

Installation, Safety and Maintenance Instructions

Dynamic Control Guard Rail R3



PACKAGE CONTENTS



Bollard

1 pc



Concrete Anchor Bolts

(14 × 135 mm)
4 pcs per base



Galvanized Steel Guard Rail

80X40
length as required



Rail Brackets

Included as required for connection



Bolts and Nuts (bracket to bollard)

3/8"×110 mm



Bolts and Nuts (rail to bollard)

5/16"×65 mm



Base Plate

1 pc



Elastomer

1 pc



R3 lower Bracket

(80X40 mm)



R3 Adaptor for lower Bracket



Allen screw & Nyloc nut

M14×65 mm



R3 Elastomer



REQUIRED TOOLS



Hammer drill with 14 mm concrete drill bit



Combination wrench 22 mm



Electric impact wrench with 22, 14, 13 mm socket



Allen Key 12



Vacuum cleaner for dust removal

Impact Control



support@imp-control.com



imp-control.com



INSTALLATION INSTRUCTIONS

STEP 1 Positioning

Place the bollard in the desired installation location. Make sure the spacing between bollards matches the guard rail layout.

STEP 2 Marking the Drill Holes

Using the holes in the base plate as a guide, mark the drilling points on the concrete surface. This can be done using either a drill tip or a marker.

STEP 3 Drilling

Drill holes with a 14 mm diameter to a minimum depth of 135 mm.

STEP 4 Cleaning the Holes

Remove dust and debris from the drilled holes using a vacuum cleaner.

STEP 5 Positioning the Bollard Assembly

First place the elastomer on the floor.
Ensure that the elastomer logo is facing downward.
Place the bollard on top of the elastomer.
Place the base plate over the bollard and elastomer, aligning it with the drilled holes.

STEP 6 Positioning the R3 Adaptor

Position the R3 adaptor above the holes

STEP 7 Fixing the Anchor Bolts

Insert the anchor bolts through the R3 adaptor into the holes, and tighten them partially

STEP 8 Final Tightening

Tighten all anchor bolts evenly using the electric impact wrench until the base plate is firmly secured to the floor.

STEP 9 Installing the Rail Brackets

Attach the rail brackets in the correct position using 3/8" bolts and nuts, and tighten the brackets directly and straight to the bollards.
Ensure that the brackets are properly aligned.
The nuts must be firmly tightened to ensure the guard rail is securely fixed
Repeat this procedure for all bollards along the guard rail.





INSTALLATION INSTRUCTIONS

STEP 10 Installing the Guard Rail

Insert the guard rail into position and secure it through the oval hole of the rail bracket using 5/16" bolts, nuts, and two washers.

The nuts must be firmly tightened to ensure the guard rail is securely fixed.

STEP 11 Installation of R3 Elastomer and Railing Bracket

Place the R3 elastomer over the center hole of the R3 bracket.

Position the R3 railing bracket on top of the elastomer, aligning all components with the center hole of the adaptor.

Insert the M14 Allen screw through the railing bracket, the R3 elastomer, and the adaptor.

Using a 22 mm combination wrench and a 12 mm Allen key, tighten the nut until the R3 elastomer is slightly compressed. Do not overtighten.

STEP 12 Installing the Guard Rail

Repeat step 10





SAFETY INSTRUCTIONS



Ensure the concrete floor is structurally sound and suitable for anchoring before drilling.



Always wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and hearing protection during drilling and installation.



Use only the recommended tools and anchor bolts for installation.



Improper installation may reduce the effectiveness of the protection bollard and could lead to equipment damage or personal injury.



MAINTENANCE / INSPECTION



After installation, verify that all anchor bolts are properly tightened.



Perform periodic visual inspections to ensure the bollard remains securely fixed to the floor.



Check the bollard for visible deformation, loosened anchors, or damage after any impact.



If significant damage or structural deformation is observed, the bollard should be replaced immediately.



Ensure that all fasteners remain tight and that the base plate remains flush with the floor surface.



TECHNICAL NOTES



Recommended drill hole diameter: Ø14 mm



Minimum drill depth: 135 mm



Anchor bolts must be tightened evenly to ensure proper load distribution on the base plate.



Installation is intended for concrete surfaces only, unless otherwise specified.



For optimal performance, ensure the base plate is fully supported by the floor surface and not installed on uneven or damaged concrete.

Impact Control



support@imp-control.com

 imp-control.com