

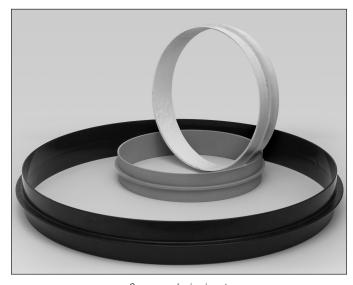
# **Grade Rings & Grade Ring Inserts**

## **Applications**

Orenco's grade rings extend existing access risers to needed lengths. Orenco's grade ring inserts connect sections of access riser pipe for strong, watertight bonding.



Orenco® grade rings with grade ring inserts attached



Orenco grade ring inserts

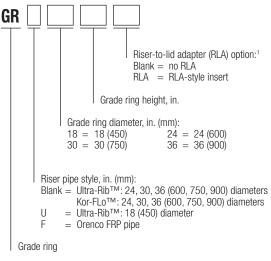
#### General

An Orenco® grade ring is constructed of a section of Orenco FRP or PVC riser pipe with an insert affixed to its edge. The grade ring insert is bonded to the end of the riser to serve as a coupling. MA320 or ADH200 adhesive is used to bond grade ring inserts to riser pipes.

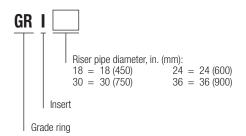
#### **Standard Models**

See the specifications chart on page 2 for standard models of grade ring inserts.

### **Product Code Diagrams**

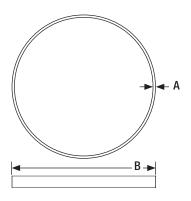


<sup>1</sup> For 24-in. (600-mm) grade rings only

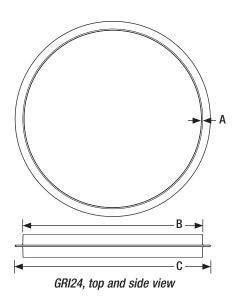


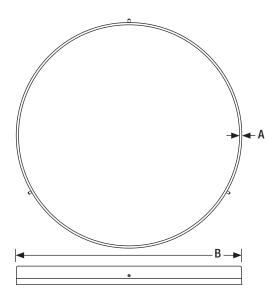
#### **Materials of Construction**

Grade Rings and Grade Ring Inserts	
18-in. (450-mm)	ABS
24- and 30-in. (600- and 750-mm)	ABS
36-in. (900-mm)	Fiberglass-reinforced polyester
Screws and spacers (GRI30 only)	Stainless steel and nylon
Ribbed riser pipe	PVC
FRP pipe	Fiberglass-reinforced polyester



GRI18, top and side view





GRI30, top and side view

# **Specifications\***

Grade ring inserts**	GRI18	GRI24	GRI24RLA	GRI30	GRI36
A - Insert thickness, in. (mm)	0.30 (8)	0.30 (8)	0.30 (8)	0.20 (5)	0.25 (6)
B - Outer diameter, in. (mm)	18.70 (475)	23.50 (597)	24.38 (619)	29.25 (743)	35.5 (902)
C - Flange outer diameter, in. (mm)	N/A	24.50 (622)	N/A	N/A	N/A
Pipe applications	Ultra-Rib	Ultra-Rib, Perma-Loc, Kor-Flo™ Orenco FRP	24-in. (600-mm) pipe with RLAs Orenco FRP	Ultra-Rib, Perma-Loc, Kor-Flo Orenco FRP	Perma-Loc, Kor-Flo Orenco FRP

<sup>\*</sup>Specifications for pipe portion of grade rings can be found on Access Riser technical data sheets NTD-RLA-RR-1 and NTD-RLA-RR-2.

<sup>\*\*</sup>All inserts adapt to the I.D. of the riser, except the GRI18, which adapts to the O.D. of the riser.