

Specification Sheet No

PSA 163 Description

**GRADUS SHR40 HANDRAIL** 

Date

APRIL 2023

### **ARCHITECTURAL SPECIFICATION / BOQ**

## SPECIFICATION:

Supply and install SHR40P handrail comprising an aluminium retainer, PVC-u cover, anodized aluminium brackets and PVC-u accessories including returns, inside and outside corners, variable angle and end stops, with PVC-u accessories supplied with black reveals in an anti-bacterial finish to provide neat, smooth joints, featuring a 40mm diameter handrail and offering a smooth, comfortable grip, PVC-u covers and accessories are available in 32 colour options and are through-coloured to conceal the effects of impact and abrasion, supplied in 4.00m lengths. Joining of PVC, length of walls, and contours and deviations of walls **must** be considered when calculating the brackets needed, available from Polyflor (011) 609 3500.

## INSTALLATION: (PLEASE NOTE: ALWAYS USE COMPATIBLE PRODUCTS FROM ONE SUPPLIER)

# SHR40P - PVC-u option, SHR40W - Wood effect option, SHR40S - Silver anodised option

- 1. The wood effect and silver anodised handrails are aluminium extrusions with a thin surface coating. The PVC-u version has a PVC-u sleeve which is already fitted to the handrail.
- 2. Measure the desired length for the handrail, making allowances for any accessories to be added to the straight lengths. Reduce the length by 22mm for each end cap and an additional 30mm so that the end caps can be fitted and removed when placed near an architrave or wall. Allow 82mm for any wall return being fitted and a further 30mm so that it can be fitted and removed. For any 'right-angle' internal corner pieces allow 132mm from the corner's vertex. For an external 'right-angle' corner it is necessary to extend the straight section 8mm beyond the apex of the wall. For the fitting of custom angles consider fitting the 'Rapid-angle' part described in the section 'SHR408P Handrail Rapid-angle'
- 3. SHR40P handrails are delivered with the PVC-u cover and 'closer' already snap-fixed into the aluminium profile. Remove the 'closer', by carefully lifting it from the aluminium with a screwdriver. For a better appearance, cut the aluminium and PVC profiles to length while they are snap fixed together using a chop saw fitted with a fine-toothed blade. Wood effect and Silver anodised handrail retainers should be cut in the same way.
- 4. With the closer removed, the brackets can be slid along the slot of the aluminium profile. For end and corner brackets use a spacing of 200mm from the end of the retainer to the centreline of the bracket. For short handrail lengths, use at least two brackets set at even intervals. Clamp the brackets to the aluminium profile by tightening their grub screws using a 2.5mm Allen key. Likewise, for the returns and corner pieces, always ensuring that the reveals are in place, fasten them to the retainer using the grub screws.
- 5. For lengths longer than 4.0m it will be necessary to connect 2 sections, and this can be done in one of two ways (i) over a bracket or (ii) using a jointing block. When the desired length has been determined allow 200mm for each end bracket then divide the remaining length by the number of available brackets minus one. The spacing should never exceed 720mm. If the spacing is calculated to be less than 600mm reduce the number of brackets. Wherever possible try and even out the lengths of the handrail sections (i.e., for a 4.5 metre length consider using a 2.0m and a 2.5m length instead of a 4.0m & 0.5m length). A bracket must not be placed within 80mm of a jointing block due to interference.
- 6. Whenever possible insert the 'closer' sections before mounting the handrail onto the wall. For all jointing blocks, brackets, returns, and corner pieces ensure the grub screws are tightened into position (but not over-tightened) before inserting the 'closer' sections as the grub screws will be inaccessible after the closers have been inserted. Take care that the reveals are not being pinched. The closer sections all need to be cut to their bespoke length before fitting. To minimise dirt traps, all closer sections should leave a gap of no more than 2mm than the sections they are required to fill. Closer sections will not span a jointing block.
- 7. Use a laser level to mark a height of 70mm below the prescribed upper handrail surface height, as the guide for the hole centres of the bracket screws. Hold the assembled handrail up to the wall, ensuring that the handrail is correctly spaced relative to sections of wall and corners, align the holes in the brackets with the laser line and make marks on the wall for a hole at both ends of the handrail. Drill holes at both marks using a drill bit appropriate for the wall construction and fittings (wall plugs and screws, not supplied).

## SPECIALIST FLOORING & WALL PROTECTION PARTNER

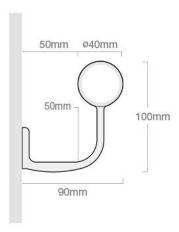


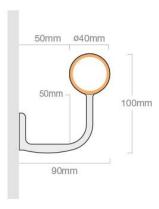
- 8. Once these 2 holes have been drilled and plugged, loosely mount the handrail brackets to the wall. Use the assembled handrail brackets as templates for marking the other hole positions. Remove the handrail to allow drilling and plugging of all remaining holes.
- 9. Refit the handrail loosely to the wall with a screw in each hole before tightening any of the screws hard down. Once it is established that all holes in the brackets are aligned with all holes in the wall, only then should the handrail bracket screws be fastened firmly.
- 10. For the wall return end cap, ensure it is screwed to the wall before fitting into the return. Fit carefully all remaining closer sections ensuring there are gaps of no more than 2mm.

#### **Fitters Tips:**

• For the cleanest cut ensure the touched face of the closer is cut first. A fine-tooth aluminium/plastic blade is also preferred.







## **MAINTENANCE:**

A regular scheduled maintenance programme should be employed to prevent the build-up of dirt and grease, which will detract from the overall appearance of the product and can lead to the spread of germs and bacteria.

Apply a neutral cleaner to a micro fibre cloth and wipe the surface of the profile. When cleaning handrails, particular attention should be paid to the underside of the handrail as this is where dirt and grease can build up.

The cleaned surface should then be 'rinse wiped' using clean water and then thoroughly dried using a soft cloth. This ensures all cleaning residue is removed.

Abrasive cleaners, solvents, or cleaning pads (e.g. Thinners, Turpentine, Handy Andy) should NOT be used as they will damage the profile surface.