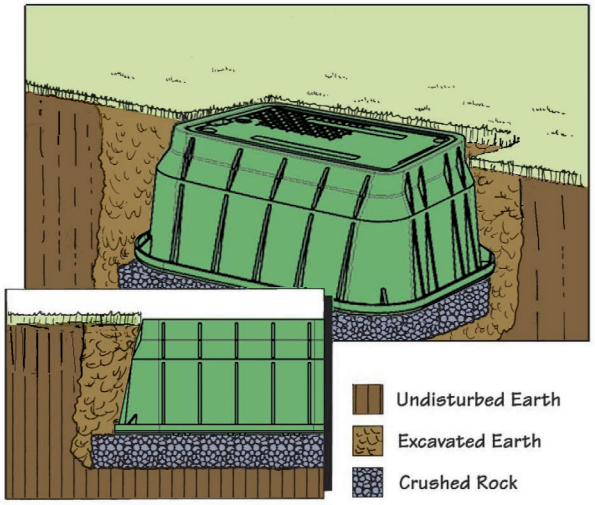
Light Duty Plastic Product

Typical grass surround installation

Crushed rock backfill is shown as specified in the Company's Installation Procedure. The tamped crushed rock supports the vault, preventing subsidence and allowing for drainage. The excavated spoils have been used for backfill.

Note the soil is free of rocks larger than three inches.

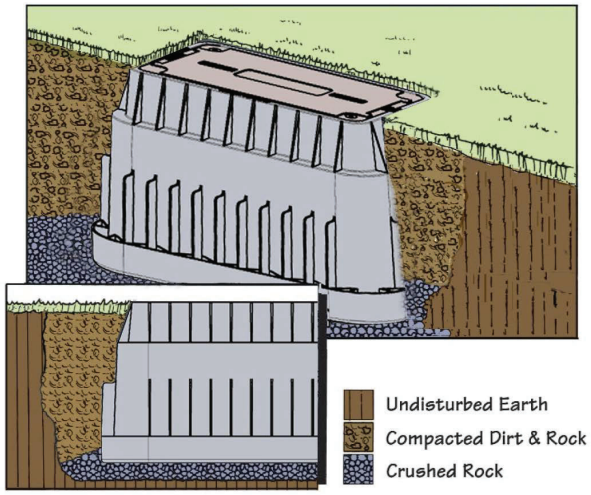


Light Duty Hybrid Product

Alternative for greenbelt location

Lateral load resistance is enhanced in this range of products. The polymer concrete cover offers an increased coefficient of friction (over HDPE) for foot traffic.

Note that backfill, although not crushed rock, is changed to specify compaction, thereby enhancing vault performance.

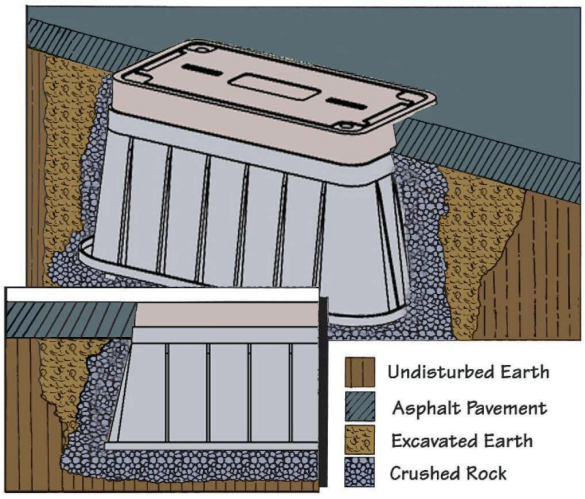


Light Duty Hybrid Product

Concrete or Asphalt Surround (shown)

Note compacted crushed rock surround. Dry mix could be added to crushed rock under "ring" to improve vertical load bearing.

CARSON® PLASTIC PRODUCTS ARE NOT INTENDED FOR INSTALLATION IN ANY DELIBERATE TRAFFIC AREA.



Installation Guidelines **OLDCASTLE POLYMER**®

Oldcastle® underground enclosures are suitable for delivery to job sites on any construction vehicle. Enclosures can be safely handled by hand by the proper number of trained workers or proper lifting equipment for loading and unloading.

Site preparation

- Follow local guidelines and job requirements.

Excavation and preparation of enclosure hole (fig 1).

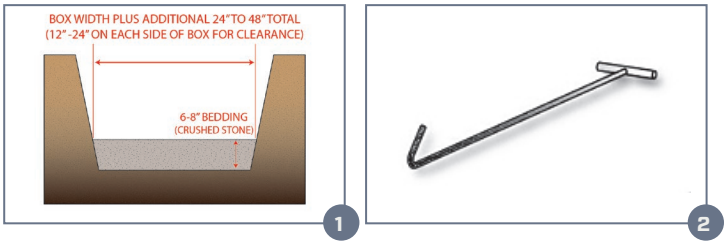
- Remove material to provide 1 – 2' of clearance all around the enclosure and 6" – 8" in additional depth allowing for bedding and rodent barrier.
- Place a suitable bedding material, such as crushed stone, at the base of the excavated hole.

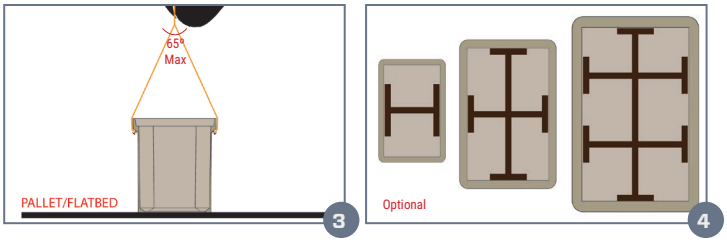
Removing enclosure from delivery vehicle and pallet.

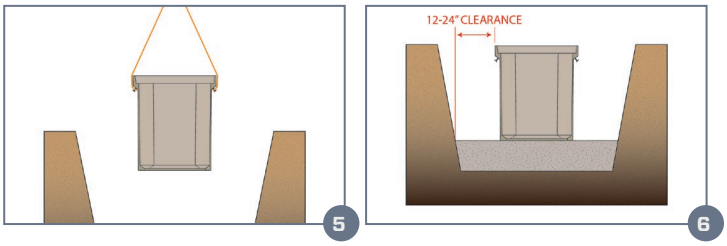
- Remove shipping band from enclosure.
- Use proper hook to remove lid from the enclosure base (fig 2).
- Using proper lifting techniques, secure and remove box from truck. Lifting bolts are provided for boxes 2424 and larger (fig 3).
- The angle of the lifting lines should not exceed 65º.
- Optional : Install temporary brace supports in the interior of the enclosure to provide additional lateral rigidity and if 95% compaction is required (fig 4).

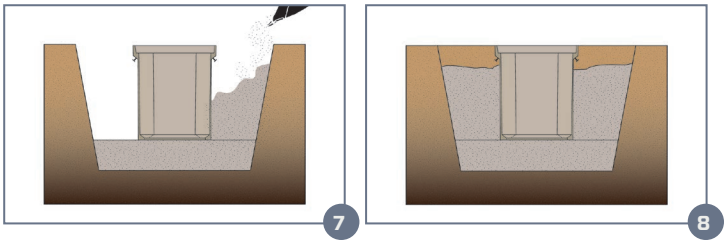
Enclosure placement into prepared hole.

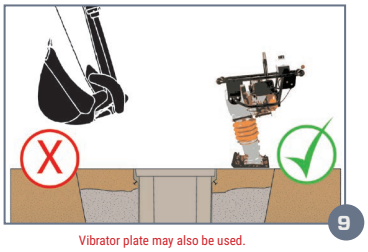
- Reinstall the lid to the base of the enclosure prior to uniformly backfilling on all four sides. Nut, bolt threads, and cover seat should always be free of dirt and debris before tightening down the bolt.
- Bed the base of the hole with crushed stone. Then lift and place the enclosure into the bedded hole.
- Place crushed stone around the sides (fig 7 & 8).
- Position the enclosure to the proper grade level and check.
- Remove lid with proper lifting-eye tool.
- Make the necessary elevation adjustments and recheck the elevation.
- After the enclosure is set to the proper elevation, remove the temporary brace supports if used and reinstall the cover.
- Compact backfill per engineering specifications.
- Proper tamping tools such as a mechanical tamping device or hand operated device should be used. (fig 9)
- A hand shovel or backhoe should never be used for tamping as damage will occur.







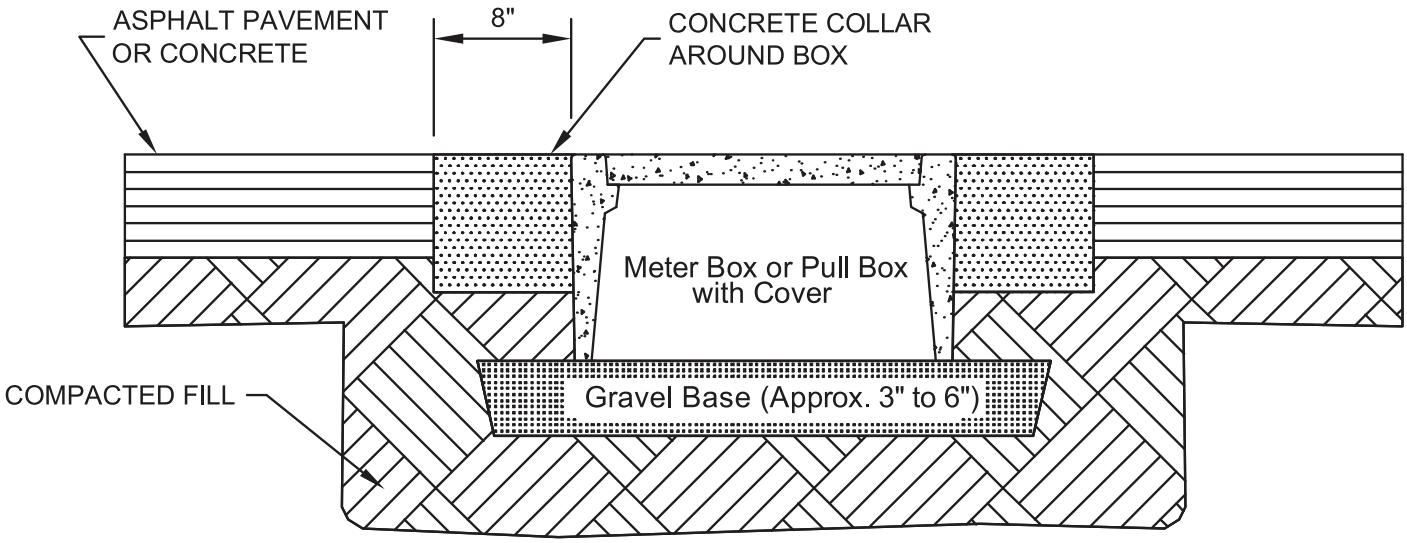




Vibrator plate may also be used.

Pedestrian Rated Enclosures

Installation in concrete or pavement for driveways, parking lots, and off-roadway applications where subject to occasional non-deliberate light vehicles.

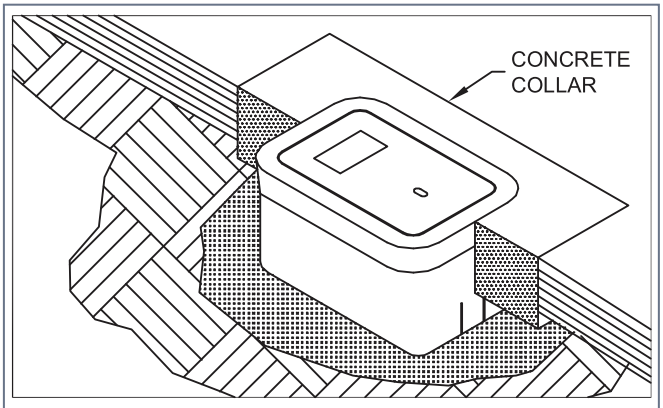


Field preparation

- Prepare the excavation approximately 6” deeper than the overall height of the enclosure.
- The length and width of the excavation should be determined by adding 4” to 6” to the overall length and width of the box.

Installation Recommendations

- Place 3” to 6” of compacted material such as sand or gravel because of its drainage characteristics.
- The compacted material should be leveled so the top of the box is flush to grade.



Note: Minimum concrete collar strength is 3,000 psi.

1

Backfilling

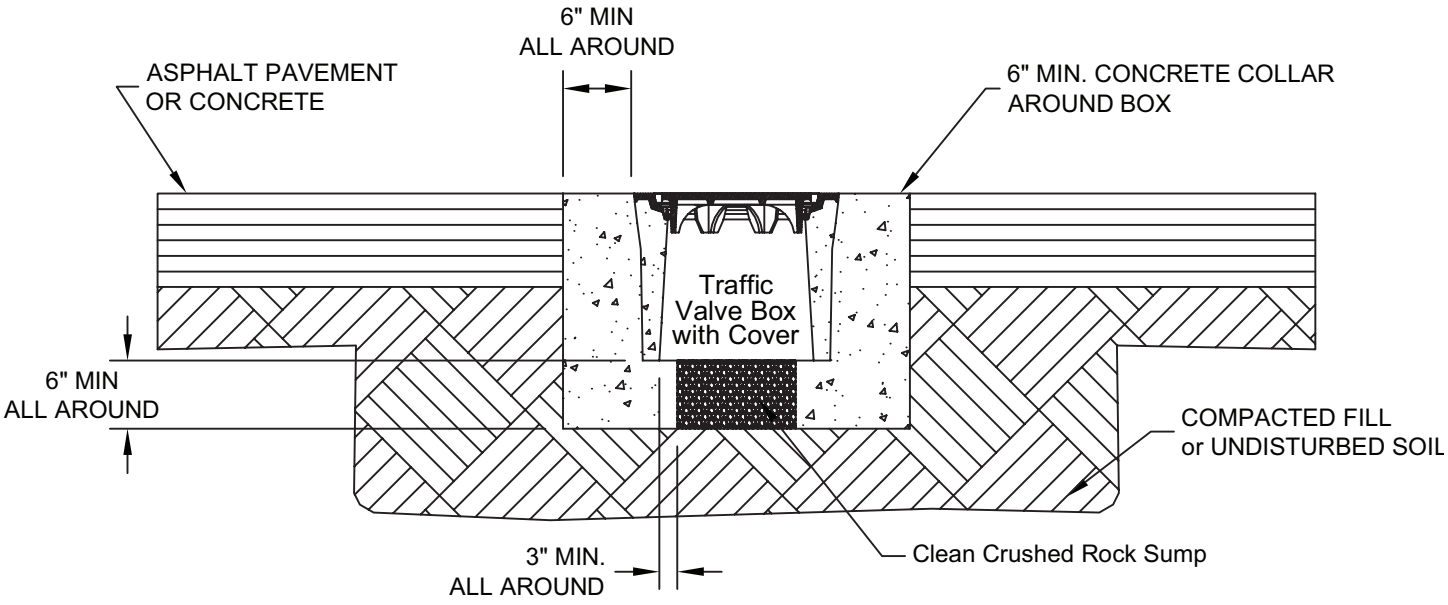
- Place select backfill into the excavation in 12” lifts and compact.
- The final 8” of the excavation should be finished with concrete
- This may be accomplished by providing a form around the enclosure that would produce an eight-inch wide collar (fig 1).

Quick Specification

Underground enclosures are manufactured by Oldcastle Infrastructure. Boxes and covers shall be concrete and have a pedestrian rated minimum vertical test load of 350 pounds per square foot. The concrete shall test to a minimum of 4500 psi compressive strength.

Traffic Rated Valve Boxes

Installation in concrete or pavement for full traffic applications. This procedure is consistent with Caltrans Standard Plan ES-8B.

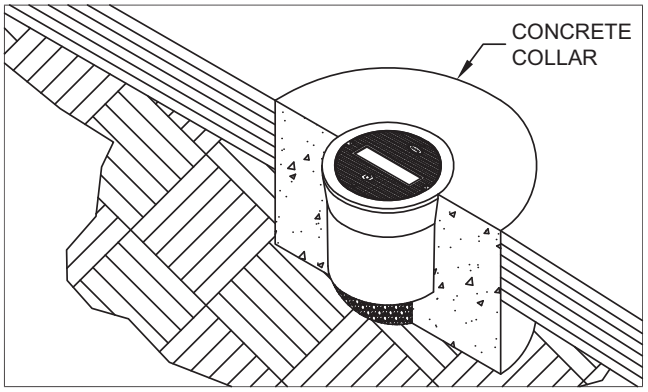


Field preparation

- Prepare the excavation approximately 6” deeper than the overall height of the enclosure.
- The diameter of the excavation should be determined by adding 12” to the overall diameter of the box.

Installation Recommendations

- Place at least 6” of compacted clean crushed rock, coarse gravel, or angular stone material because of its drainage characteristics.
- The compacted material should be leveled so the top of the box is flush to grade.



Note: Minimum concrete collar strength is 3,000 psi.

1

Backfilling

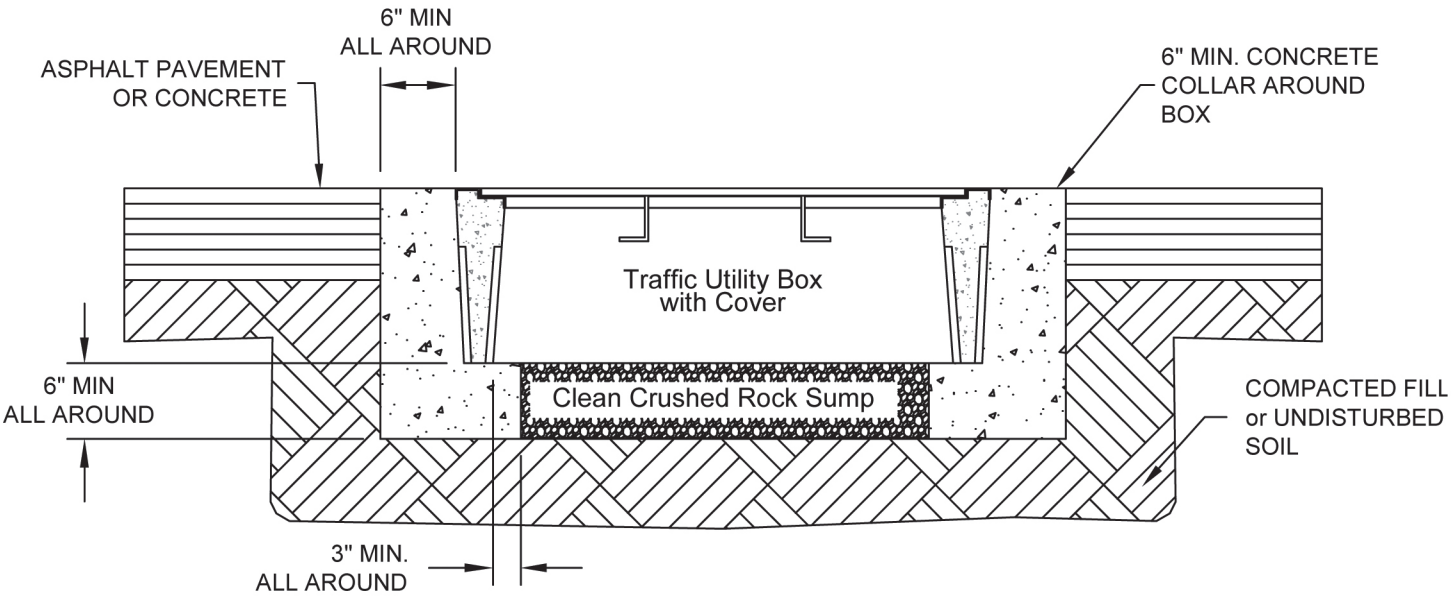
- Place select backfill into the excavation in 4” to 6” lifts and compact.
- The final 6” to 8” of the excavation should be finished with concrete collar. This may be accomplished by providing a form around the enclosure that would produce a six-inch minimum wide collar (fig 1).

Quick Specification

Traffic-rated underground enclosures are manufactured by Oldcastle Infrastructure. The box shall be precast concrete with a cast iron frame and cover with a 16,000 lbs design load. Traffic-rated enclosures shall be used where the box and cover may be exposed to vehicular traffic. The precast concrete mix shall exceed 4,500 PSI compressive strength. The concrete collar mix used in the installation shall exceed a minimum of 3,000 PSI compressive strength. Please contact Oldcastle Infrastructure for a product cut sheet and possible applications.

Traffic Rated Enclosures

Traffic box installation procedure for installation in concrete or pavement for full traffic application. This procedure is consistent with Caltrans Standard Plan ES-8B.

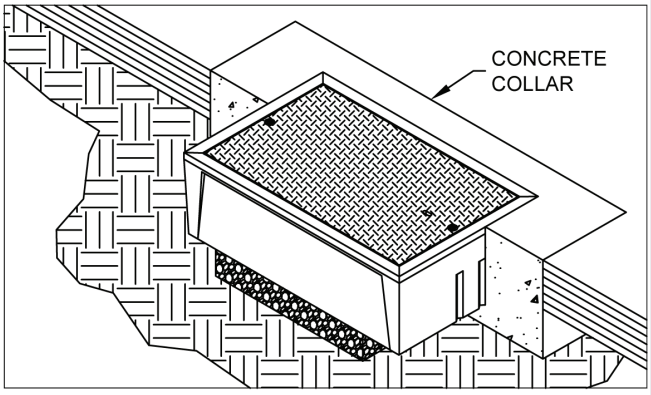


Field preparation

- Prepare the excavation approximately 6” deeper than the overall height of the enclosure.
- The length and width of the excavation should determined by adding 12” to the overall length width of the box.

Installation Recommendations

- Place at least 6” of compacted clean crushed rock, coarse gravel, or angular stone material because of drainage characteristics.
- The compacted material should be leveled so the top of box is flush to grade.



Note: Minimum concrete collar strength is 3,000 psi.

1

Backfilling

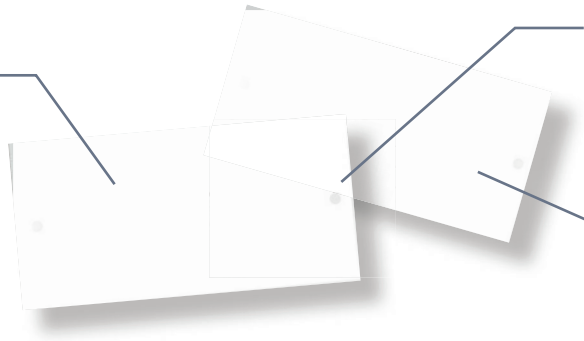
- Place select backfill into the excavation in 4” to 6” lifts and compact.
- The final 6” to 8” of the excavation should be finished with concrete collar. This may be accomplished by providing a form around the enclosure that would produce a six-inch minimum wide collar (fig 1).

Quick Specification

Traffic-rated underground enclosures are manufactured by Oldcastle Infrastructure. The box shall be precast concrete with a steel frame and cover with a 16,000 lbs design load. Traffic-rated enclosures shall be used where the box and cover may be exposed to vehicular traffic. The precast concrete mix shall exceed 4,500 PSI compressive strength. The concrete collar mix used in the installation shall exceed a minimum of 3,000 PSI compressive strength. Please contact Oldcastle Infrastructure for a product cut sheet and possible applications.

Marking Plates for Oldcastle Polymer* and Synertech Marking Plate Lids

Our Oldcastle Polymer polymer concrete and Synertech® composite lids feature a molded-in recess, allowing marking plates to be installed at the factory, distribution center, or customer location. Custom and standard markings are available.



ENGRAVED FRONT
Standard markings and custom engravings are available.

BOLT DOWN
Marking plate is securely fastened with both adhesive and bolts.

GRID TEXTURED BACK
Ensures better grip on adhesive

Installation Guidelines and Instructions

For optimal results, lid and marking plate should be clean and dry.

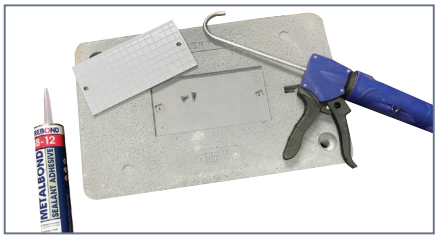
REQUIRED EQUIPMENT

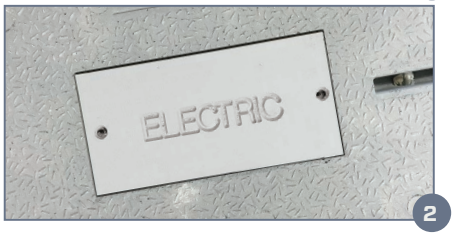
Caulk Gun

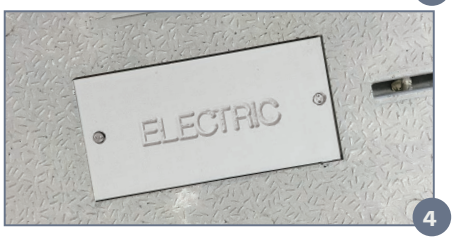
Spanner Bit Head Screwdriver

REQUIRED PARTS

- Lid
- Marking Plate
- Surebond SB-12
- (2) 10-24 X ½ Flat Head Spanner Bolts







1. Apply a moderate amount of Surebond SB-12 adhesive (approximately 1/8" bead) in a wave-like pattern with a border (Figure 1) starting and ending approximately 3/8" from pocket sides. Using excessive adhesive will slow curing process.
2. Adjust marking plate to the center of the pocket and ensure it is below or flush with the lid surface before adhesive sets. (Figure 2)
3. Using the spanner bit, hand-tighten the two spanner bolts into the pre-drilled holes of the marking plate (Figure 3) securing it to the lid. Apply continual pressure to the top of the marking plate for 10 seconds.
4. Tack-free time is 10-20 minutes and full cure is approximately 24 hours. (Figure 4)

*(formerly H-Series™)