

# Pedestrian Guard Rail

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## Operations, Maintenance & Installation Manual For PG1 and PG2 Guard Rails

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Proudly Compliant to:



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## 1.0 Copyright and Disclaimer

### Disclaimer

While every attempt has been made to verify the accuracy of the content in this manual upon its release, we cannot accept liability for any losses or damages resulting from inaccuracies. All tasks outlined must be carried out by certified professionals. Any deviation from these instructions nullifies any guaranteed entitlement or liability from the manufacturer.

### Copyright

The copyright of this manual is owned by First Fence Ltd and is protected at all times. Reproduction of this manual by any means is strictly prohibited without prior written consent from First Fence Ltd.

### Contact

For inquiries regarding the installation, operation or contents of the manual in relation to the Pedestrian Guard Rail range, please direct your questions to:

The Product and Drawing Office Manager  
First Fence Ltd  
Off Kiln Way  
Swadlincote  
Derbyshire  
DE11 8EA

Or

The Product and Drawing Office Manager  
sales@firstfence.co.uk  
+44 1283 380054

### Manufacturer and/or Reseller

First Fence Ltd  
Off Kiln Way  
Swadlincote  
Derbyshire  
DE11 8EA  
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+44 1283 380054

## 2.0 Preface

### O&M Guide

The Pedestrian Guard Rail O&M manual will detail the requirements, safety, site assessment, installation, bill of materials and maintenance best practice.

The PG1 and PG2 Pedestrian Guard Rail is available in the following widths:

500mm, 1000mm and 2000mm

## 3.0 Safety

### Competence

The range must be installed by a person of competence, defined as an individual who possesses the necessary knowledge, skill and experience in the installation of fences and gates.



### Liability

The installation guide should be understood and followed in section 5.0 before any installation activities commence. If any area of the installation is unclear, the installer must contact the manufacturer, outlined in section 1.0 'Contact'. First Fence Limited takes no responsibility for incorrectly installed systems, product, material or components.

### Personal Protective Equipment

Site specific installation methods should always be followed, in addition to using the following PPE equipment:



Hard hats  
must be worn



Ear protection  
must be worn



Foot protection  
must be worn



Eye protection  
must be worn

### Risk Assessment

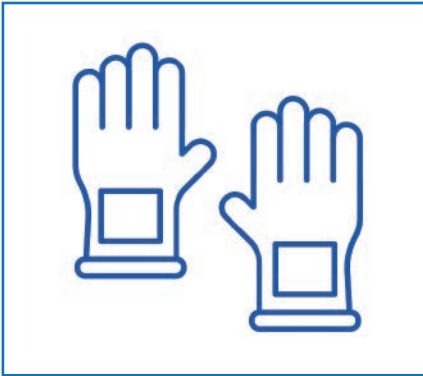
It is the responsibility of the installer to adhere to local risk assessments before installation, including and not limited to the following examples:

Activity	Risk Assessment Requirements and Not Limited to:
Breaking ground for post hole excavations	Noise Vibration Manual Handling
Post installation	Hazardous Substances (COSHH) Manual Handling
Installation of fixings	Noise Vibration Working at height

## 4.0 Installation

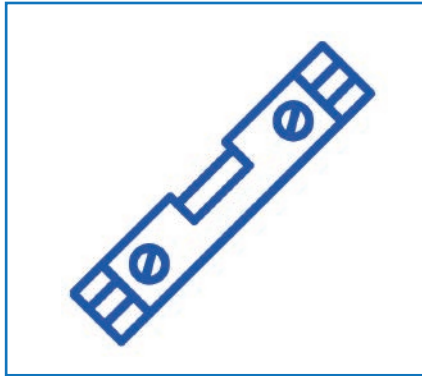
### Tools Legend

Safety Gloves



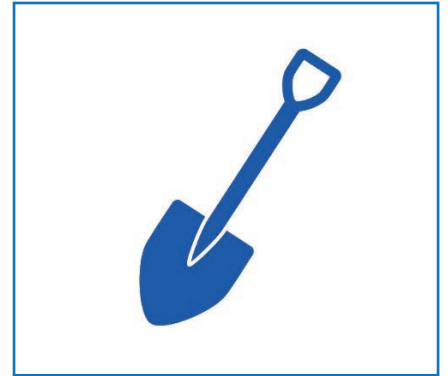
Required for all material handling  
Required for any COSHH tasks including post mix  
Required for any installation tasks

Spirit Level



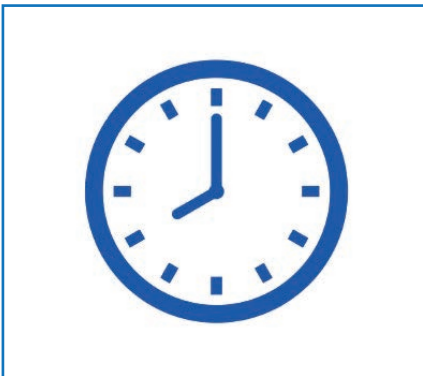
Required for plumb installation of guard rails

Shovel/Excavation



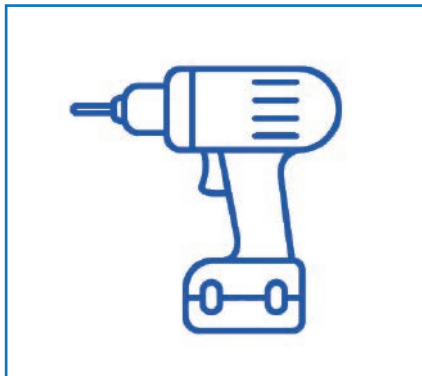
Required for excavation of holes to suit post foundations

Time



Required for post mix curing time  
Required for patched fixing curing time


Drill/Buzz Gun



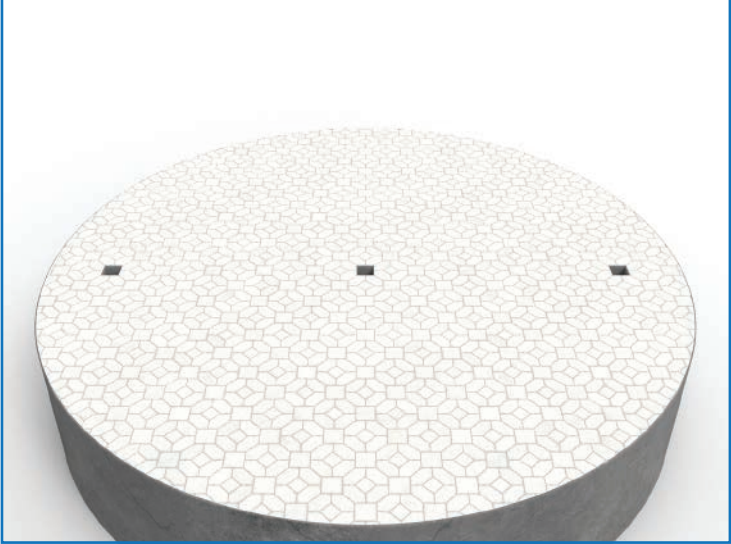
Required for nut installation on guard rails

4.0 Installation


1



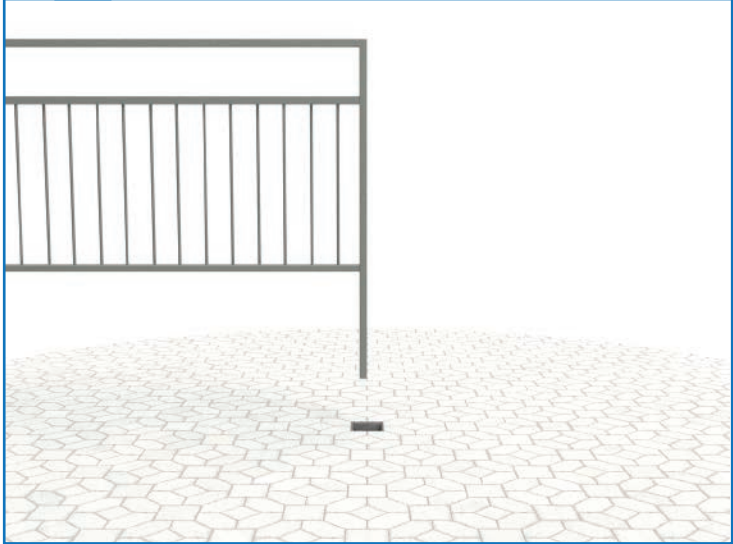
Dig holes for the panel legs of the pedestrian guard rail panel to suit 300x300x400mm deep (as per table 8 BS 7818) Spacing will depend on the panel width, refer to page 3 for dimensions.




2




Place the panel leg in the hole, ensure it is vertical and aligned (please note that for intermediate bays one hole is used for two panel legs).




3




The panels have an installed height of 1.0m and 50mm ground clearance (as per section 2.10.1 in BS 7818, 1000mm height panels must have a minimum dig in depth of 400mm).




4





Place the panel leg of the next panel into the hole, aligning it with the first one.








5	Align the posts so the top rail is level. Bolt the panels together (please ensure supplied M10 x 75mm Hex Bolt is used to ensure compliance with BS 7818) .
	




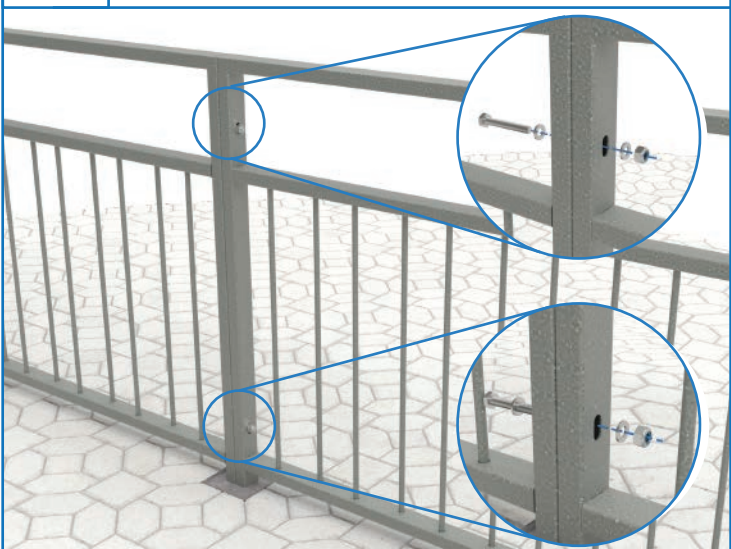
6	Fasten at the top with the M10 x 75mm Hex Bolt, Locking Nut and Flat Washers.
	





7	Fasten at the bottom with the M10 x 75mm Hex Bolt, Locking Nut and Flat Washers.
	


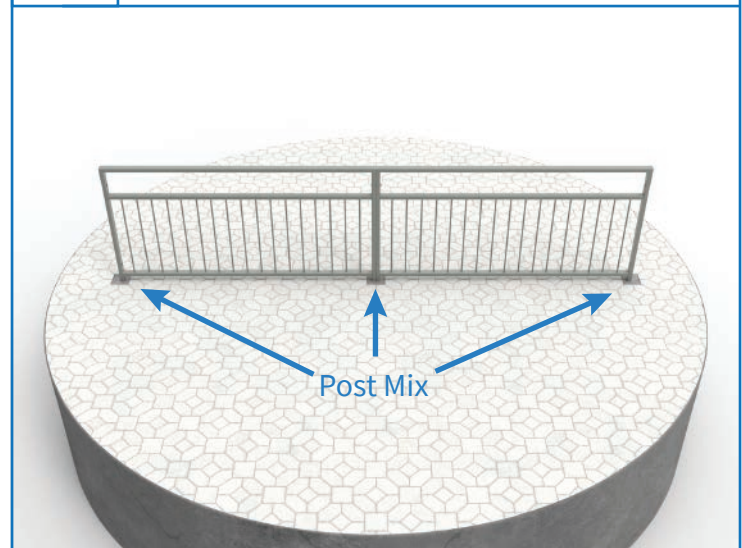


8	<i>View of top and bottom fixings assembling panel to panel.</i>
	





<p>9</p> <p></p>	<p>Secure with concrete or post mix (please note the minimum tensile strength for concrete in BS 7818 is 10 N/mm<sup>2</sup>; First Fence exceeds this tensile strength. Let it cure fully. Use one bag of Post Mix per post.</p>
	

<p>10</p> <p></p>	<p>Each post requires post mix to ensure a strong and lasting installation. Please ensure packers of a suitable height are used to maintain the ground clearance gap of 50mm on both ends of the panel.</p>
	



### Corner Assembly

Corner assemblies are constructed without fixings, relying on the concrete (post mix) to remain secure (please note two panel legs still share the same excavated hole).

### Stepped Assembly

Sloped environments will require stepping of the panels. Installer discretion is advised (please note when stepping, the minimum effective height of 1000mm must be maintained). If mechanically fixing stepped panels, ensure galvanised surfaces that are affected are treated with zinc spray.



## 5.0 Bill of Materials

PG1 Pedestrian Guard Rail 0.5m wide (standard infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail 0.5m wide BS 7818	GUAR-PG1-0030	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 1.0m wide (standard infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail 1.0m wide BS 7818	GUAR-PG1-0020	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4



PG1 Pedestrian Guard Rail 2.0m wide (standard infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail 2.0m wide BS 7818	GUAR-PG1-0010	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 0.5m wide (standard infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail 0.5m wide BS 7818	GUAR-PG2-0030	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 1.0m wide (standard infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail 1.0m wide BS 7818	GUAR-PG2-0020	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 2.0m wide (standard infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail 1.0m wide BS 7818	GUAR-PG2-0010	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 0.5m wide (single stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Single Stagger 0.5m wide BS 7818	GUAR-PG1-0060	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 1.0m wide (single stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Single Stagger 1.0m wide BS 7818	GUAR-PG1-0050	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 2.0m wide (single stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Single Stagger 2.0m wide BS 7818	GUAR-PG1-0040	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 0.5m wide (single stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Single Stagger 0.5m wide BS 7818	GUAR-PG2-0060	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 1.0m wide (single stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Single Stagger 1.0m wide BS 7818	GUAR-PG2-0050	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 2.0m wide (single stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Single Stagger 2.0m wide BS 7818	GUAR-PG2-0040	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4



PG1 Pedestrian Guard Rail 0.5m wide (double stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Double Stagger 0.5m wide BS 7818	GUAR-PG1-0090	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 1.0m wide (double stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Double Stagger 1.0m wide BS 7818	GUAR-PG1-0080	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 2.0m wide (double stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Double Stagger 2.0m wide BS 7818	GUAR-PG1-0070	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 0.5m wide (double stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Double Stagger 0.5m wide BS 7818	GUAR-PG2-0090	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 1.0m wide (double stagger infill)

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	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
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	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 0.5m wide (triple stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Triple Stagger 0.5m wide BS 7818	GUAR-PG1-1030	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 1.0m wide (triple stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Triple Stagger 1.0m wide BS 7818	GUAR-PG1-1020	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG1 Pedestrian Guard Rail 2.0m wide (triple stagger infill)

Illustration	Description	Component Code	Quantity
	PG1 Pedestrian Guard Rail Triple Stagger 2.0m wide BS 7818	GUAR-PG1-1010	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 0.5m wide (triple stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Triple Stagger 0.5m wide BS 7818	GUAR-PG2-1030	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 1.0m wide (triple stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Triple Stagger 1.0m wide BS 7818	GUAR-PG2-1020	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

PG2 Pedestrian Guard Rail 2.0m wide (triple stagger infill)

Illustration	Description	Component Code	Quantity
	PG2 Pedestrian Guard Rail Triple Stagger 2.0m wide BS 7818	GUAR-PG2-1010	1
	M10 x 75mm Full Thread Hexagon Bolt - Stainless Steel	GUAR-FIX-0010	2
	M10 Hexagon Nylon Locking Nut - Stainless Steel	GUAR-FIX-0030	2
	M10 x 20mm Form A Flat Washer - Stainless Steel	GUAR-FIX-0050	4

## 6.0 Installation Sign Off Checklist



Note: below is an advisory best practice installation check list to ensure your Pedestrian Guard Rail fencing remains operational, effective and safe.



Action	Description	Consequence	Pass or Fail?	Remedial Action	Initial	Date
Site clean up	Ground clean up involves the thorough removal of all construction debris, surplus materials, packaging, tools, equipment, and waste from the site upon completion of the installation.	Failure to properly clean the site can result in safety hazards such as trips or injuries, delays in project handover, client dissatisfaction, and potential breaches of environmental regulations.		If the site is not properly cleaned, immediate action should be taken to remove all debris, tools, and waste. The area must be made safe, surfaces cleaned, and waste disposed of correctly. A final inspection should be carried out to ensure the site meets the required standards before handover.		
Final inspection and snagging completed	Final inspection and snagging involve a thorough walk through of the completed installation to identify and document any defects, unfinished work, or areas that do not meet the project specifications.	Failure to complete the final inspection and snagging process can result in overlooked defects, safety hazards, and substandard workmanship remaining on site.		To fix snags, first inspect and list all defects or incomplete works. Assign each item to the relevant trade or team, then carry out the necessary repairs or adjustments to meet the required standard. Once completed, recheck the area to ensure the issue is fully resolved.		

Sign off declaration:

I hereby confirm that Pedestrian Guard Rail has been assembled and installed in accordance with the above requirements, and any remedial works have been carried out before the final sign off:

Site Supervisor

Sign off Date

Relationship to the Client

Signature



## 7.0 Maintenance Schedule

Check Area	Result	Action
Ensure all steel components are periodically cleaned of bird matter, debris and dirt.	This will minimise the harbouring of corrosive matter, which could affect paint and galvanising long term	Pressure wash gently to ensure clear of debris
Check for structural damage, loose fittings and corrosion/rust.	Structural damage may make the system non-compliant. Loose fittings may make the system unsafe. Corrosion or rust may make the system's lifespan shorter.	Replace any damaged panels, tighten fittings, attend to any corrosion or replace panel.
Durability and corrosion protection (section 2.8 mandates that materials must have adequate corrosion protection and protective coatings must be maintained to ensure functionality throughout the guard rail's life.	This will affect the structural integrity and the panel's ability to perform to the strength requirements in BS 7818.	Any damaged coatings must be promptly repaired and damage to steelwork replaced.

## Take the hassle out of your maintenance schedule

First Fence Limited offers an annual inspection programme for your Pedestrian Guard Rail System.

Contact our team today to include this quote onto your sales order.

[highsecuritymaintenance@firstfence.co.uk](mailto:highsecuritymaintenance@firstfence.co.uk)

## 8.0 Operational Notes

1.0 This system is designed specifically for use. Additional loads such as climbing or mounting signage or privacy netting may cause deformation or damage to the system.

2.0 Check periodically for structural damage, loose fittings, corrosion or coating failure. Replace or repair components as necessary to maintain safe operation.

3.0 Any damage as a result of collision should ideally see the panel fully replaced rather than repaired.