

TOOLS REQUIRED: Pick, shovel, tape, level, grade stakes, string line, poly sheet, carbon tooth hole saw, carbon sabre tooth saw.

INSTALLATION: -

Ensure proper installation to maintain proven static loading limits and performance. Ground must be well drained with a solid compacted base. Course sand is recommended for backfill in 12" lifts and foot compacted solid before continuing.

The performance of this product is directly related to the variety of applications, installation methods and conditions. The following installation procedures are generic and local ground and site conditions may dictate necessary changes - consult site engineer for necessary changes.

- Excavate and clear trench 12" outside of the box area.
- Ensure proper drainage media and fill sand used below duct inverts.
- Level the base area and machine tamp as necessary to correct grade.
- Add fill sand as required, level by hand, and firmly bed the box by sliding back and forth. For a good installation it is very important to have level base in all directions.
- Check to finished grade. Run a string line from grade stakes to assist measurement.
- If final grade is unknown due to landscaping or other limitations check with engineered drawings or consult site engineer.
- Box height should be measured to correspond to final grade.
- A CIG8 grade adjustment may be required for 30" or greater duct invert burial.
- Measure and drill using a carbon tipped hole saw for duct access (inlet & outlet).
- Duct holes for bell ends may be drilled with a holesaw or pneumatic hole punch. A jigsaw may be used with care. Install duct entries between vertical ribs only. Cutting into vertical ribs will reduce wall strength and reduce static loading limits.
- Slide box so duct protrudes inside box. Cap and glue duct with pvc flared end. Slide continuing duct through holes at other end of box. Cap and glue flared end to duct.

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- "Add the lid". Lid must be in place prior to backfill and compacting. Backfill must be fully compacted to top level of installation to withstand static load limits and avoid damage from movement of on site equipment. Visual staking is necessary to prevent damage until site work is complete.
- Backfill in two lifts with fill sand to your customer's standards or as instructed by the site engineer. Foot tamp at each lift. If a power mechanical compactor is used, keep a 12" distance from the box to avoid damage. Note warranty is void if machine tamping in this area. Foot tamping is the method required by most clients and customers, and we recommend it too. It reduces the possible movement of the assembly and eliminates breakage.
- Finally fill to within 6" of final grade.
- Foot tamp each lift to top of box to ensure box will support load. (If box cannot be fully backfilled stake the four corners and flag to prevent damage.)
- Pack landscape fill material under the flange area and to final grade. For concrete sidewalk allow for a 4" pour under the flange area.
- Clean up FINISHED.

Although the product is designed for occasional traffic loads, it is not recommended for use on roads, service roads or driveways where maximum loads are not know. Higher loading may be achieved from surrounding the top 4" perimeter with a 3" wide steel reinforced corner pour.

INSTALLATION FAILURES:

Most installation failures or problems occur during the servicing or subdivision phase of development. Few failures occur after development. In the majority of cases failures are due to the following:

- * Unsuitable drainage around service area.
- * For high water tables connect to drainage system.
- * Improper base material especially in high water table areas.
- * Use of native backfill containing rocks, clay or soil.
- * Insufficient tamping (foot tamp product in 12" lifts.)
- * No backfill under box flange.
- * Unit not fully backfilled to top perimeter of box.
- * Lid not properly seated on installation.
- * Box located in traffic areas where ultimate loading is unknown; perimeter should be concrete fill in this case.
- * Duct placed in ribbed area of box reducing load limits.

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