



Installation Guidelines

Precast Concrete Installation Guidelines

Product Handling

All material will be delivered on flatbed trucks and to be offloaded by the customer unless otherwise arranged with Locke Solutions. The precast concrete sections should be stored on stable and level ground. Products can be stacked with the use of dunnage placed in line with the lifting points in the product. It is critical for the dunnage to be lined up in the vertical direction to prevent excessive loading on the product due to point loading.



Lifting

Precast concrete sections are equipped with utility anchor lifting points. Although no special lifting attachments are required, contractor should verify hook sizes will fit within the recess pockets (3 1/4" wide x 8" long x 3" deep).

In some cases, the precast concrete sections are equipped with coil insert lifting points that require eyebolt lifting devices. These devices will be supplied with the product during the initial shipments. The lifting void in the eyebolt is approximately 1 1/2" in diameter to accept the lifting hooks.

Chains or cable slings should be used in accordance with the manufacturer's capacity. If the lifting anchor is located on a surface parallel to the ground, the chains or slings should be long enough to have a minimum of a 60 degree angle between the floor of the precast product and the chain (this is a slope of at least 21" vertically for every 12" horizontally). If the lifting anchor is located on a surface perpendicular to the ground, ensure there is a minimum of a 30 degree angle between the vertical wall and the chain.

Site Excavation & Subgrade Preparation

Shoring of the excavation should be evaluated by the contractor and handled as the project conditions deem necessary to prevent wall erosion or cave-ins. Different soil and site conditions will warrant different methods to maintain a safe jobsite.

Contractor should take notice of outside dimensions of precast concrete sections being installed and excavate appropriately to have enough space for backfill as needed. Depending on soil conditions, we recommend excavating deep enough to allow for at least 6" of compactible aggregate material (crushed stone for example) directly below the precast concrete section. The material should be leveled and compacted to withstand a recommended minimum of 2,500 lbs per square foot of pressure.

Backfilling

Once the precast concrete section has been placed at the appropriate elevation, backfill in 6" to 12" lifts with stabilized sand.

Alternate backfilling each side of the precast concrete structure to prevent uneven loading and possible movement of the product.

Compact the fill material to withstand a minimum of 2,500 lbs per square foot of pressure.

Joint Sealants

Depending on the project, a butyl rubber sealant may be provided with the precast concrete to help provide a more water resistant seal between the precast sections. This sealant should be installed according to the manufacturer's installation requirements as noted on the sealant data sheet.

LOCKE SOLUTIONS

7600 S. Santa Fe, Bldg I
Houston, TX 77061

832.804.7062
LockeSolutions.com

