

VAULT INSTALLATION INSTRUCTIONS

GENERAL NOTES:

1. Proper installation of the precast structure is absolutely critical for maintaining structural integrity.
2. These instructions are a supplement to the production drawings for each particular project.
3. These instructions shall apply unless noted otherwise on the plans or specifications. In the case of conflict with the plans or specifications, the more restrictive requirements shall apply.

EXCAVATION AND BEDDING: (SECTIONAL VAULTS)

Installation of sectional vaults require that the customer provide the excavation in which to lower the individual components into place. The excavation must allow for overall assembled height of vault plus added height of risers, manhole casting, ect. and bedding material consisting of 3" to 6" of compacted sand or gravel, and graded level.

A minimum clearance of 6" around the sidewalls of the vault is required for ease of installation. All shoring in accordance with federal, state and local requirements is the responsibility of the contractor.

SETTING:

The vault is assembled by lowering each section into the excavation. The base section is lowered first, set level and firmly positioned before placing intermediate and top sections.

The seal surfaces between section must be clean and the sealant material must be in place. Excavation must not contain water when setting vault.

Columbia Precast Products vault lifting anchors are designed with a 4:1 safety factor with 4-way cables at a lifting angle of 60° minimum. (Fig. 1) If the angle of the picking cable/chain is less than 60° then it becomes the responsibility of the contractor for any damages that may occur.

INSTALLATION AND BEDDING: (HANDHOLE VAULTS)

Installation of handhole vaults require that you provide excavation in which to lower the vault into place.

Excavation must allow for overall height of the vault plus added height of risers and bedding material consisting of 3" to 6" of compacted sand or gravel, graded level.

A minimum clearance of 4" around the side walls of the vault is required for ease of installation.

KNOCKOUTS:

Knockouts are provided in various locations in sufficient number to meet the majority of requirements.

Knockouts are easily removed by striking in the center with a hammer or other similar tool. A single moderately heavy blow will have better results than numerous light blows.

BACKFILLING:

Backfill around all vaults should consist of good compactable material such as pea gravel, sand or select backfill material. In no case shall the material be saturated soil, or contain large rocks or chunks. No voids should remain between the vault walls and native soil of excavation. Back filling should not be done until vault is completely assembled making certain to compact the backfill progressively from the bottom to the top surface.

All backfilling is the responsibility of the customer and/or the contractor.

GROUTING:

All grouting of risers, covers, conduit or specific section of vaults is the responsibility of the customer and/or the contractor. A recommended cement grout consists of two parts sand and one part cement and sufficient water to form a plastic slurry. Apply in a manner to insure filling of all voids in the joint being sealed.

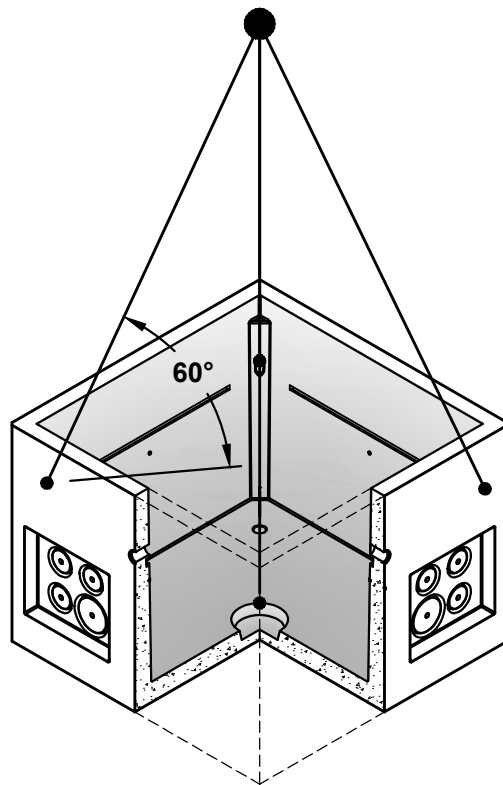


Figure 1: Drawing of vault base and cables