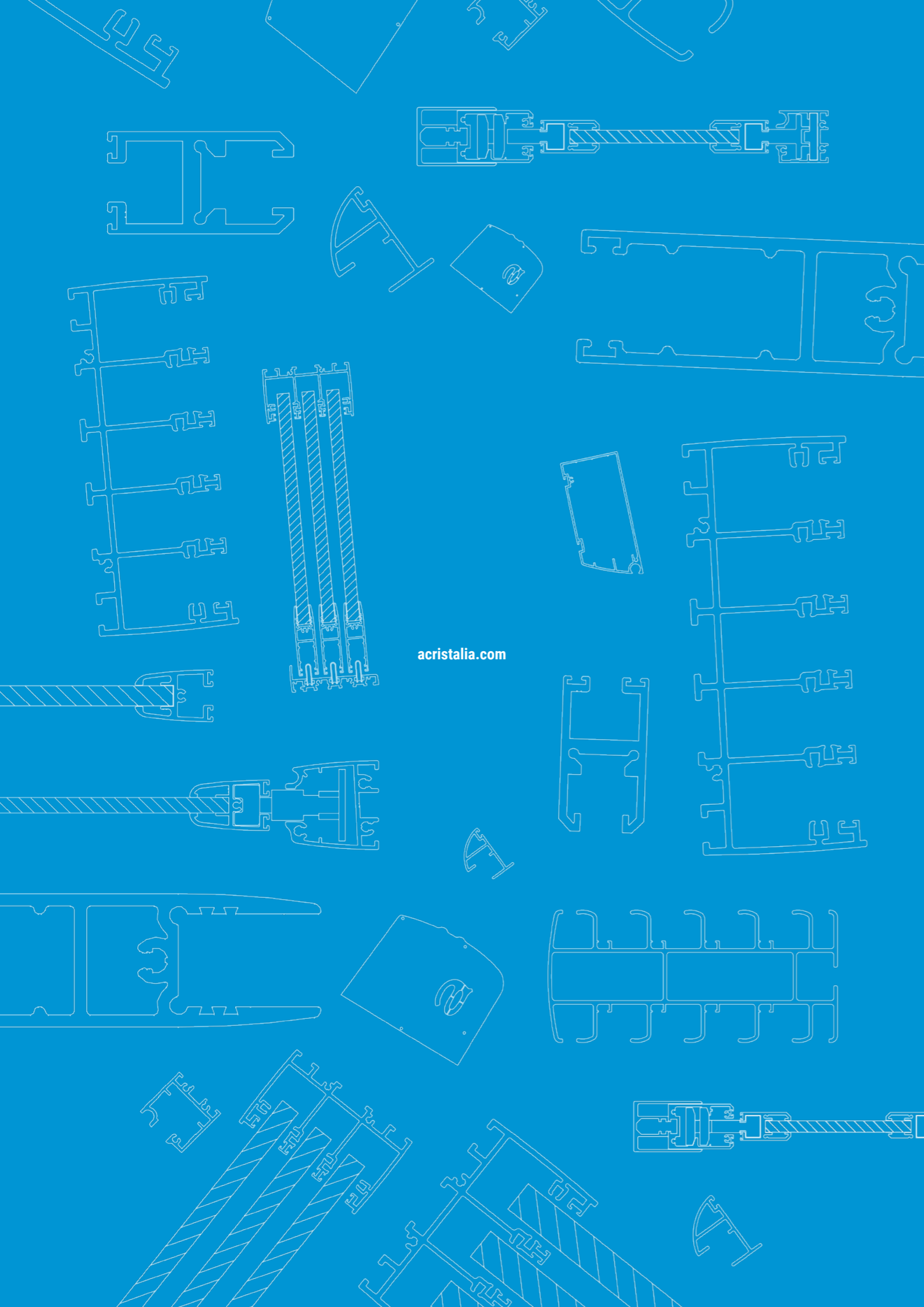




TECHNICAL FOLDER

GLASS RAILINGS
RAILING SERIES

acristalia



acristalia.com

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GLASS RAILINGS
RAILING SERIES

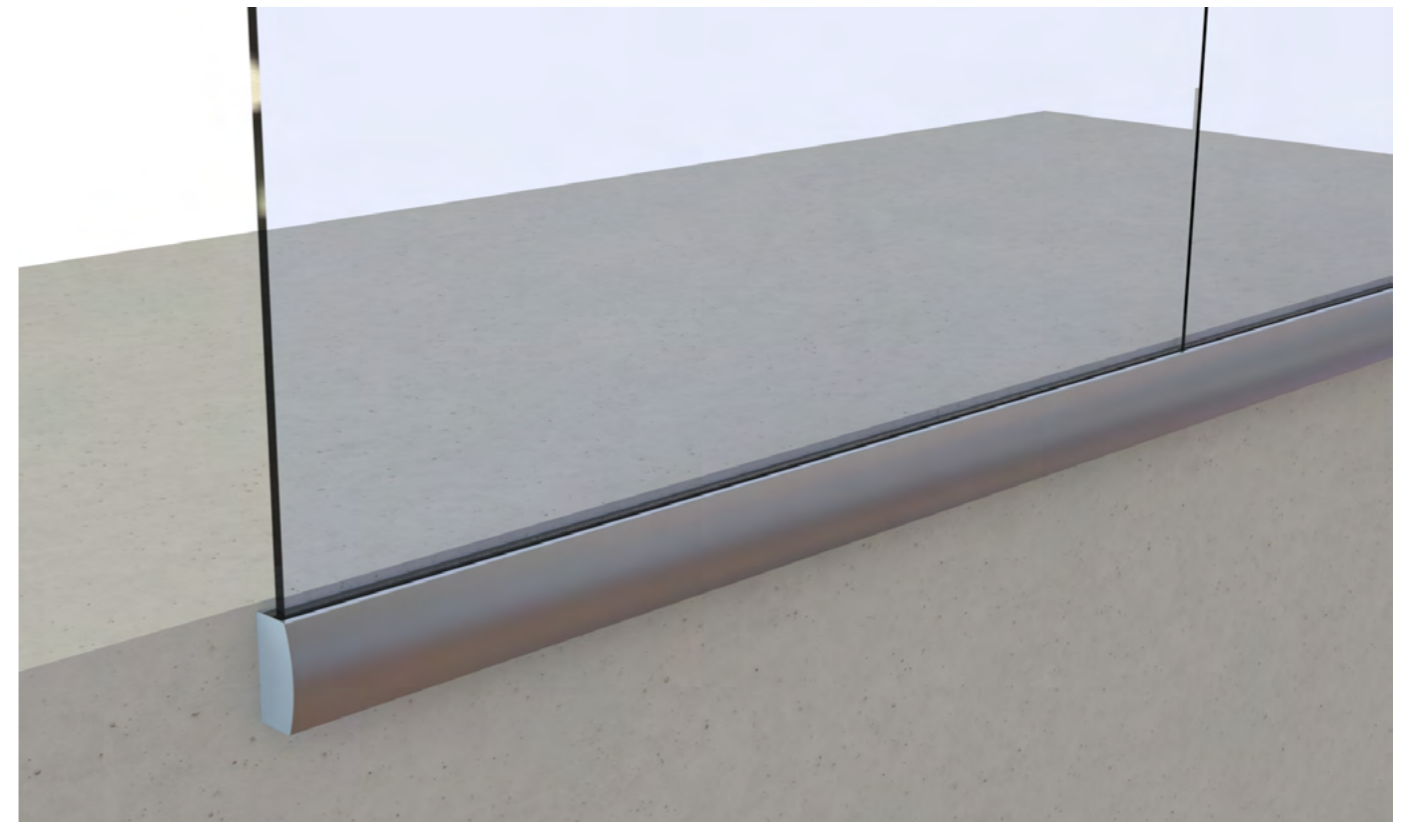


1 INTRODUCTION. RAILING SERIES

The Railing Series is a further step towards the space limitation. The design developed by Acristalia allows to use a type of railing centered on the aesthetics, the safety and the landscape views.

This technical folder will present the different aspects of this product and will help you to understand it better for a future installation. This document is

composed of a short presentation of the tests results obtained for the Railing Series, a guide of installation possibilities with a sample of the design and the functionality of the product, the technical features such as the dimensions, the glass and the aluminium profiles as well as a list of accessories.



2 TESTS

This part shows in a descriptive and synthetized way the essays, controls and standards met by the Railing Series. This document of specifications of construction gathers the different controls of quality to which this enclosure system has been submitted according to the different materials used. On the other hand, the document details the glass classification and the requirements that meets Acristalia. Below, the bigger frame gathers the results of the test of

resistance under horizontal load and the dynamic test with mild object. Both tests are compulsory in order to meet the requirements that rules the use of railings. For any further information regarding these essays, you can visit our website (www.acristalia.com) where you will find the "Downloads" file with the corresponding documents.

ACRISTALIA. QUALITY BRAND

Acristalia manufactures all its products under strict quality controls that are regularized and specified under the quality management system according to the standard UNE-EN ISO 9001:2015 and guarantees that all the materials used in the manufacture of its products are of first quality complying with the following regulations: Aluminium with CE marking according to the new European Construction Products Regulation (EU) 305/2011 and the harmonized standard UNE-EN 15088:2006: Aluminium products and aluminium alloys for structural applications. In addition, it complies with quality standards for surface treatment of profiles (Qualicoat, Qualand and Qualideco).

CLASSIFICATION OF TEMPERED AND LAMINATED GLASS

All the glasses are manufactured according to the UNE-EN 12150-1:2016 con la clasificación 1C1 de resistencia y seguridad para vidrios templados.

Laminated glasses meets the fabrication control standard and bears the CE marking according to the UNE-EN 14449:2006.

N. EXP. 1214463 - 1445

RESISTANCE TEST UNDER HORIZONTAL LOAD TOWARDS THE EXTERIOR

According to CTE Basic Document of Use and Accessibility Security.

Results of the test:

According to the load applied and taking into account the impact of the mild object, the glasses that satisfied the test both in top-mounted and lateral options are:

DYNAMIC TEST WITH MILD OBJECT ACCORDING TO UNE 85-238-91

Test realized for Glass Railings placed on surface and on slab edge, with glass measures 1100 x 1000 mm width x height for the top-mounted option and 1200 x 1000 mm for the lateral option.

Load 0,8 kN/m - Minimal composition 8+8 Tempered Laminated

Load 1,6 kN/m - Minimal composition 8+8 Tempered Laminated

Load 3 kN/m - Minimal composition 10+10 Tempered Laminated

N. EXP. 050267

3 INSTALLATION POSSIBILITIES

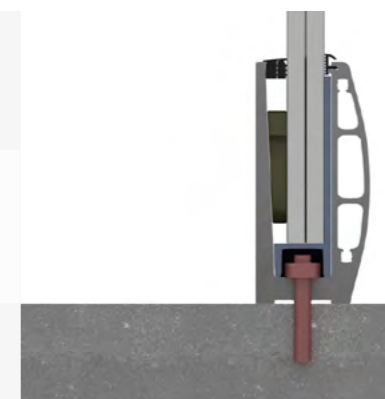
The Glass Railings Railing Series, as well as the other enclosure systems provided by Acristalia, have been studied and developed to be adapted to any type of project. This is why the main advantage of this product is that it has three

different solutions but all of them use the same unique horizontal profile and there are no vertical profiles that obstruct the views. These three solutions are: top-mounted, side-mounted or embedded.

ONE PROFILE, THREE SOLUTIONS:

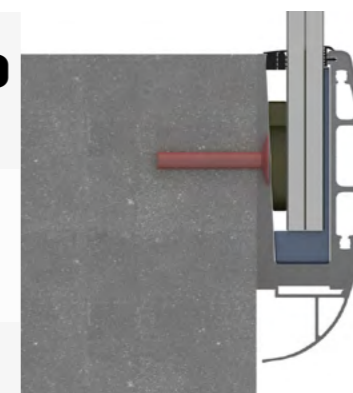
TOP-MOUNTED SOLUTION

The top-mounted solution consists in screwing the profile to the ground, giving an extra protection to the glass.



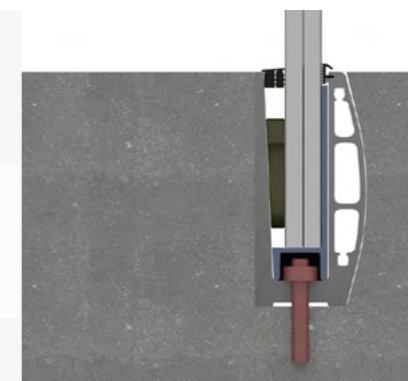
SIDE-MOUNTED SOLUTION

With the side-mounted solution, the profile is screwed to the slab edge from the outside and we add a covering profile.



EMBEDDED SOLUTION

With the embedded solution, the profile is inserted by screwing it from the base with only the glass and the plastic seal remaining at sight.

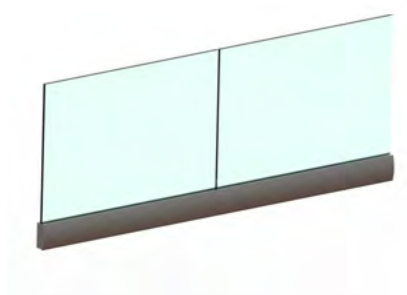


The Acristalia glass railings allows all type of polygonal shapes, angles and even polygonal figures that can adapt to projects with circular structure (as shown in the infography below). On the other hand, the Railing Series can be combined with other products of the brand such as the Basic Pro Glass Curtains. This association is an optimal enclosure to have the best panoramic views and natural light.

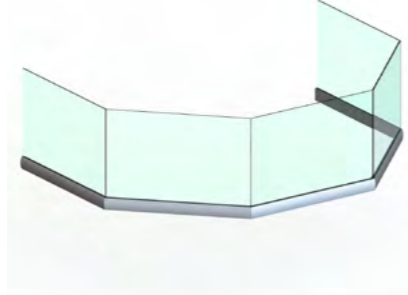
Our glass railings can be used to close outdoor or indoor spaces or to be included in stairs. Other options are available such as the handrails.

Thanks to the compatibility of the Railing and Basic Pro Series, two products can be integrated in the same installation. A handrail will be added to connect the glass curtains to the railing. All the profiles are customizable and we offer a large range of supports, components and glass adjustment parts to provide you with the best solution.

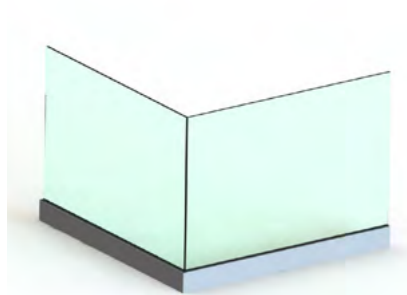
Straight option



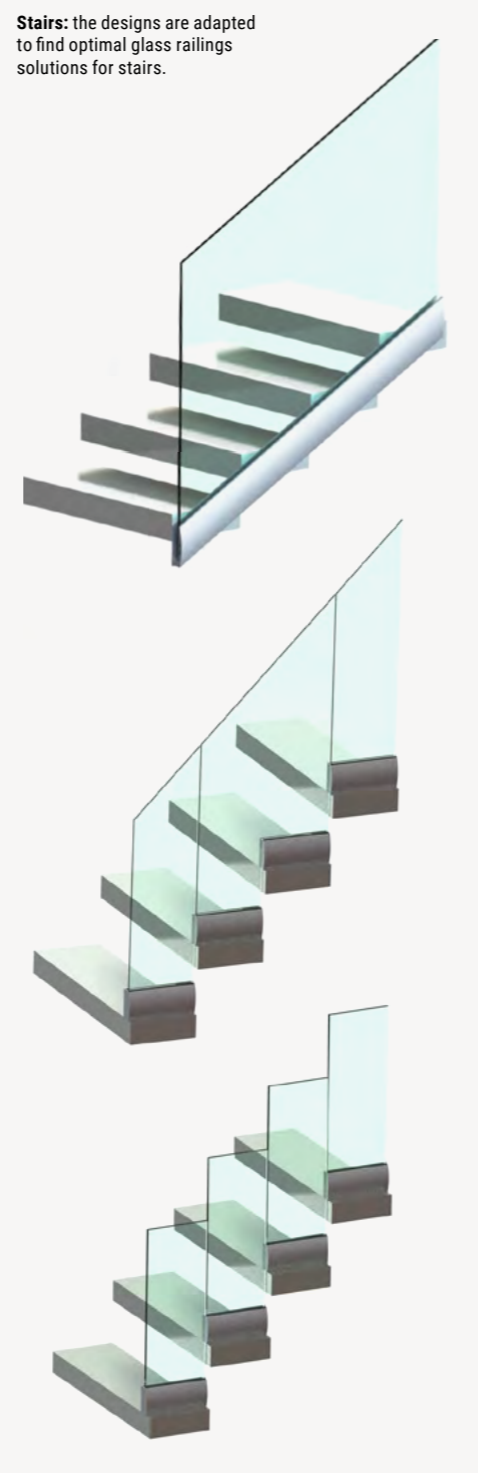
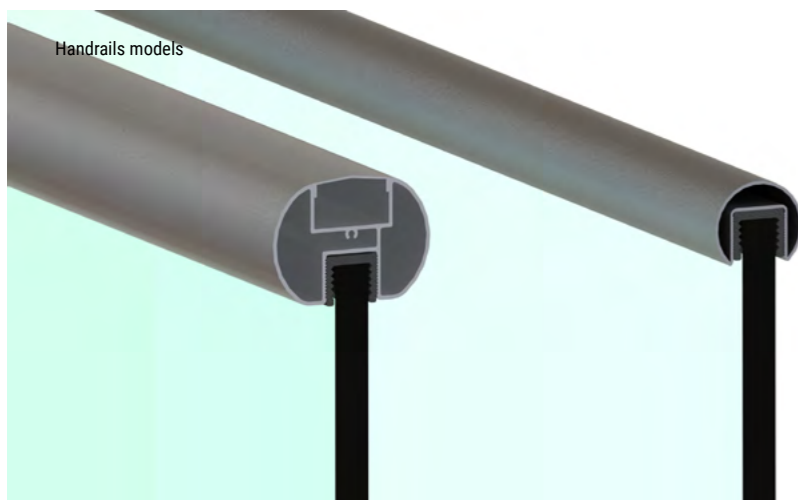
Polygonal option



90° option



Basic Pro option



Stairs: the designs are adapted to find optimal glass railings solutions for stairs.

4 TECHNICAL FEATURES

In this part we detail some of the technical features of the glass railings system. This product has different options of glass thickness: 6+6, 8+8, 10+10 and 12+12, laminated or tempered laminated. In addition, there is the possibility to choose between all the 200 colours of the RAL chart, anodized finish or wood imitation.

With the side-mounted option, Acristalia has designed a covering profile that makes more aesthetic the system. Regarding the space between glasses, the minimal distance shall be 2 mm, no matter what is the type of installation, and 10 mm is the most common space.

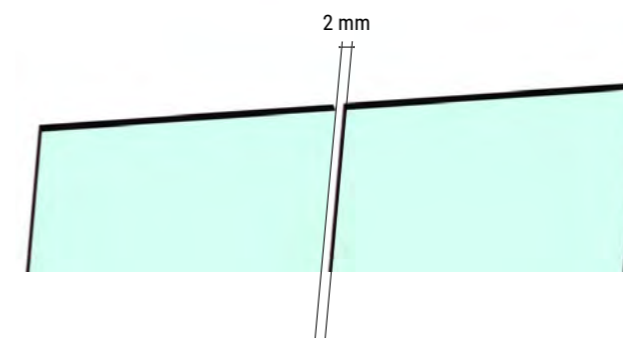
The glass railings can also integrate central parts between glasses. There are small round parts, with a nice design and minimalist style, aiming at getting the best line-up of the top edge of the glass. In addition, the product is totally prepared and pre-machined so that the connections with the floor can be realized directly by the client.

Finally, if the project requires a drainage for the water, a hole can be added. If you need further information, you can contact our sales department.

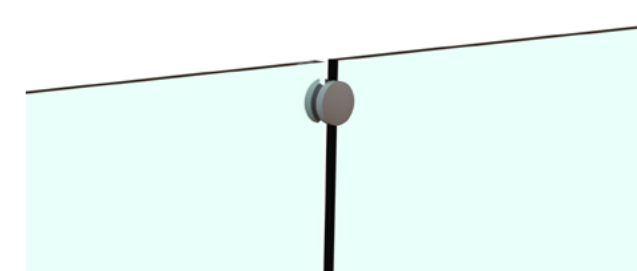
Glass thickness



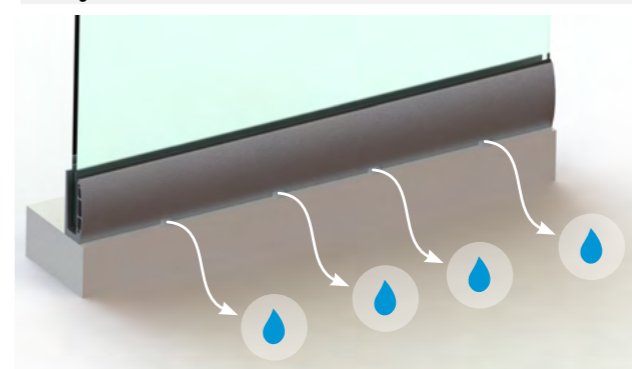
Minimal distance between glasses



Glass central part



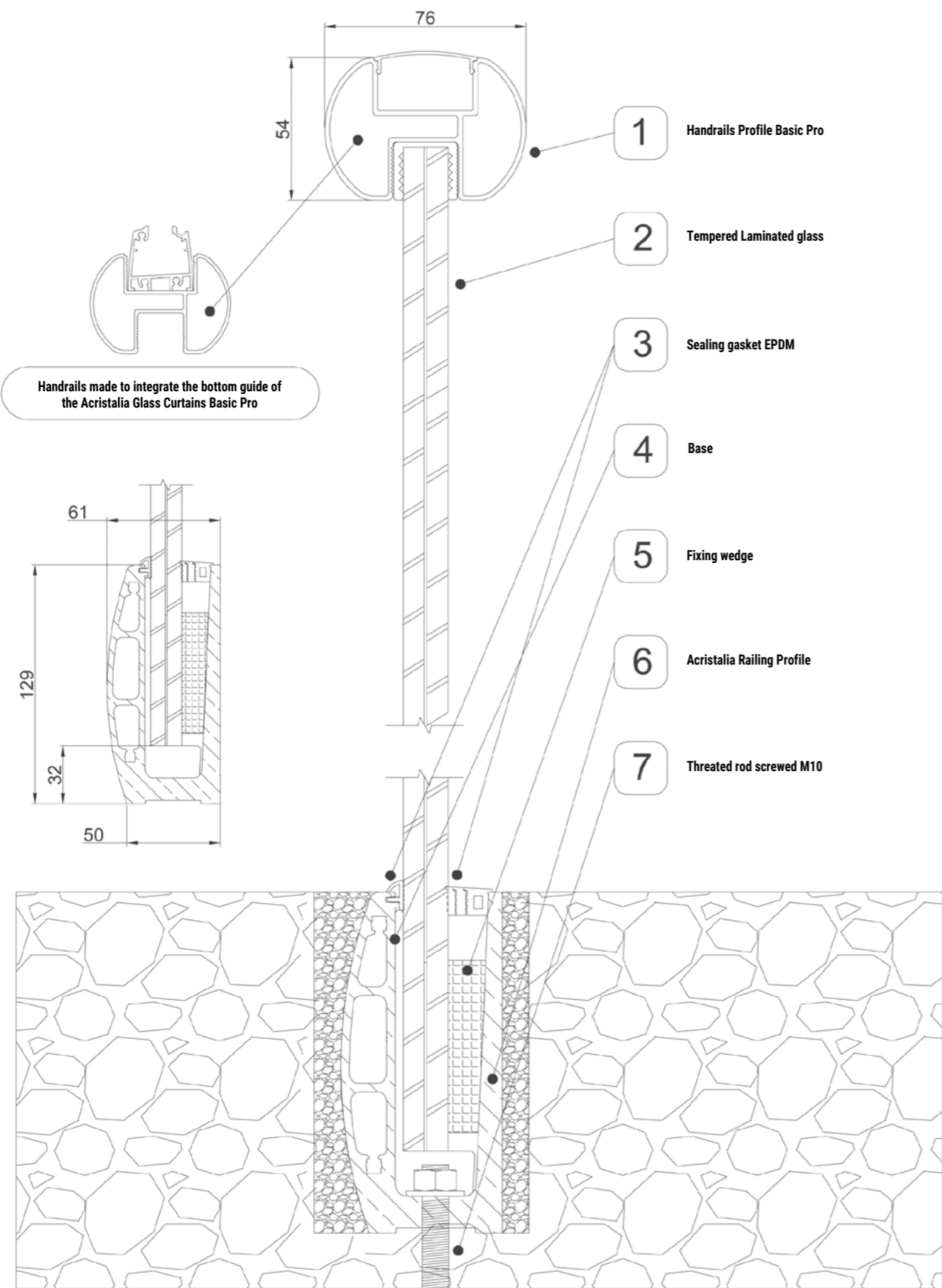
Drainage hole



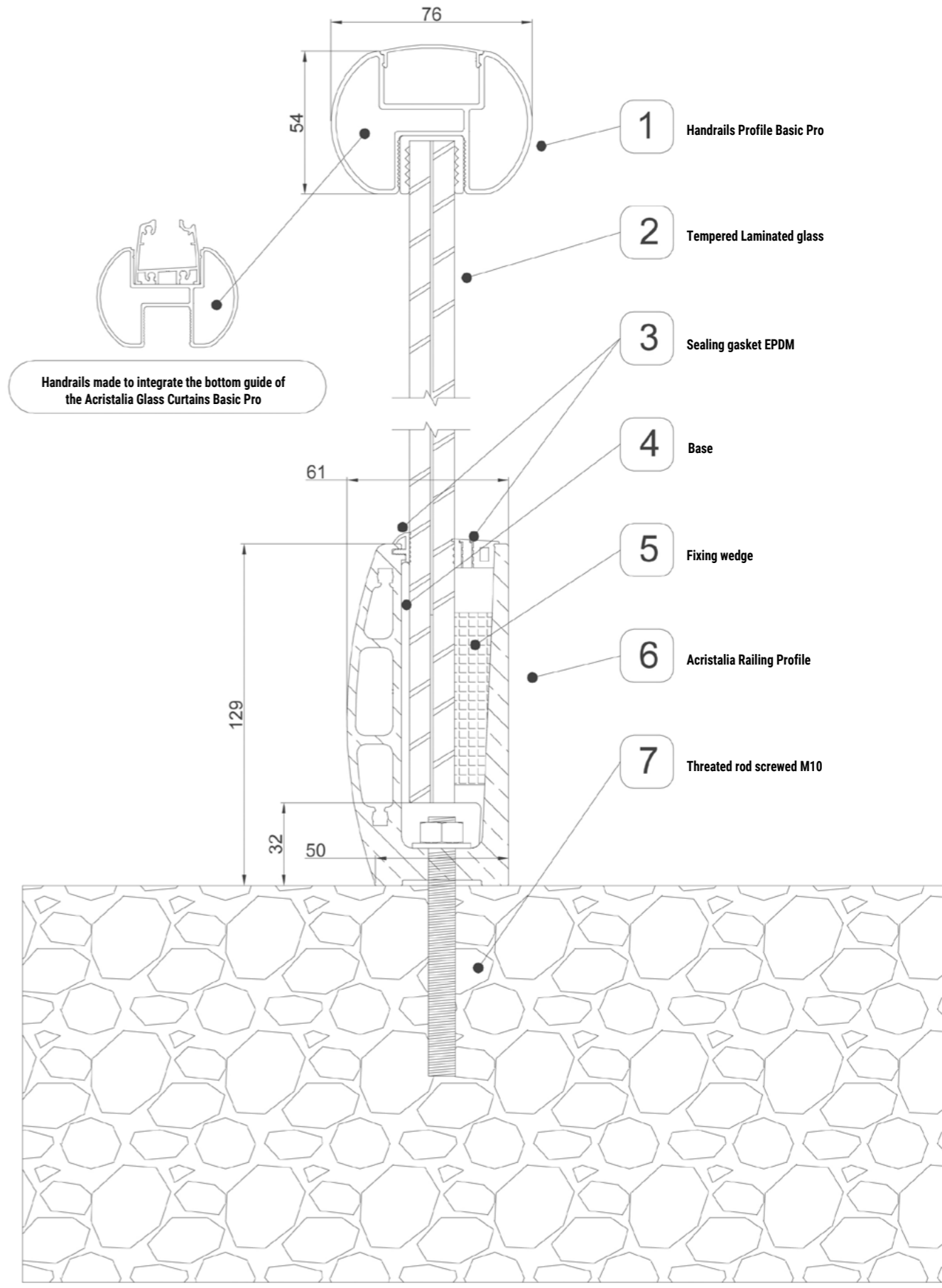
5 PROFILES SECTION

Reviewed: J. Hurtado

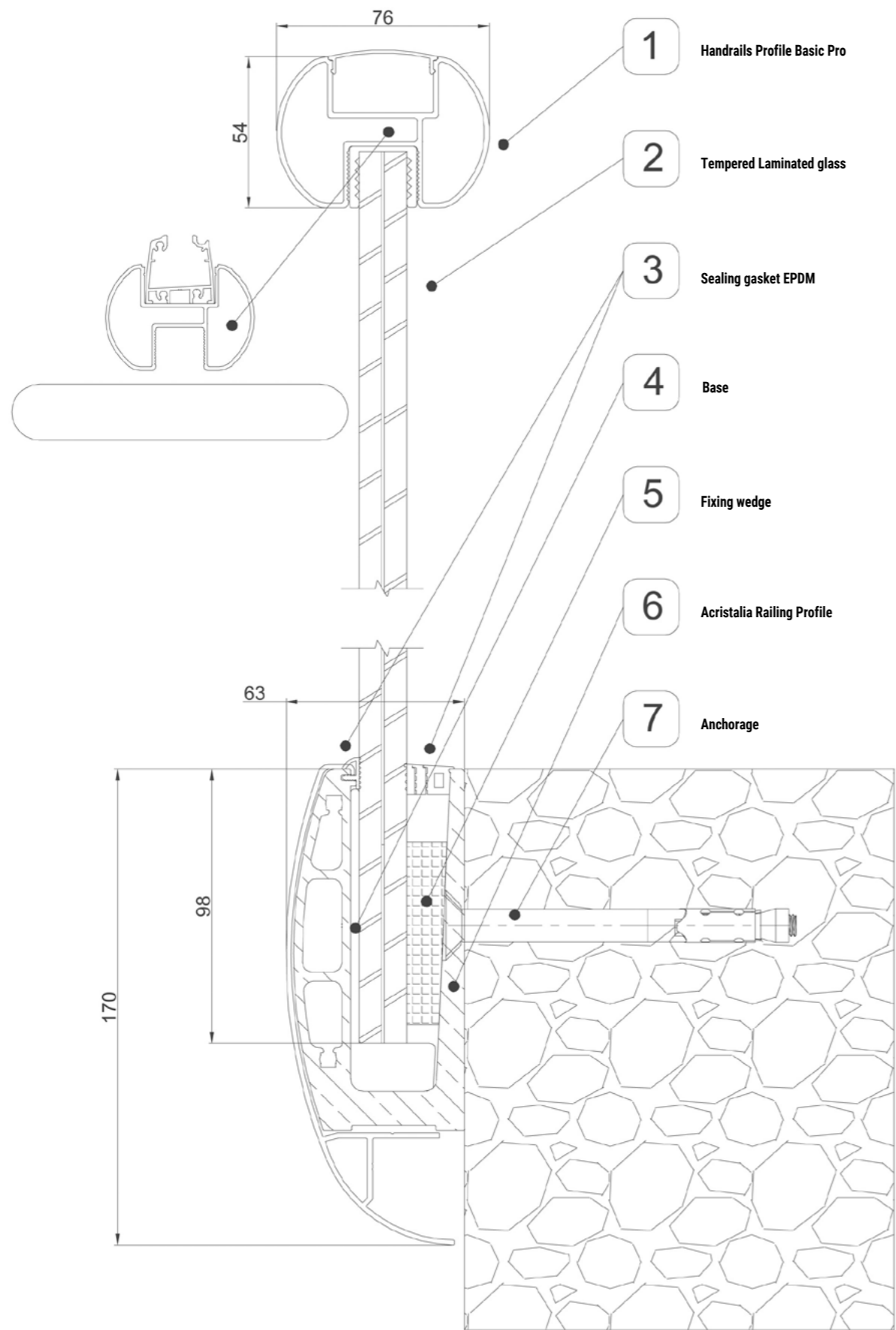
Version: March 2018
Designation: Parts embedded Railings
Series Railing



Reviewed: J. Hurtado
Version: March 2018
Designation: Parts above - ground railings
Series Railing



Reviewed: J. Hurtado
Version: March 2018
Designation: Parts side - mounted railings
Series Railing



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