

Safety Gate System Specification

Identification of the Product & Company

Product:	Safety Gate - Injection moulded safe access product
Company Details:	Evergrip Limited Flaxley Road Selby YO8 4BG United Kingdom
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Quality Assurance



The Safety Gate System covered by this specification is tested and approved by AIB-Vinçotte Belgium.

Product Description

Evergrip offer a high quality, self-closing Safety Gate system providing fall protection for ladder way openings & platforms. The system is complete with all required fittings & accessories and has been tested and where applicable, meets with approval to current relevant safety standards:

EN ISO 14122-3 & 4

Safety of machinery - permanent means of access to machinery

Part 3: Stairways, stepladders & guard-rails

Part 4: Fixed ladders

Double and Single Bar Gates meet the required loading standard, however where an existing guardrail system containing a mid (knee) rail has been specified, the Double Bar gate variant should be utilized to maintain full compliance.

The system is designed to offer a low maintenance, innovative and cost effective alternative to stainless or galvanised steel gates when used in new build or refurbishment/improvement projects.



Available in high visibility safety yellow RAL 1023, the Safety Gate system provides the following benefits:

- each gate is simple to configure from left to right opening
- spring actuated self-closing safety mechanism with adjustable closing force
- non-corroding A2 304 stainless steel components
- easy to install
- maintenance free self-lubricating hinge element
- UV resistant, anti-static and fire retardant
- high strength
- extremely durable with long design life
- 5 year warranty (replaceable spring mechanism guaranteed for 100,000 openings)

Material & Design Criteria

- Manufactured from high density polyurethane
- Lightweight with a high strength to weight ratio
- Warm to touch
- Electrically & thermally non-conductive
- Excellent chemical & corrosion resistance
- UV resistant, anti-static and fire retardant
- Transparent to electromagnetic and radio frequencies
- Maintenance free - no scraping, shot-blasting or painting required
- Long design life - typically 20+ years
- Highly durable
- Simple & rapid installation
- Complementary range of stainless & galvanized fasteners & accessories available
- High visibility safety yellow colour

Physical Properties

Density	1050 kg/m ³	DIN 53420
Tensile Strength	50 N/mm ²	DIN 53455
Compressive Strength	15 N/mm ²	DIN 53421
E-modulus	2000 N/mm ²	DIN 53423
Impact Resistance	45 kJ/m ²	DIN 52612

Standard mounting materials to fix the hinge and supporting block are fabricated of stainless steel 304, A2 quality

Composition

High density injection moulded polyurethane, UV stabiliser and flame retardant. Chemical pigment is mixed in to produce the final colour, offering a natural finish which will not require painting.

Loading Data

The Safety Gate system has been tested and satisfies the required loading standard of:

BS EN ISO 14122 Parts 3 & 4

Safety Gates have been tested to withstand a load of 100kg in both vertical and horizontal direction*
- in accordance with and exceeding the mechanical requirements of EN ISO 14122-3.

*Non-destructive test on a Safety Gate with a free span of 81cm and concentrated load in the centre of 100kg

Chemical Resistance

The Safety Gate has excellent outdoor weather resistance and is resistant to most common chemicals. Chemical resistance is however, dependent on factors such as concentration, temperature etc. So if this is a critical factor in the environment, please contact us for further details.

Operating Temperature Range

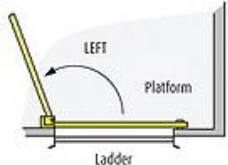
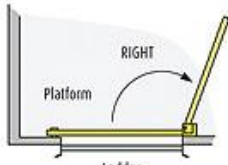
Operating temperature range of **minimum -50°C** to **maximum +100°C**

Dimensions & Weights

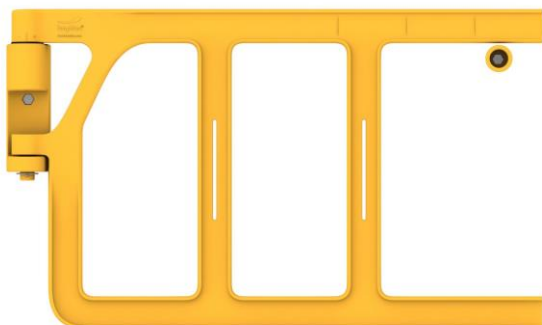
The product is available as either a Double or Single bar configuration with two standard lengths. Gates may also be cut down to length as required. Each gate is configurable to a choice of left or right opening.

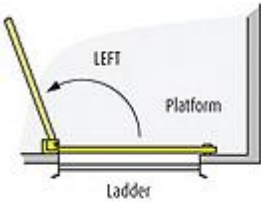
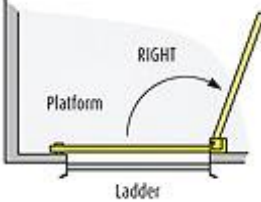
Single Gate





Part No.	Description	Swing Direction: Left or Right (configurable)	Size		Weight kg including hardware
			mm	inch	
SG2.S37-UNIV	Single Gate including hinge, support block, fixings & installation guidelines		940	37	4.0
SG2.S47-UNIV			1200	47	5.5

Double Gate



Part No.	Description	Swing Direction: Left or Right (configurable)	Size		Weight kg including hardware
			mm	inch	
SG2.D37-UNIV	Double Gate including hinge, support block, fixings & installation guidelines		940	37	6.0
SG2.D47-UNIV			1200	47	7.0

Accessories

Part No.	Description	Image	Size mm	
			Diameter	Length
XF107/001	Magnetic Locking Set 16kg opening force		-	-
XF107/002	Magnetic Locking Set 7.5kg opening force		-	-
XF106/001	Tube Fixing Clamp Set HD Galvanized Lined or unlined Ø 40mm		37 - 42	-
XF106/002	Tube Fixing Clamp Set HD Galvanized Lined or unlined Ø 50mm		47 - 52	-
	Hinge/Support Block Bolt Set 316 A4 Stainless incl. nuts & washers		12	60
	Hinge/Support Block 316 A4 Stainless incl. nuts & washers		12	100

Service Life, Routine & Maintenance Inspections

The Safety Gate range has a design life of 20+ years and is sold with a 5 year warranty.

Some fading of the colour should be expected to take place over time where the product is continually exposed to sunlight. Unless the product is subject to conditions outside of the design criteria, no routine inspection is required. The spring actuated closing mechanism is tested guaranteed for 100,000 cycles. The spring unit is quick and easy to replace if required.

In polluted environments, cleaning with a mild detergent solution e.g. automotive shampoo, will restore the appearance of the gate.

Disposal & Environmental Considerations

Solid polyurethane is an inert, non-toxic substance. Scrap and waste material should be disposed of via approved landfill facilities adhering to local regulatory handling and documentation requirements. The material presents no special hazard to the environment.

At the time of printing, we are unable to advice a route to recycling waste of this type.

Handling, Re-working & Machining of Safety Gates - COSHH Advisory Notes

Operators should observe correct manual handling techniques when lifting & moving products to prevent personal injury.

General guidelines are, if cutting or machining products with power tools, this may produce a non-toxic, biologically inert dust. Irrespective of material type, dust levels should always be kept as low as is reasonably practicable and must not exceed the Occupational Exposure Limit of 10mg/m³ total inhalable dust and 4mg/m³ respirable dust – 8 hour TWA value. When working indoors or in confined spaces, adequate ventilation should be provided and when extensive operations are necessary, suitable dust extraction should be provided. Operators should wear dust masks (FFP2) & goggles.

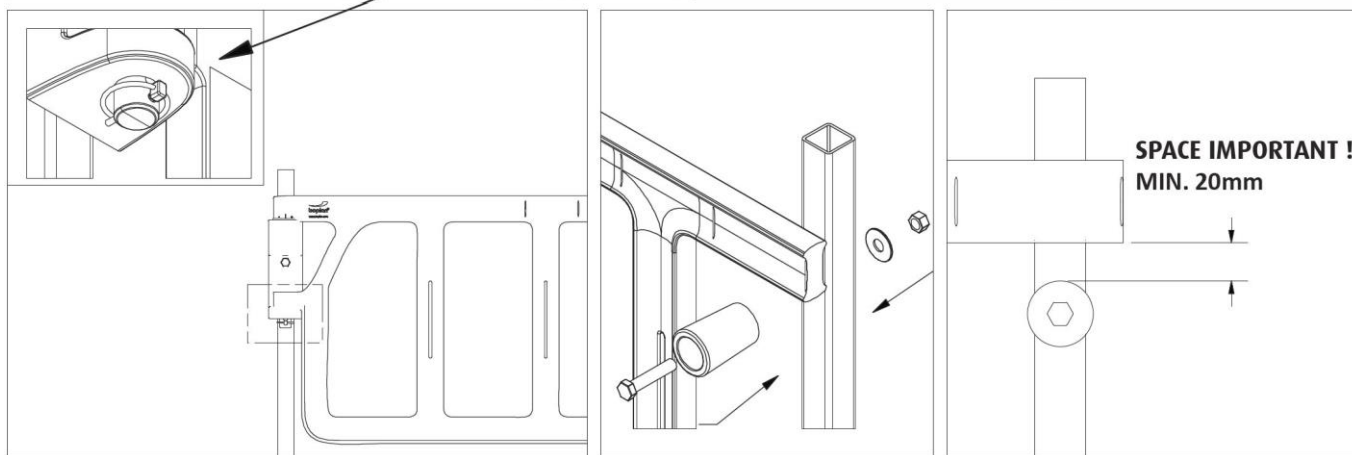
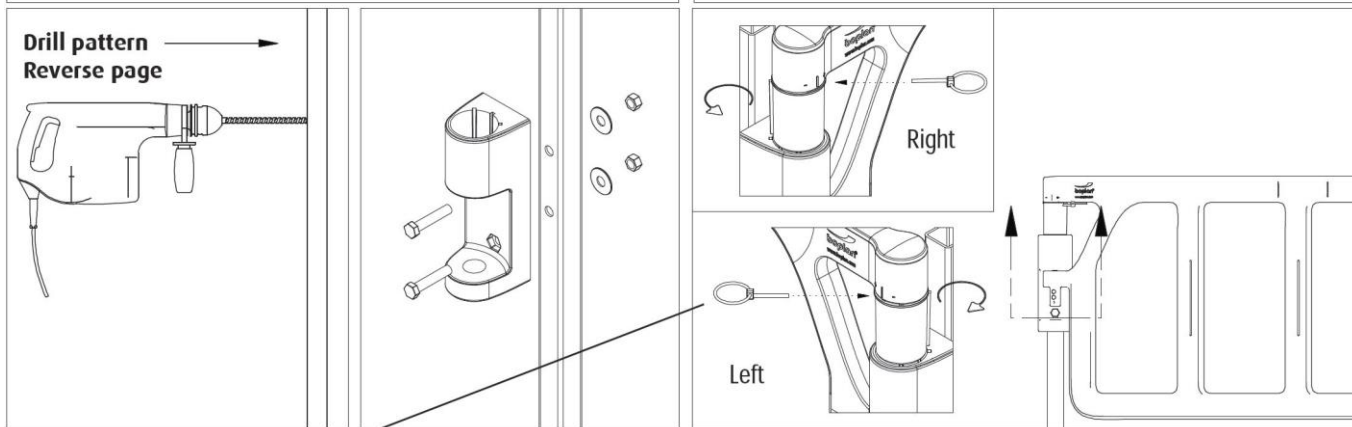
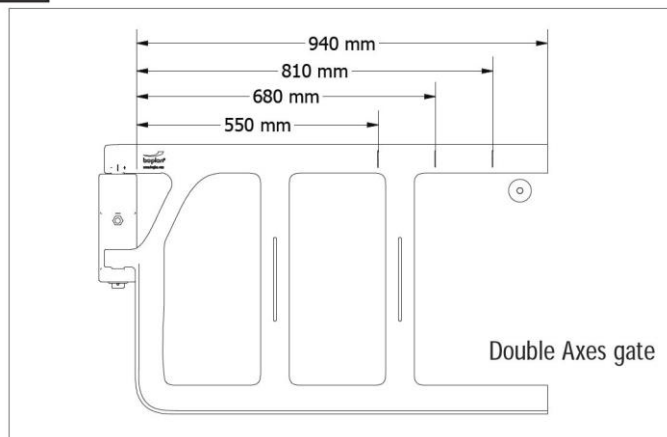
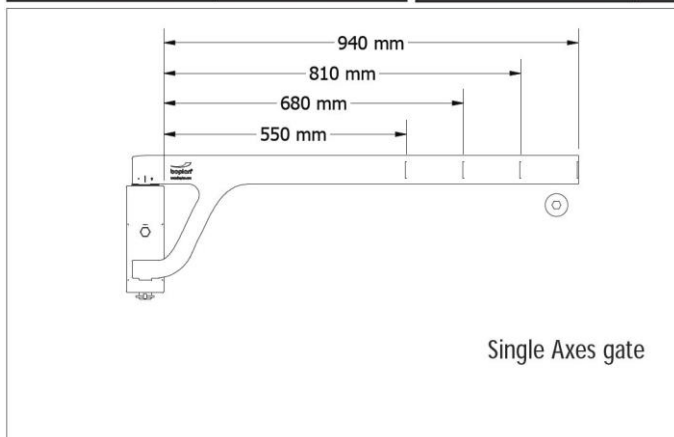
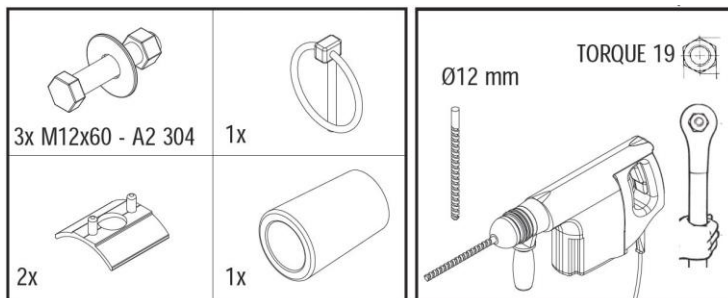


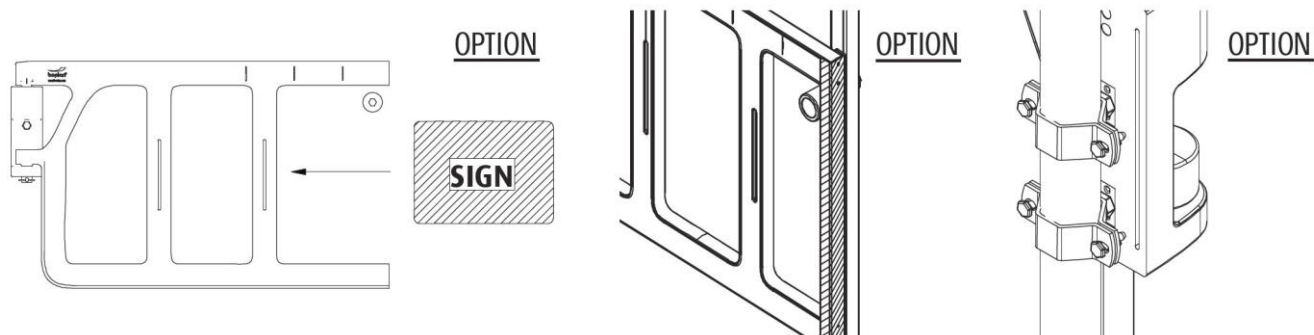
contd.

In isolated cases, dust may cause slight, transient skin irritation. Should these effects become prolonged or should any signs of a rash occur, medical advice should be sought. All exposed skin should be thoroughly washed with soap and water. Any eye contamination should be washed out with copious amounts of bottled sterile water or fresh clean water.

Do not smoke, eat or drink in working areas.

Installation Guidelines





Drilling Template

The final page shows a drilling template for the gate mounting block shown in 1/1 scale.

SCALE 1/1

