

RISER SOLUTIONS: Installation Instructions

1) Prepare a flat, level surface

- a. Compacted base
 - i. Coarse sand, dampened
 - ii. Limestone chips
 - iii. Undisturbed soil
- b. Precast planks
- c. Structural steel decking
- d. Structural concrete slab / deck

2) Install EPS Geofom

- a. EPS blocks that are custom-cut per application
 - i. Rectangular shape – minimal waste
 - ii. Tapered top to match the inclination of the 'rise & run' of the tiered concrete
- b. EPS foam offers several beneficial characteristics when compared to traditional fill
 - i. Approximately 1%~2% the weight of compacted granular fill or soil
 - ii. No lateral compaction loading against adjacent walls
 1. Perimeter walls can be metal studs or CMU
 2. No lateral bracing required to support perimeter walls
 - iii. The slope is absolutely precise to spec
 - iv. Concrete volumes accurately estimated
 - v. Workers can walk on the foam without disruption of the slope and surface
 - vi. Engineered 'load bearing' capability
 1. Dead & live loads distributed through concrete slab onto Geofom – possible reduction of structural concrete design
 2. ASTM tests document PSF load bearing capacity of Geofom (per square foot)
- c. Straight applications
 - i. Larger block sizes are possible
 1. Size determined by application
 - ii. Blocks can set adjacent, parallel, or perpendicular to each other
- d. Radius applications
 - i. Approximate blocks 'footprint' will be up to 36" x 52"
 - ii. Blocks are set 'nose to nose' along the actual radius layout
 - iii. Successive rows of Geofom blocks are trimmed progressively wider
 1. first row will be the narrowest
 2. back row will be the widest

3) Plywood 'interface' secured to the EPS

- a. ¾" plywood, cut 12" wide
- b. 12" width bears sufficient concrete volume
 - i. Mass of concrete prevents lifting
 - ii. Mass of concrete prevents rotation of form face, when attached to a series of riser ties
- c. Will not exceed 24" on center positioning
- d. Positioned in a straight or radial pattern from front to back
 - i. Located over every joint between the foam blocks; covering irregular gaps
 - ii. Located at the mid-point of the foam blocks
- e. Bonded with high strength foam adhesive
- f. Initially secured with pronged connecting pins

4) Attach riser ties to the plywood

- a. Custom ties, configured to match the specific 'rise & run' for each application
- b. Layout never exceeds 24" on center horizontal spacing
- c. Threaded fasteners stabilize & secure the riser ties to the plywood
- d. Connection exceeds lateral concrete pressures against the riser form faces
- e. Connection exceeds installation & use loads
 - i. Workers climbing & standing on forms
 - ii. Pumping lines laying on the form

5) Install riser face, forming plywood

- a. ¾" HDO plywood riser face
- b. Pre-cut to riser height
- c. Pre-drilled to match tie
- d. Pre-cut chamfer detail on bottom edge
- e. Please note – some systems are completely pre-assembled – ready to install

6) Attach forming hardware

- a. Various hardware products can be used
 - i. Cam Lock (hand set)
 - ii. Button Head Wedge (hand set)
 - iii. Anchor Lock (attached)
- b. Hardware selection is often determined by the riser height
 - i. Hardware is selected to provide sufficient room for finishing the concrete
 - ii. Hardware is sometimes dictated by the contractor
- c. Please note – some systems are completely pre-assembled – ready to install

7) Install walers

- a. Straight applications can use standard lumber walers
- b. Radius applications should use pre-formed custom walers
- c. Please note – some systems are completely pre-assembled – ready to install

8) Place concrete

- a. Concrete can be 'pumped' into the forms
- b. Concrete can be 'bucketed' into the forms
- c. Placing sequence is totally at the discretion of the contractor
 - i. Bottom to top
 - ii. Top to bottom

9) Strip forms and repeat as required

- a. Reuse is acceptable as long as the forms are well maintained and free from damage
- b. Control/contraction joint layout will affect the design & reuse of the riser forming assembly

RISER SOLUTIONS®

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