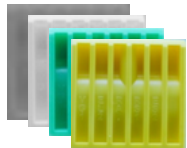


Barrier Sabco is a product designed by Sadev in France to be as simple to install as possible. The instructions below must be followed in their entirety. Should you have any problems or are unsure of any of the steps laid out in this document please call our office on 01708 891515 for assistance.

Please note that all testing has been applied when fixing directly to Steel or Concrete. We do not recommend fixing to timber, or to steel or concrete with timber sandwiched between as it is not a stable platform and can cause excessive movement.

1, Clamp Size Required

Clamps are available in 3 sizes and colours for easy recognition. They are:

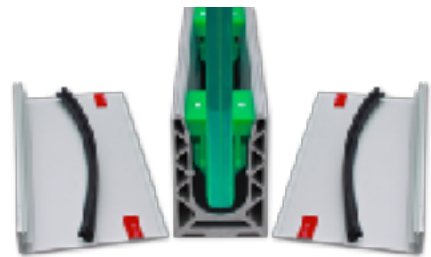


Grey	=	15mm Glass
White	=	16.9mm & 17.5mm Glass
Green	=	20.76mm, 20.9mm & 21.52mm Glass
Yellow	=	24.76mm, 25mm & 25.52mm Glass (only clamp suitable for 3kN rating)

2, Kit Contents - (Kit refers to each 2500mm rail)

Each kit will consist of:

- 1x 2500mm Rail
- 10 x Clamps with Wedges and torx screws*
- 2 x 2500mm Covers (cover type dependant on Base or Side Mount)
- 5000mm Gasket



*** For the 3kN rating the kit will include double the amount of clamps which need to be spaced equally along the channel.**

Fixings (supplied by others) are also required. Please take advice from a Structural Engineer as to the recommended fixings for your application.

3, Additional items you may need

- Connection Pins
- End Caps
- Glass Panel Spacers
- Handrail Components & Gasket

4, Tools Required

- Drill
- Torx Screwdriver Bit
- Suitable Drill Bits
- Socket Set
- Screwdriver
- Torque Wrench
- Spirit Level
- Clamps
- Circular Saw or other suitable for cutting aluminium profiles
- Glass Carrier Suction Pads

In accordance with current Health & Safety regulations please ensure requirements for PPE are met such as Steel toe capped boots, glasses, hard hat etc.

5, Layout

Plan out where you need the channel to run. Cut rails accordingly and ensure that if you are joining any rails that you have the connecting pins for correct alignment.

Should you require any angles please note these are created by simply mitre cutting the rail to suit ensuring there is a fixing hole 50mm from the cut end as measured on centreline.

Also ensure you have end caps for any open ends.

6, Rail Fixing

Before starting to drill please take advice from a Structural Engineer as to how close to the edge you can safely drill the required holes whilst still maintaining maximum strength of the slab. This applies to both base or side mounting locations.

Although the channel is drilled at 200mm centres you will only require fixings at 400 centres. The remaining holes can then aid drainage of the channel.

Drill holes into the slab as per your chosen fixing requirements.

Once channel is aligned over the holes secure in place and ensure fixings are torqued to their required pressure as recommended by the fixings manufacturer.

Ensure channels butted together are connected with the pins so that perfect alignment and line strength is achieved.

Mitred joins although not pinned must have a fixing on either side at 50mm from edge as measured along channel centreline.

Insert clamps (minus top wedges) along the rail spaced evenly over the full length 50mm from edge of channel or the glass it is holding. For example a 2500mm rail would have 10 clamps 50mm from either side and then at 267mm centres. **When a 3kN is being installed 20 clamps would be equally spaced per 2500mm rail.**

7, LED Lighting - Now Available!

The base part of the Sabco clamps has a recess to house LED lighting. This allows the LED's to be on the centreline and throw light up into the interlayer and glass.

LED's are now available from Barrier Components with options to suit most applications. The LED strip used is a high quality, nano coated, 24v variant that comes with a 5yr guarantee. It also has a IP rating of IP65 if relying solely on the 3M tape fixing or IP68 if held by other means. This makes it ideal for Sabco Balustrades.

Controllers are available for hard wired or radio frequency control and you have the choice of either multi or single zone layouts.

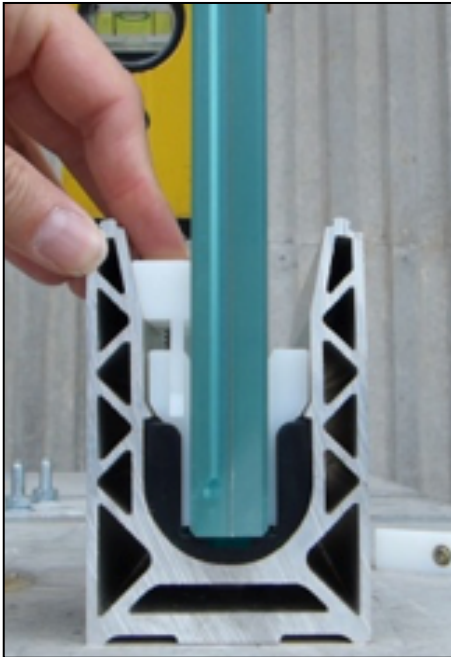
For further details on our LED range please call our sales office or visit the website.



8, Glass Installation and Clamping

If using the glass panel spacers please attach these to the bottom of the vertical edge. Note each spacer is 5mm thick. If a larger gap is required simple join 2 or 3 together to create 10mm or 15mm gaps.

Insert glass carefully into the channel ensuring you do not catch any edges on the rail. Once in position adjust position along rail length as required.



Once glass is in place insert one clamp wedge in position. Using a spirit level against the glass slowly press the clamp wedge down until the bubble is central. If you press down too much raise and repeat process.

Once happy insert the 2nd wedge on the opposite side and insert torx screw. Then begin to screw down until clamp is lightly held in place. Repeat on 1st wedge and then check glass is still in correct alignment. Glass is now held in place and you can now finish driving screw all the way. Torque setting on the torx screw should then be set to between 1.5Nm - 3.0Nm.

Repeat this with every clamp. When aligning the next panel of glass we recommend you use a ratchet style clamp to hold the already installed panel against the following panel to be fitted. This then ensures the panels are aligned and helps make the process a lot easier.

9, Rail Cover Fitting



The Rail covers are pre-fitted with 3M tape. Cut Cover to size allowing for any corners or mitred cut outs. Please ensure main channel is clean and free from debris or grease. Remove 3M backing tape and carefully position the cover by engaging the top section first and then slowly lowering the sides down. This ensures cover is correctly engaged on the top of the channel.

10, Rubber Seal Installation



Press the seal into the gap between the glass and cover so that the small recess on the seal (which has a green stripe inside) overlaps the cover edge. Then, using your thumb or another device, move along seal until it's completely inserted. Please do not stretch seal too much whilst doing this as it will shrink back over time leaving a gap.

11, End Cap Fitting

End caps have 2 strips of 3M tape for fixing to the bare end of the channel. Ensure pointed corners face down and the slightly curved corners face up. Press firmly into position.

Depending on the LED system (if installed) the end cap may need to be drilled for a cable to exit the channel. Liaise with lighting expert for advice.

12, Hand Rail Fixing - (Where Applicable)

Place rubber gasket over top of glass and then place handrail over gasket and press down firmly. Washing up liquid will aid this if it is very tight as will a rubber mallet.

Place end caps at each end - most require a dab of mastic to hold in place.

Joining pieces and adjustable joints for staircases are available and are simply installed between lengths of handrail.

13, Maintenance

This system requires little maintenance but we recommend that you should occasionally wipe the covers, end caps & handrails over with water and a non abrasive detergent if becoming soiled. This ensures they keep looking like new.

Glass can be treated with a self cleaning agent which can be applied before installation at point of manufacture or on site with a specialist cleaner such as EnduroShield.

Periodically inspect the concrete slab for any signs of weakness. Although very unlikely this is advisable as the balustrade system is only as strong as the base it is fitted to.

14, Contact Details

Should you have any issues during or after installation feel free to call us on 01708 891515 or email us at sales@barrier-components.co.uk

Our address is;

Barrier Components Limited
Unit 8 Dolphin Point
Dolphin Way
Purfleet
Essex
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