INSTALLATION INSTRUCTIONS



1.

Clean the surface of the manhole to be sure no loose material or debris is left behind. Use a chipping hammer or chisel and whisk broom.



2.

Measure the distance from the top of the manhole to the desired final elevation, subtract the height of the casting and select the rings.



3.

If the surface on top of the manhole is too damaged, rough or irregular, place a $\frac{1}{2}$ " thick bed of non-shrink mortar or grout on the surface and rough in.



4

Embed the first ring directly into the mortar, center it and make sure the ring is level. Proceed to step 6 to determine remaining rings required. If step 3&4 are not required, proceed to step 5.



5.

Repair any minor surface defects that may be present with a non-shrink repair mortar to ensure a flat, level surface.



6.

Dry stack the selected rings and verify the measurements to ensure the desired elevation has been attained.



7.

If Angle Rings are used, a paint mark should be made on the rings during dry fit alignment to ensure proper position once installed with the adhesive. Once final elevation is set, remove the ring stack and set upside down off to the side.



8.

Overfill the grooves in underside of the Grade Ring with the recommended adhesive. Flip the ring with adhesive side down onto manhole, making sure it is centered.



9.

Apply a ¼" to ½" bead of the recommended adhesive to the groove and to the outer glue trench of the next Grade Ring or proceed to step 10 for a Finish Ring.



10.

Apply the recommended adhesive as before to each groove on the underside of the Finish Ring and position with the grooves down onto the Grade Ring.



11.

For Angle Rings, place a ¼" bead of recommended adhesive into the groove on the underside of the Angle Ring and to the inside shoulder of the Finish Ring.



12.

Place the Angle Ring onto the Finish Ring with the recommended adhesive facing down, making sure to align with any previously applied marks.



13.

Place one or two ½" beads of the recommended adhesive on the top surface of the Finish or Angle Ring prior to setting the manhole frame casting.



14.

Install and center the manhole frame casting. With installation complete, backfilling and paving may proceed immediately. Take care as to not displace the rings or the frame.

THE USE OF SHIMS OF ANY TYPE ARE PROHIBITED.



