

# Grade Rings and Grade Ring Inserts

## Applications

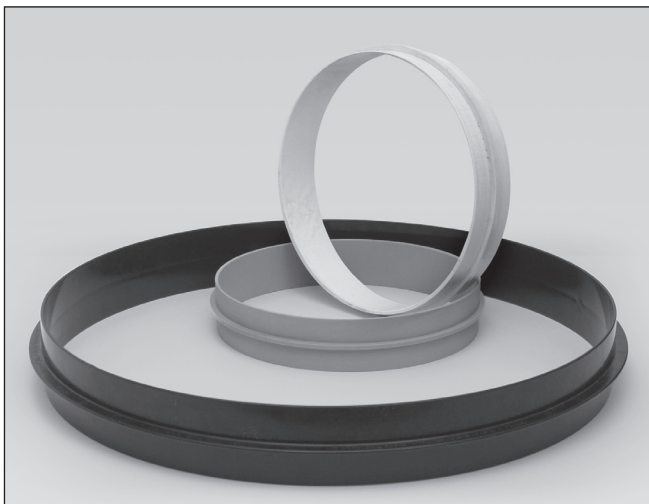
Orenco Grade Rings can be attached to access risers to extend the length of the risers. Orenco Grade Ring Inserts connect sections of access riser pipe with a strong, watertight bond.

## General

Orenco grade rings consist of a section of Orenco fiber-reinforced polymer (FRP) or polyvinyl chloride (PVC) riser pipe with an Orenco grade ring insert affixed to the edge. The grade ring inserts serve as a coupling and are bonded to the end of a riser with adhesive. See [Adhesives and Dispensers for Orenco Products Technical Data Sheet, NTD-ADH-1](#).



Orenco grade rings with grade ring inserts attached

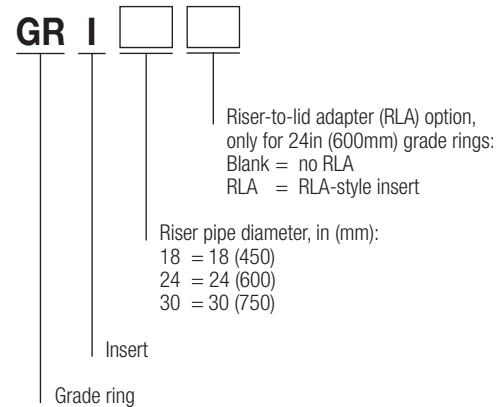
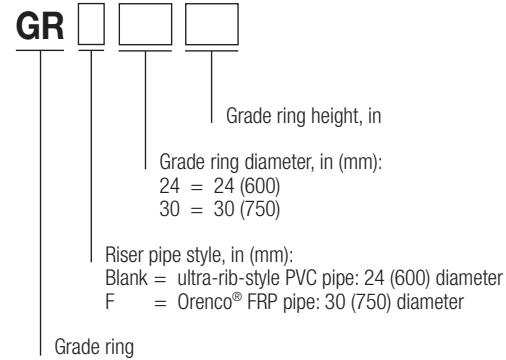


Orenco grade ring inserts

## Standard Models

GRI18, GRI24, GRI24RLA, GRI30

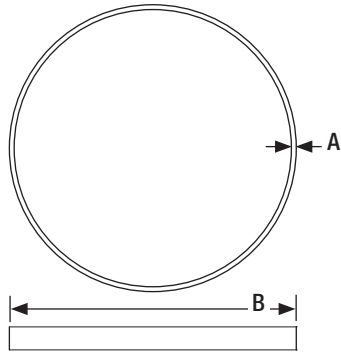
## Product Code Diagrams



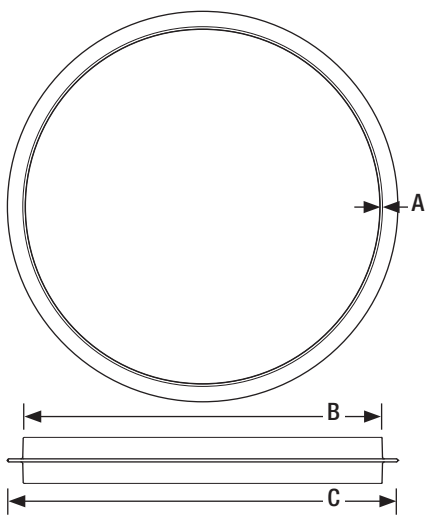
**Not all product code configurations may be available as standard products.**

## Materials of Construction

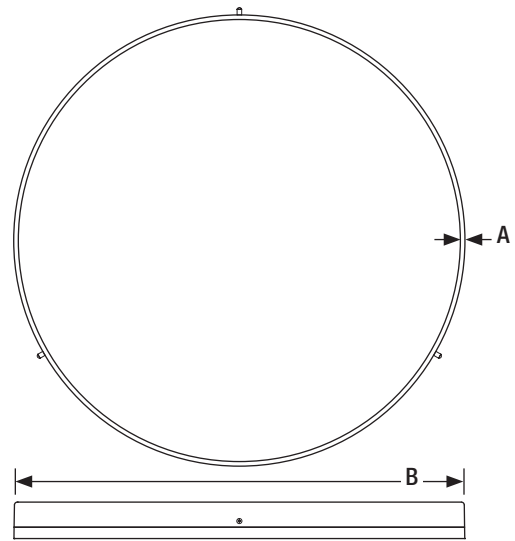
18, 24, and 30in (450, 600, and 750mm) inserts	ABS
Screws and spacers (GRI30 only)	Stainless steel, nylon
Ribbed riser pipe	PVC
FRP pipe	FRP



GRI18, top and side view



GRI24, top and side view



GRI30, top and side view

### Specifications\*

Grade ring inserts <sup>†</sup>	GRI18	GRI24	GRI24RLA	GRI30
<b>A</b> Insert thickness, in (mm)	0.30 (8)	0.30 (8)	0.30 (8)	0.20 (5)
<b>B</b> Outer diameter, in (mm)	18.70 (475)	23.50 (597)	24.38 (619)	29.25 (743)
<b>C</b> Flange outer diameter, in (mm)	N/A	24.50 (622)	N/A	N/A
Pipe applications	Ultra-rib-style PVC	Ultra-rib-style PVC, spiral-seam PVC, dual-wall corrugated PVC, Orenco FRP	24in (600mm) pipe with riser-to-lid adapters (RLAs), Orenco FRP	Spiral-seam PVC, dual-wall corrugated PVC, Orenco FRP

\*Specifications for pipe portion of grade rings can be found in [Ultra-Rib-Style Access Risers Technical Data Sheet, NTD-GOP-RAR-2](#), and [FRP Access Risers Technical Data Sheet, NTD-GOP-FAR-1](#).

† All inserts adapt to the I.D. of the riser except the GRI18, which adapts to the O.D. of the riser.