ATTACHMENT 3: LIFTING REQUIREMENTS FOR CONCRETE BLOCKS

Concrete Blocks (i.e., Ecology, Landscaping Blocks) stacked more than two high shall be evaluated for structural stability. Lifting blocks that are not stacked, with a forklift (load on tines) are acceptable. Concrete Block lift bails shall be inspected and found free of cracks, deformation, excessive wear exceeding 10% of nominal size, damage, or broken wires or stands, as applicable, before being lifted using bails under one of the following approved conditions and methods.

1. Lifting with “Engineered and Marked” Concrete Blocks

   Concrete blocks that meet the following requirements or equivalent as determined and approved by a qualified engineer, may be lifted using the lifting bale.
   
   • Concrete Blocks shall be designed by a licensed professional engineer.
   
   • Concrete shall be per American Concrete Institute (ACI) 318, Building Code Requirements for Structural Concrete and Commentary, and 301, Specifications for Structural Concrete.
   
   • Lifting bail embedment shall comply with ACI 318 and lifting bail material shall be designed to the applicable codes to withstand the anticipated lifting loads.
   
   • Concrete Block manufacturers shall implement a documented system for quality control of the block fabrication. The system shall include random testing of a minimum 10% of the lifting bails to a 125% load test for each contractor purchase order.
   
   • Each concrete block shall be permanently marked (etched or stenciled) on both sides of the block with the Contract Number and the month and year of fabrication.

2. Lifting with an approved below-the-hook lifting device

   Concrete blocks that do not meet the requirements of an Engineered and Marked block, shall be lifted with an approved below-the-hook lifting device meeting the requirements of Chapter 11.0, Below-the-Hook Lifting Devices.

3. Lifting with Special lift plan

   Existing concrete blocks that do not meet the requirements of an Engineered and Marked block and are configured in a position that prohibits the use of an approved lifting device, shall be lifted by implementing Special/Engineered lift criteria addressing hazards associated with a possible lift point failure.
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