8 1/2 X 37 in. (216 X 940 mm).

Side View

