

Installation, Safety and Maintenance Instructions

Impact Control Guard Rail R1 & R2

PACKAGE CONTENTS

The installation kit includes:



Bollar

1 pc



Concrete Anchor Bolts

(12 × 70 mm)
4 pcs per base



Galvanized Steel Guard Rail

80X40
length as required



Rail Brackets

Included as required for connection



Bolts And Nuts

3/8"×110 mm



Bolts Nuts And Washers

5/16"×65 mm



REQUIRED TOOLS

The installation kit includes:



Hammer drill with 12 mm concrete drill bit



Electric impact wrench with 17, 14, 13 mm socket



Vacuum cleaner for dust removal

Impact Control



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 12 mm diameter to a minimum depth of 70 mm.

STEP 4

Cleaning the Holes

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

STEP 5

Positioning the Bollard Assembly

Place the base plate over the bollard and elastomer, aligning it with the drilled holes.

STEP 6

Fixing the Anchor Bolts

Insert the anchor bolts into the holes and tighten them partially.

STEP 7

Final Tightening

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

STEP 8

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.

STEP 9

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.





SAFETY INSTRUCTIONS

The installation kit includes:



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: 100 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.

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