

PRECAST STRUCTURE 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.

CONTRACTORS RESPONSIBILITIES:

1. Access to the site.
2. Crane and all applicable lifting devices required to safely off load and set the vault. (Special lifting devices may be purchased through Columbia Precast Products)
3. Crew for install.
4. Tools required for proper installation. IE: ladder, wrenches, brooms, levels and welder if required.
5. Any bracing that may be needed.
6. Grouting of joints and any block-outs.
7. Field welding technician if required.

COLUMBIA PRECAST PRODUCTS RESPONSIBILITIES:

1. Ensure contractor has the most current set of production drawings.
2. Proper amount of mastic joint sealant.
3. Associated hardware for bolting or welding the structure together.
4. At the request of the contractor, Columbia Precast Products may furnish a field technician to monitor the installation of the structure.

EXCAVATION:

Prior to excavation, identify and locate all buried utilities. Follow OSHA regulations governing excavation work at all times. Excavation should be sloped or shored to comply with all construction safety requirements.

BEDDING:

Imported bedding material is necessary to provide a uniform bearing surface. A good base layer should ensure that the structure would not be subjected to adverse settling. Use a minimum of 6" compacted sand or gravel graded level for a base course. Fine grading may be required to ensure a uniform and level bearing pad. Ensure that there are no large boulders or rock edges exposed in the bedding area. A minimum of 3' of clearance is required around the base to allow for ease of installation. Proper compaction is required to make sure differential settling does not occur.

INSTALLATION:

1. Ensure base/footing is on flat even compacted soil. Use of marking paint is a common practice to make sure the structure is aligned properly.
2. Place mastic strips as needed between adjoining precast pieces. If the wall thickness exceeds 10" and/or is located in ground water, than 2 rows of mastic may be required. When placing mastic make sure that any adjoining pieces have at least a 6" overlap. **DO NOT STACK MASTIC ON TOP OF EACH OTHER.**
3. Make sure that all base/footings are free of loose debris prior to settling of any adjoining pieces.
4. When building a panel vault start with an end wall panel and finish with an end wall panel.
5. Place adjoining sections into the precast keyway. If adjoining pieces cannot support themselves than additional bracing may be required.
6. All sections of the structure should be checked for proper alignment and level prior to the adjoining section being placed.
7. When placing vertical precast segments, mastic may be required between adjoining sections. The use of spray adhesive will aid in the placement of the mastic sealant.
8. Once two adjoining sections are placed they should be welded or bolted together using the supplied hardware. If bolted, snug all the bolts being careful not to over tighten as damage may occur.
9. Steps 1 thru 8 will be repeated for every piece until completed.
10. Once the precast structure is assembled it may be required to set a separate lid.
11. Place a row of mastic or two as outlined above on the top of the installed walls.
12. Hoist the lids into place making sure the keyway fits within the vertical walls.
13. Once all the lids are in place, grout all interior and exterior seams along with any bolted connections to ensure a watertight seal.
14. Wrap exterior joints with joint wrap as required by project specifications.
15. Backfill per project specifications.