

# Installation Instructions

Ranger  
DL-RANG-NTC



## Specifications:

- Material: GFRC Concrete with Structural Foam
- Approximate uninstalled Size: 7'-6"x4'-10"x4'-8"
- Approximate Weight: 2000 Lbs
- Maximum fall height: 3'-8" (assumes 1' of safety surfacing)
- Age group: 2-5 years old

## Required Parts (included):

- GFRC Sculpture
- 4"x4"x3/8" aluminum angle mounting brackets: 4ct
- 1/2" X 5 1/2" SS w edge Anchor: 4ct
- Bolt Hanger (lifting eye) : 4ct
- "Ranger" drawing set

## Recommended Equipment (not included):

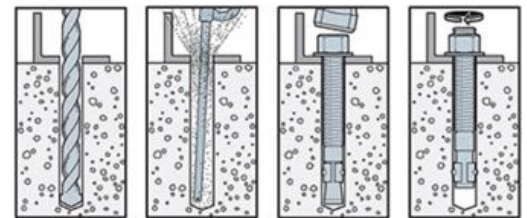
- Hammer Drill
- 1/2"x 6" concrete drill bit
- Air compressor with blow tube
- Hole brush
- Adjustable Wrench
- 6' lifting straps: 4ct
- 1/2" Quick links: 4ct
- Large adjustable crescent wrench
- Lift: Reach Type Forklift 6000lb Capacity, Skid Steer or Crane



To verify product certification,  
visit [www.ipema.org](http://www.ipema.org)

## Important Notes:

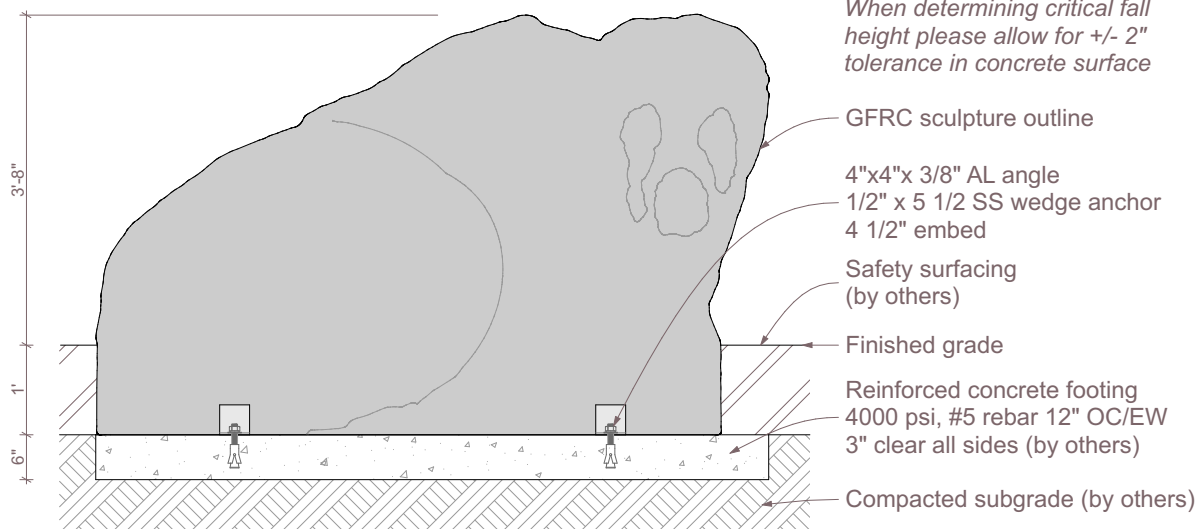
- *Warning: Installation over a hard surface such as asphalt, or packed earth may result in serious injury or death from falls.*
- *It is the responsibility of the installer to ensure all components are installed in compliance with ASTM F-1487.*
- *All site built footings should be allowed to cure for a minimum of 48 hours prior to installation.*



Typical Wedge Anchor Installation

Note:

When determining critical fall height please allow for +/- 2" tolerance in concrete surface



Section

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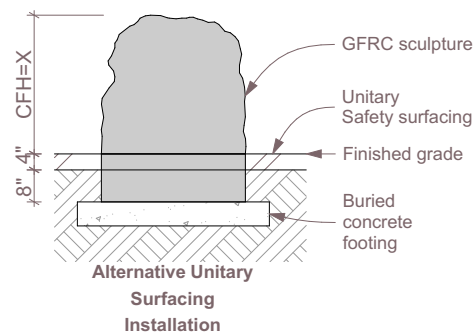
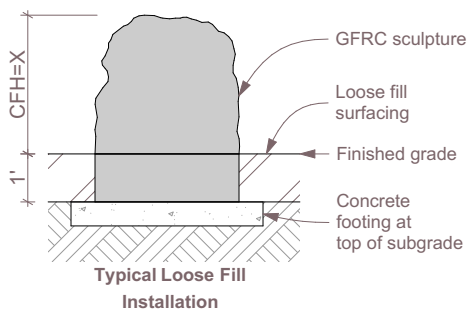
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## PRE-INSTALL CHECKLIST

Please review prior to ordering and installing products.

- ☐ 1. Verify that you have the recommended lifting equipment to unload and install your component, as specified by the installation instructions. Please check the installation instructions for the weight of each component and shipping dimensions.
- ☐ 2. Develop a proper plan to access the site and control access prior to opening.
- ☐ 3. Call your local utilities to locate any potential existing below grade equipment?
- ☐ 4. FOR ALL SCULPTURES: Verify you have accounted for adjustments to the footing depth based on your choice of safety surfacing material. Footing depth must be adjusted to compensate for the depth/thickness requirements of the selected safety surfacing (*see diagrams below*). Layout drawings show the uninstalled dimensions of the component.



\*Critical Fall Height (CFH)

- ☐ 5. Verify that you have installed any required footings prior to the arrival of your sculptures. Please note, footings should be allowed to cure for a minimum of 7 days.

### Important Safety Note:

Please install and maintain adequate protective surfacing under and around your equipment.  
Never let dogs play on the equipment before protective surfacing is installed.

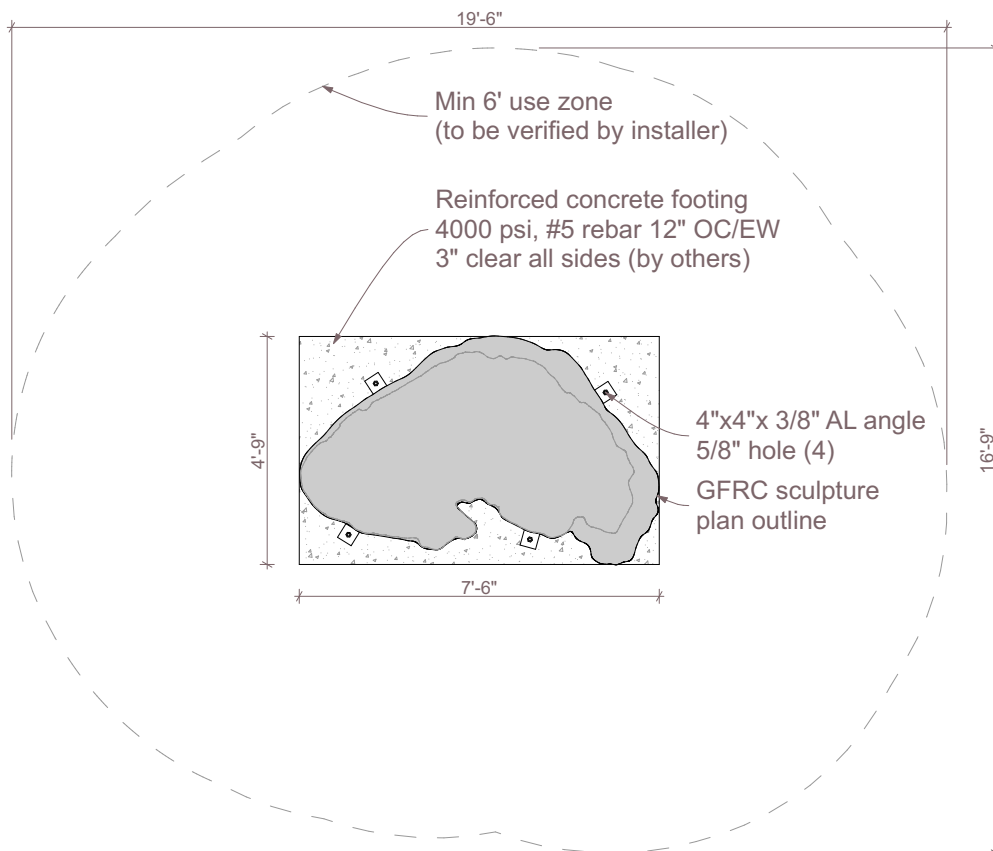
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## Sculpture Installation:

1. Locate and construct the footer based on the provided layout plan drawing.
2. Place the palette mounted sculpture on the footing, disconnect the sculpture to palette connection bolts and discard.
3. Make sure that the Bolt Hanger / lifting eyes (4ct) are securely attached to the bolts protruding from the base of the sculpture. Secure the (4) 6' lifting straps to Bolt Hangers using 1/2" quick links.
4. Lift the sculpture using an appropriate reach forklift or crane taking care to equalize the load on straps.
5. Remove the palette and set the sculpture in place on the footing, verify all use zones as defined by ASTM 1487 before drilling anchor holes.
6. Remove the bolt hangers and replace the nut over mounting brackets.
7. Drill through the holes in the mounting brackets and into the concrete slab with a 1/2"x6" hammer drill bit to a minimum depth of 4 1/2", this will penetrate the clean holes with compressed air and brush.
8. Install the stainless steel 1/2"x5 1/2" wedge anchors and tighten.
9. Install resilient surfacing material in accordance with layout guidelines, and ASTM standards.



Plan