

faraone[®]
ARCHITETTURE TRASPARENTI
italian style

faraone.it

DS DELUXE
SYSTEMS
ITALIAN WINDOWS CULTURE



NINFA[®]
THE SERIES
GLASS BALUSTRADES FOR ARCHITECTURE



IT CONTAINS NINFA MODELS 6, 106, 116, 56, 176, 186



Take care of the people you love.

With the latest generation of Ninfa balustrades.



In 2008, the first meters of what would later become a reference system for glass balustrades in Italy were shipped: the Ninfa system.

At the time, this system was relegated to the last pages of the balustrade catalogue, after the stainless steel systems, occupying a small space with a single article.

Thirteen years and five series later, breaking records over records, the Ninfa balustrade system has definitely conquered designers and operators of the Italian sector, becoming a best-selling item with over 800,000 meters installed from 2008 to the end of 2021.

Now in its sixth generation, the Ninfa 6 series has new records to break, which we see as a natural evolution of design inherited from the previous series. For the market it is a real technological innovation that will stand out for its unique design and performance.

The entire range stems from our desire to always look forward by aiming for continuous innovation, aimed at improving its performance, its beauty, its functionality, its ease of installation and much more.

Among the main new records you will find the simplicity of the management of glass thicknesses and the possibility of using higher glass, much higher (to meet current demands), with calculation verifications and laboratory tests in total compliance with the regulations.

We do all this not because the market requires it, but because we strongly believe in what we do and always want to raise the level of the category.

Welcome to our new innovation.

Flavio Faraone

CEO of Faraone Transparent Architectures

WHY USE THE NEW NINFA FARAONE BALUSTRADE SYSTEM?

After more than 50 years in the world of Transparent Architecture, Ninfa is still the best-selling “all-glass” balustrade in Italy.

The Ninfa glass balustrades by Faraone are synonymous with experience, comfort and safety for outdoor environments such as balconies, terraces, poolside fencing, fences; and for indoor environments such as stairways, galleries and walkways.

The reason for using the new Ninfa series 6 balustrades by Faraone can be found in some of the following records achieved to date:

1. The Ninfa system by Faraone was the first industrialized all-glass balustrade to arrive on the market in Italy since 2008, previously there were mainly handcrafted or “do-it-yourself” solutions;
2. To date, more than 900,000 meters (984.300 yd) of Ninfa balustrade have been installed in Italy with total customer satisfaction;
3. Ninfa was the first balustrade to use the “only from the inside” assembly methodology since 2016 and today it reduces assembly times by 40% compared to the market average;
4. Ninfa the 6th series is the first glass balustrade system that fully complies with static calculations, which are verified by our technical department with inimitable performances;



Sabatino Faraone
PRESIDENT



Flavio Faraone
CHIEF EXECUTIVE OFFICER / CEO



Pamela Faraone
ADMINISTRATIVE MANAGEMENT



Federico Vallese
ORGANIZATIONAL DIRECTION

NINFA THE SERIES 6: ONCE AGAIN THE REFERENCE POINT OF GLASS BALUSTRADES

The whole series 6 of NINFA glass balustrades has been verified by analytical calculation and real tests. News: the new RS technology for a faster installation.



NINFA® 56
THE GLASS
BALUSTRADE
WITH AN ULTRA
SLIM DESIGN
(It's ideal for mounting on a low wall)



NINFA® 106
THE MINIMAL
BUT HIGH-PER-
FORMING BALU-
STRADE
(ideal for for private places like balconies and terraces, and uncrowded public places)



NINFA® 116
THE GLASS
BALUSTRADE TO
BE MOUNTED FLU-
SH WITH THE EX-
TERNAL SIDE OF
THE FLOOR AND
FOR SOLUTIONS
INTEGRATED INTO
THE FLOOR
(ideal for private places like balconies and terraces, and uncrowded public spaces)

A RECORD THAT IS STILL UNDEFEATED: INSTALLATION ON THE INSIDE ONLY

Install-time optimization



When the Faraone R&D department designs a balustrade, they also think about the installation phases.

That's why all the NINFA series 6 technology is even easier and quicker to install.

The glass is assembled exclusively from the inside to offer a better installation experience and greater safety for the installer, who is not forced to work from the outside.

Also for the Ninfa 186 profile, which is fascia mounted, the glass is mounted only from the inside.

It is advisable to contact "expert hands" to be sure to get a state-of-the-art installation.



Watch the installation video of Ninfa 106 or consult the written instructions on p. 192

THE NEW NINFA PROJECT

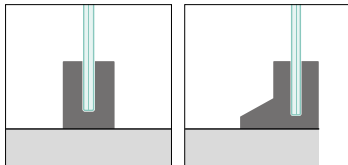
The new NINFA Series 6 project further improves the previous series with a more practical and faster glass adjustment system.

PATENTED SYSTEM

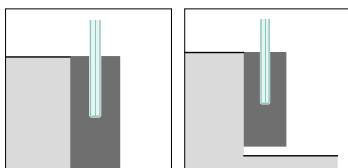
New range with resistance from 200 kg/m (tested at 300 kg/m) up to 500 kg/m (tested at 750 kg/m).
137 lb/ft (tested at 206 lb/ft) up to 343 lb/ft (tested at 514 lb/ft).

THE SYSTEM GUARANTEES THE USUAL SAFETY LEVEL.

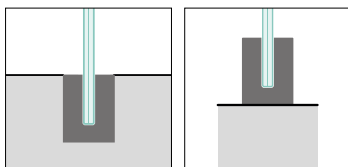
Types of FIXING



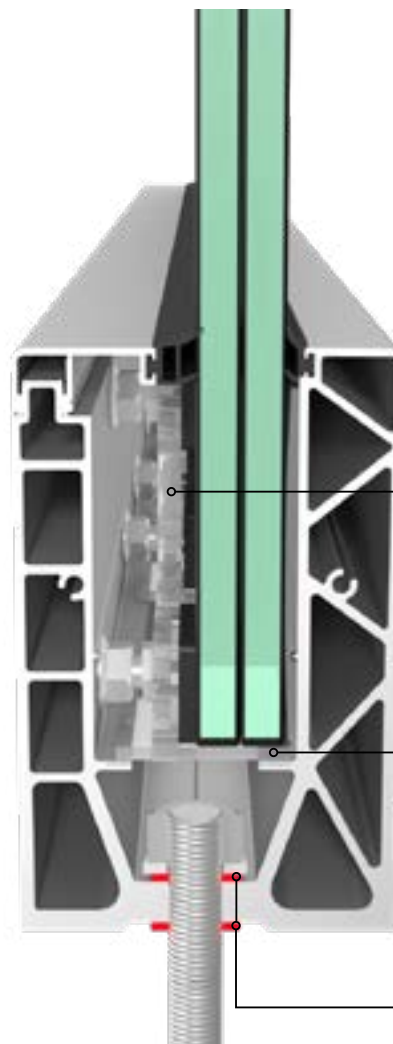
ON THE FLOOR



WITH SIDE FIXING



INTEGRATED INTO THE FLOOR FIXED TO LOW WALL



New RS system

Glass-holding Plastic

Rubber washer

THE IDEAL TECHNOLOGICAL PACKAGE

- 1 - NINFA system
- 2 - Safety glass

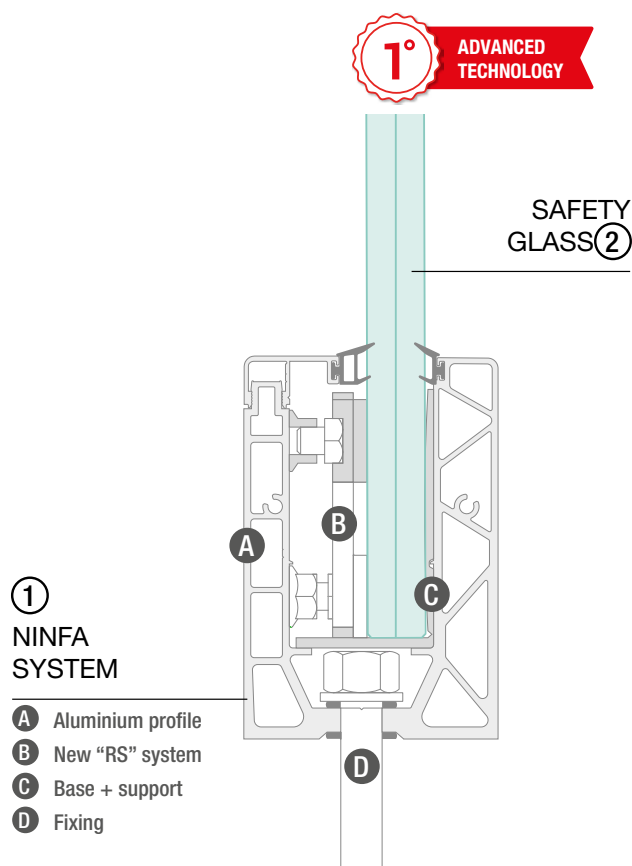
Only with **the NINFA system** and the **appropriate safety glass** it is possible to obtain **surprising performances** in total compliance with the regulations.

The knowledge of the materials used such as aluminium and glass combined with their technological capabilities has allowed Faraone to develop increasingly performing systems.

This is possible thanks to the Technology Package consisting of the **NINFA System** (profile, RS, base, fixing) and the **appropriate Structural Glass**.

Why are they both essential? The **NINFA System** concerns Faraone's know-how: from resistance performance (based on the intended use and the glass used) to installation needs and ease of assembly. The **Structural Glass**, on the other hand, concerns the production technique of the glass sheets, the hardening and processing methods that make this material, basically fragile, into a resistant and performing one.

The performance of a glass balustrade depends mainly on the number of sheets that make up the balustrade, their thickness and the type of interlayer that is inserted inside.



OUR STRENGTH: THE QUICK ASSEMBLY



OPTIMIZED
ASSEMBLY TIME

4 simple steps, and that's it!

STEP01

> PREPARATION

- Position the pre-drilled bar (with external gasket already inserted) to use as a template
- Mark the holes and then drill the floor
- Thoroughly clean the holes
- Apply the resin
- Insert the rods

> START OF ASSEMBLY

- Fasten the profile to the floor

YOU ONLY HAVE TO
Place in sequence:
first rubber washer,
aluminium profile,
second rubber washer,
plain washer, nut M12



STEP02

> Glass housing

- Insert the plastic for glass housing inside the profile
- Prepare the RS system by inserting the correct spacers according to the glass to be inserted (6.6, 8.8, 10.10, 12.12) (1/4", 1/4", 5/16", 5/16", 3/8", 3/8", 1/2", 1/2")

YOU ONLY HAVE TO
Distribute the plastic
for glass support (4
for each meter)



ALUMINIUM FINISHES

Exemplary reproduction of the available finishes

Customize your balustrade



Customize your profile with trendy finishes for INDOOR and OUTDOOR use, or choose a colour on request among more than 2,000 RAL colours.



Anodized finishes

BASE



SILVER
ANODIZED
(raw on request)

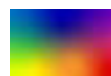
PREMIUM ON REQUEST



INOX CHROME MATT
ANODIZED

Other colours

ON REQUEST



2000 RAL colours

RAL Finishes and Special Paints

BASE

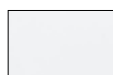


WHITE
RAL 9010 POLISH

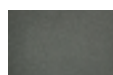


BLACK
RAL 9005 MATT

PREMIUM ON REQUEST



TRAFFIC WHITE
RAL 9016 MATT



GREY
RAL 7016 GRINZ



NKR1
SPECIAL PAINTING
DOVE GREY EFFECT



ALUMINIUM GREY
RAL 9006 MATT



BRONZE
EFFECT PAINTING
BRONZE



NKR2
SPECIAL PAINTING
CONCRETE GREY EFFECT



ANTHRACITE GRAY
RAL 7016 MATT



ANTIQUE GREY
SPECIAL PAINTING
WRINKLED EFFECT

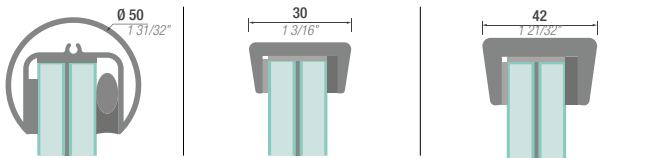


NKR3
SPECIAL PAINTING
CORTEEN EFFECT

OPTIONAL

Exemplary reproduction of the available finishes

Handrail



Anodized finishes and Painted

BASE



SILVER
SILVER ANODIZED
(raw on request)



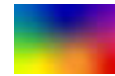
WHITE
RAL 9010
GLOSSY



BLACK
RAL 9005 MATT

Other colours

ON REQUEST



2000 colours
RAL

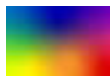
Led Pack

(Not supplied by Faraone)

TYPES OF LIGHT

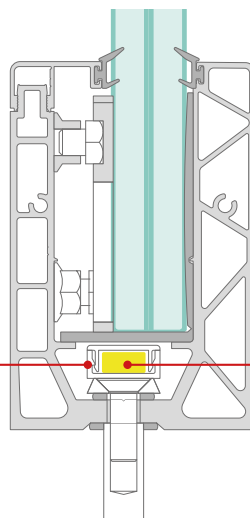


WHITE LIGHT:
Unique light effect



MULTICOLOR LIGHT
Customize the type of light thanks to the RGB LED version

Supplied by Faraone



LED EFFECTS

Get the most of the light and the effect you want:

EDGE EFFECT:

- on extra-clear glass

DIFFUSED LIGHT EFFECT:

- on glass with surface treated for LEDs

Supplied by Faraone

NINFA THE 6th SERIES AND ITS POTENTIAL

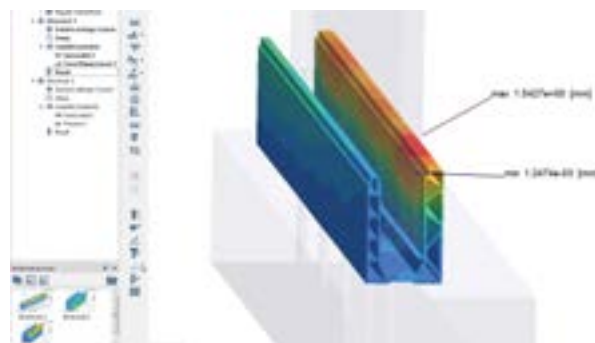
The secret of the new glass balustrades is in the details.



Sabatino Faraone

Founder and President of the Faraone Company with over 50 years of experience in the sector.

THE IMPORTANCE OF THE ALUMINIUM SHOCK ABSORBER PROFILE



What is important to know is that you have to choose the right materials for the uses you will have to make. This is true for aluminium, too: there are different alloys and different hardness levels that determine its characteristics depending on the use; consequently, this aspect also applies to the balustrades. There is a need for study, continuous experimentation of knowledge of the materials and suppliers who follow you along this path.

Ninfa series 6 was born thanks to the knowledge of the behaviour of the materials, thanks to which it was possible to obtain a system that has the right stiffness and, at the same time, the right elasticity to obtain the right shock-absorbing effect; that is, the ability to unload on the profile the loads that are applied to the glass.

It is easy to design a “heavy profile” (rigid and resistant) that is not optimized for glass.

tance, so much so that in the design of the various Ninfa systems over the years, fixing is the first element that has always been taken into consideration. The fixing system indicated by Faraone is the only one that is able to guarantee the perfect tightness, which is verified by calculation and carried out in several tests performed both in our test laboratory and at the certification bodies:

- a threaded bar certified according to the standard
- a corresponding CERTIFIED chemical anchor recommended by the manufacturer, not just any chemical resin!

Is the mechanical fixing not up to standard? Let me be clear, even the mechanical fixing offers the necessary guarantees if you are sure that you have a “guaranteed” concrete, better if vibrated; however, on the construction site you do not always have to deal with an ideal concrete.

This is why fixing with a chemical resin offers all the guarantee that is needed for those who do not want to have problems after the installation.

WATER DISCHARGES ON THE PROFILE

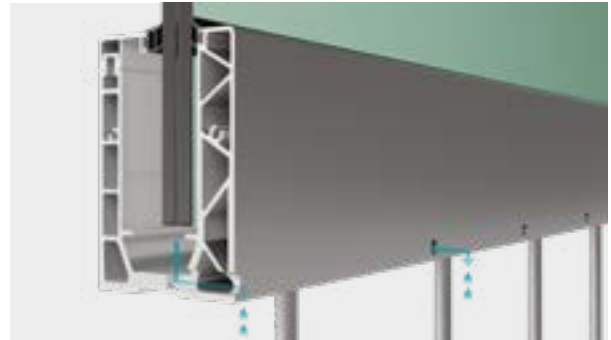
The first question that is asked by the designer and the customer is: where does the water go?

Water has always been a hassle for all those who have to do with outdoor balustrades. You never know where it comes from. Even when everything is planned and designed well, it can sometimes infiltrate into a micro-crack and become a problem.

As for the balustrade, the utmost attention must be paid to:

- the gasket along the glass
- the gasket between glass and glass
- the fixing

- the water that stagnates near the bar due to the in-



- clination and the non-prediction of water discharges
- do not use polyester resins, they are not suitable for the required loads.

Paying attention to all these points, with an excellent installation, infiltrations are avoided.

However, we wanted to go further with two important technical measures:

- the use of epoxy resin (water-proof)
- external discharges on the whole new Ninfa 6 series

This prevents water from infiltrating into the fixing points and any excess water from escaping from the discharges (just like windows).

THE MAINTENANCE

In general, classic iron or masonry balustrades need continuous ordinary and extraordinary maintenance with painting from 6 to 10 years.

The more you live in areas affected by atmospheric agents, such as near the sea, the more maintenance you will need to do.

With an aluminium and glass balustrade (with suitable anodizing or painting) you can rest assured for many years. These materials, in fact,

are widely used in architecture to last over time. This type of balustrade consists of an aluminium profile painted according to QUALICOAT and SEASIDE system and anodized according to QUALANOD.

The profile is fixed to the floor or a base by means of specific bolts. The glass sheets are inserted inside the aluminium profile, and they are adjusted and blocked by means of special systems that prevent them from escaping and ensure their due rigidity.

The main components of a balustrade system are:

- Painted or anodized aluminium profile (supporting structure);
- Floor fixing bolts;
- Laminated tempered/tempered or tempered/hardened glass 8.8 or 10.10 (5/16". 5/16" or 3/8". 3/8") + interlayer;
- Gaskets;

For each system, a booklet on ordinary maintenance is available, which consists of simply cleaning the profiles and the glass.

Zero Maintenance



Maintenance with specific antirust treatments for common metal balustrades is recommended, to prevent them from being corroded by time, losing beauty and safety.

INTENDED USE

For new or refurbishment

01 RESIDENTIAL

- private house - indoors / outdoors



02 CONDOMINIUMS

- balconies
- terraces



05 HOSPITALITY

- hotels
- restaurants
- chalets
- poolside fencing



06 INFRASTRUCTURE

- airports
- train stations



INTENDED USE

For new or refurbishment

09 HEALTHCARE FACILITIES

- hospitals
- private clinics
- socio-health structures
- nursing homes



10 SCHOOL BUILDINGS

- schools
- campus and university





NINFA[®] 106
THE MINIMAL & PERFORMING GLASS BALUSTRADE



DESIGN: R&D FARAONE - PATENTED SYSTEM



NINFA[®] 106

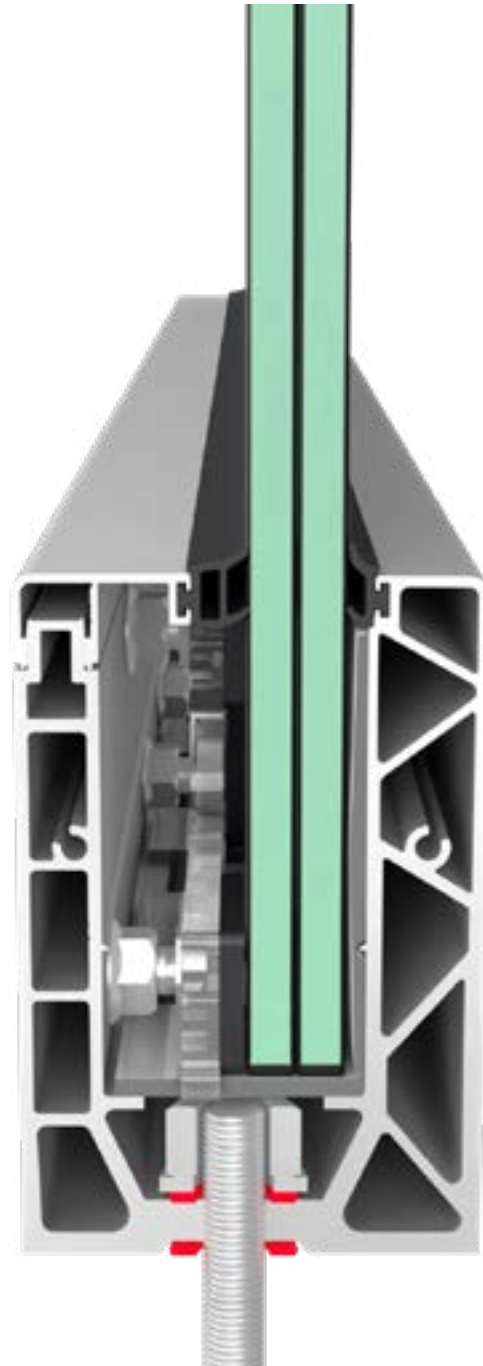
THE MINIMAL & PERFORMING GLASS BALUSTRADE

The glass balustrade **NINFA 106** was created to increase the safety level of balconies, terraces, stairs, galleries and poolside fencing. It's ideal for private and public spaces.

The profile accommodates both 8.8 and 10.10 (5/16" .5/16" and 3/8".3/8") glass thanks to the new **RS system** for adjusting and tightening the glass.

Optional: integrable LED and handrail.

Finishes: Standard and on request customizations.



NINFA[®] 106 **H**



For uncrowded environments:
Tested to 300 kg/m 206 lb/ft
Dynamic impact resistance up to 350 J 258 ft*lb



NINFA[®] 106 **P**



For very crowded environments:
Tested to 450 kg/m 302 lb/ft
Dynamic impact resistance up to 600 J 440 ft*lb

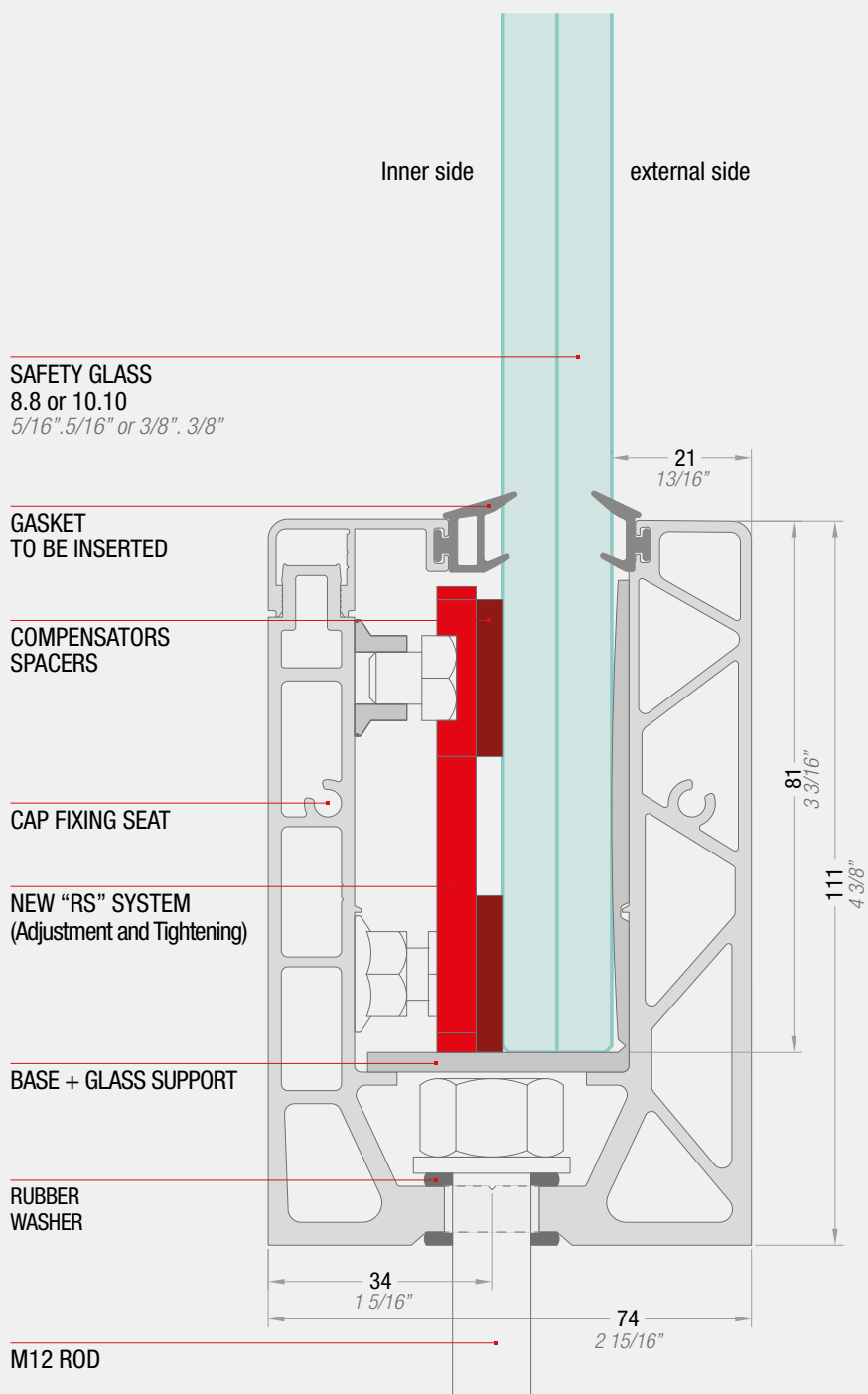
Ninfa 106 **H** (Home)

Ninfa 106 **P** (Professional)

TECHNICAL DETAILS

This page shows the complete list of the main components.

Some accessories, such as the adjusting block, the gaskets and the cladding can vary to accommodate different thicknesses of glass sheets, such as the “compensator thickness” shown in the drawing alongside.



scale 1:1



NINFA[®] 116
THE GLASS BALUSTRADE FOR EXTERNAL FLUSH MOUNTING



DESIGN: R&D FARAONE - PATENTED SYSTEM



NINFA[®] 116

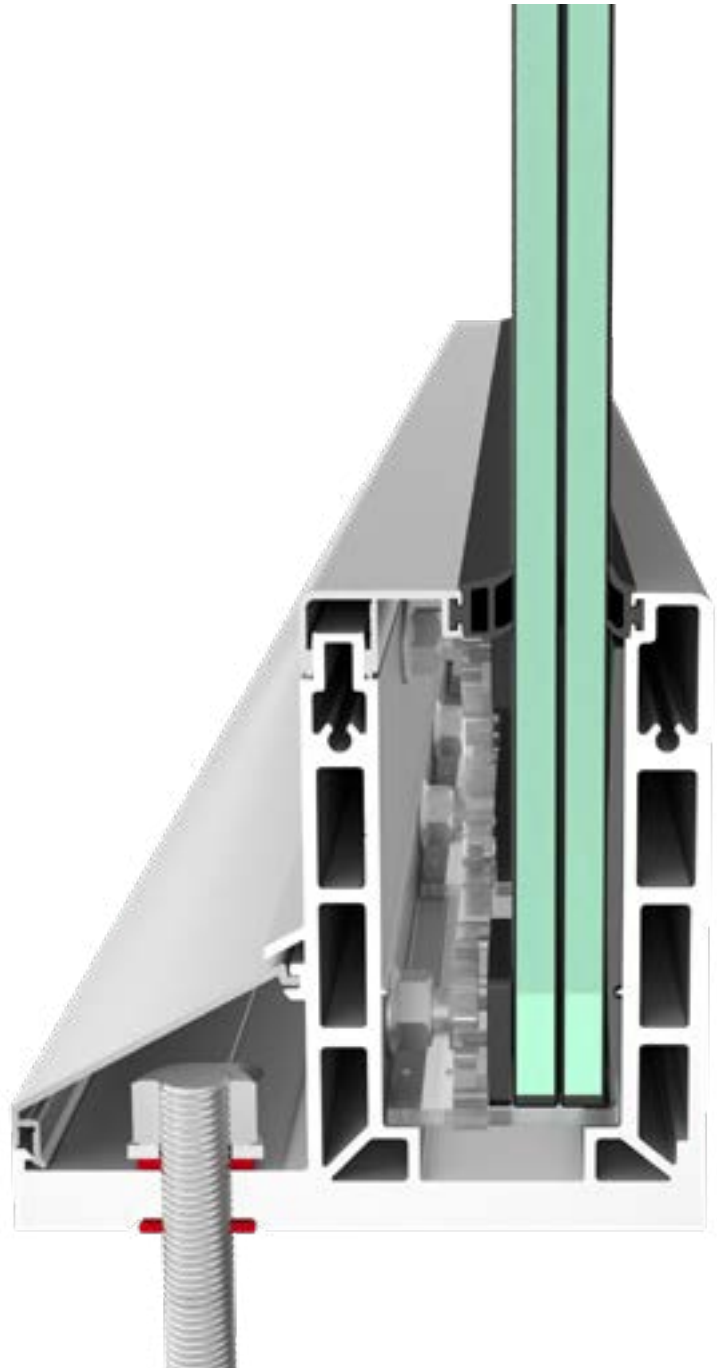
THE GLASS BALUSTRADE FOR EXTERNAL FLUSH MOUNTING

The **NINFA 116** was created to increase the safety level of balconies, terraces, stairs, galleries and poolside fencing. It's ideal for private and public spaces.

The profile accommodates both 8.8 and 10.10 (5/16".5/16" and 3/8".3/8") glass thanks to the new **RS system** for adjusting and tightening the glass.

Optional: integrable LED and handrail.

Finishes: Standard and on request customizations.



NINFA[®] 116 **H**



For uncrowded environments:
Tested at 300 kg/m 206 lb/ft
impact up to 350 J 258 ft*lb



NINFA[®] 116 **P**



For very crowded environments:
Tested to 450 kg/m 302 lb/ft
Dynamic impact resistance up to 600 J 440 ft*lb

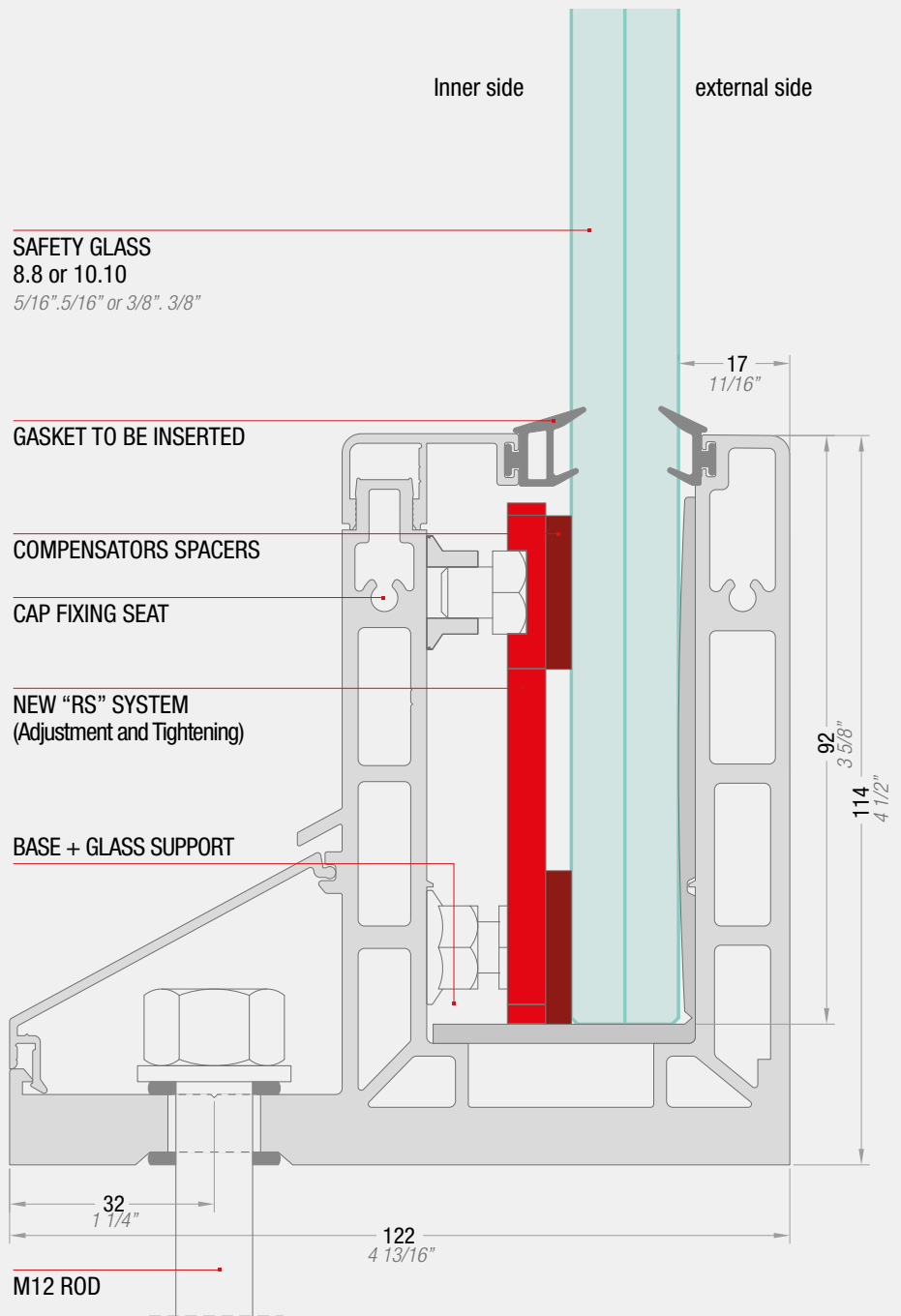
Ninfa 116 **H** (Home)

Ninfa 116 **P** (Professional)

TECHNICAL DETAILS

This page shows the complete list of the main components.

Some accessories, such as the adjusting block, the gaskets and the cladding can vary to accommodate different thicknesses of glass sheets, such as the "compensator thickness" shown in the drawing alongside.



scale 1:1



NINFA[®] 56
THE GLASS BALUSTRADE WITH ULTRA SLIM DESIGN



DESIGN: R&D FARAONE - PATENTED SYSTEM



NINFA[®] 56
THE GLASS BALUSTRADE WITH ULTRA SLIM DESIGN

The **Ninfa 56** profile is the smallest of the series, in height and width (It's recommended for private places) can be used in the following ways:

1) on a low reinforced concrete wall, **the glass can have a variable height up to a maximum of 90 cm.** (example 20 cm (11" 13/16) wall + 90 cm (2' 7" 1/2) glass = H 110 cm (3' 7" 5/16), height now required in general).

The use of the anti-climbing cladding for children is essential.

2) It can be mounted on the floor with the normal cladding and with the 8.8 (5/16" . 5/16") glass 100 cm (3' 3" 3/8) high only if there is no fall into the void, or with a fall height of less than 100 cm from the floor level. (example: internal partition, ground floor, or similar).

The profile accommodates both 6.6 and 8.8 (1/4" . 1/4" and 5/16" . 5/16") glass thanks to the new **RS system** for adjusting and tightening the glass.

Optional: integrable LED and handrail.

Finishes: Standard and on request customizations.

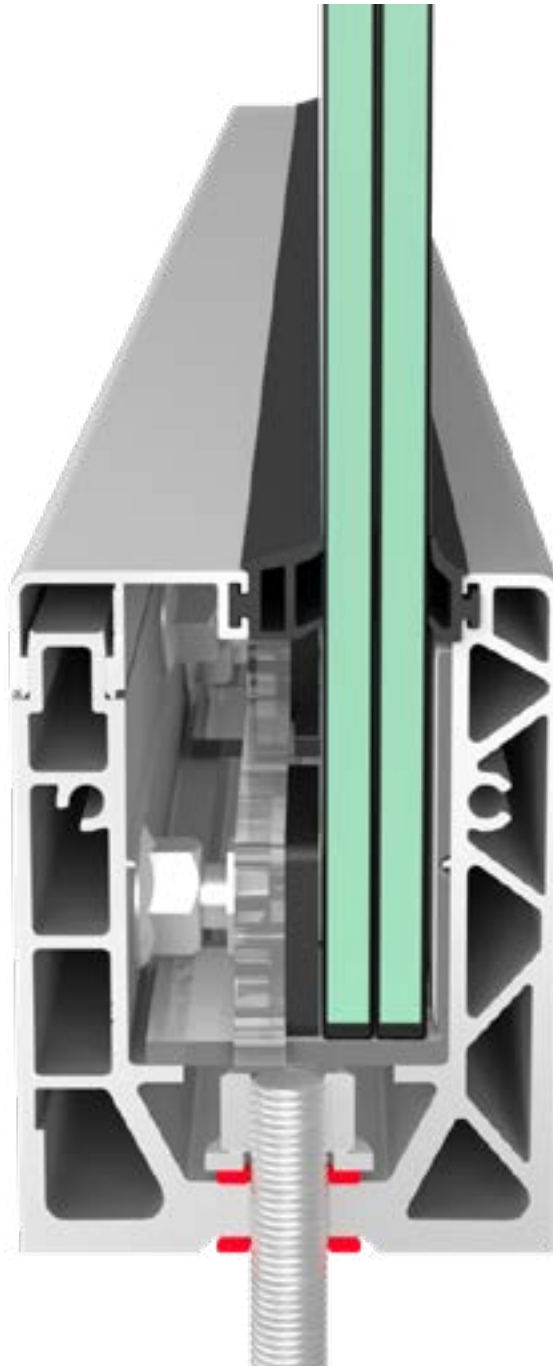


NINFA[®] 56 (H)



For uncrowded environments:
Tested at 300 kg/m 206 lb/ft
impact up to 350 J 258 ft*lb

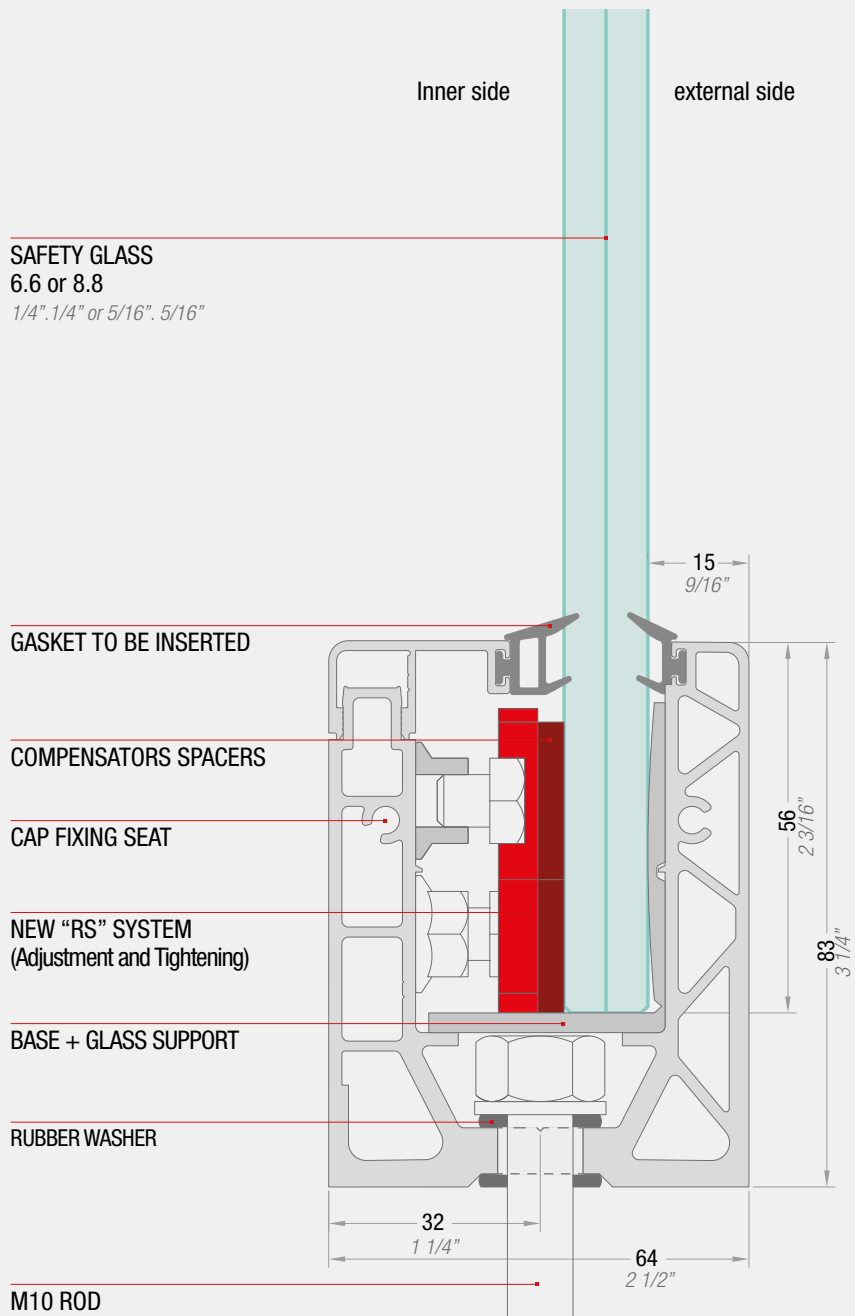
Ninfa 56 **H** (Home)



TECHNICAL DETAILS

This page shows the complete list of the main components.

Some accessories, such as the adjusting block, the gaskets and the cladding can vary to accommodate different thicknesses of glass sheets, such as the "compensator thickness" shown in the drawing alongside.



scale 1:1



NINFA[®] 176
THE GLASS BALUSTRADE WITH INTERNAL LATERAL FIXATION



DESIGN: R&D FARAONE - PATENTED SYSTEM

NINFA[®] 176

THE GLASS BALUSTRADE WITH INTERNAL LATERAL FIXATION

The **NINFA 176** glass balustrade is the technology for internal side mounting, ideal for private and public places thanks to its performance.

NINFA 176, like the whole new series, meet the calculation verifications with engineering software and laboratory test simultaneously (static load test and dynamic impact test), required by the Italian regulations.

The profile accommodates 8.8, 10.10 and 12.12 (5/16".5/16", 3/8".3/8" and 1/2".1/2") glass thanks to the new **RS system** for adjusting and tightening the glass.

Optional: integrable LED and handrail.

Finishes: Standard and on request customizations.

NINFA[®] 176 **H**



For uncrowded environments:
Tested at 300 kg/m 206 lb/ft
impact up to 350 J 258 ft*lb

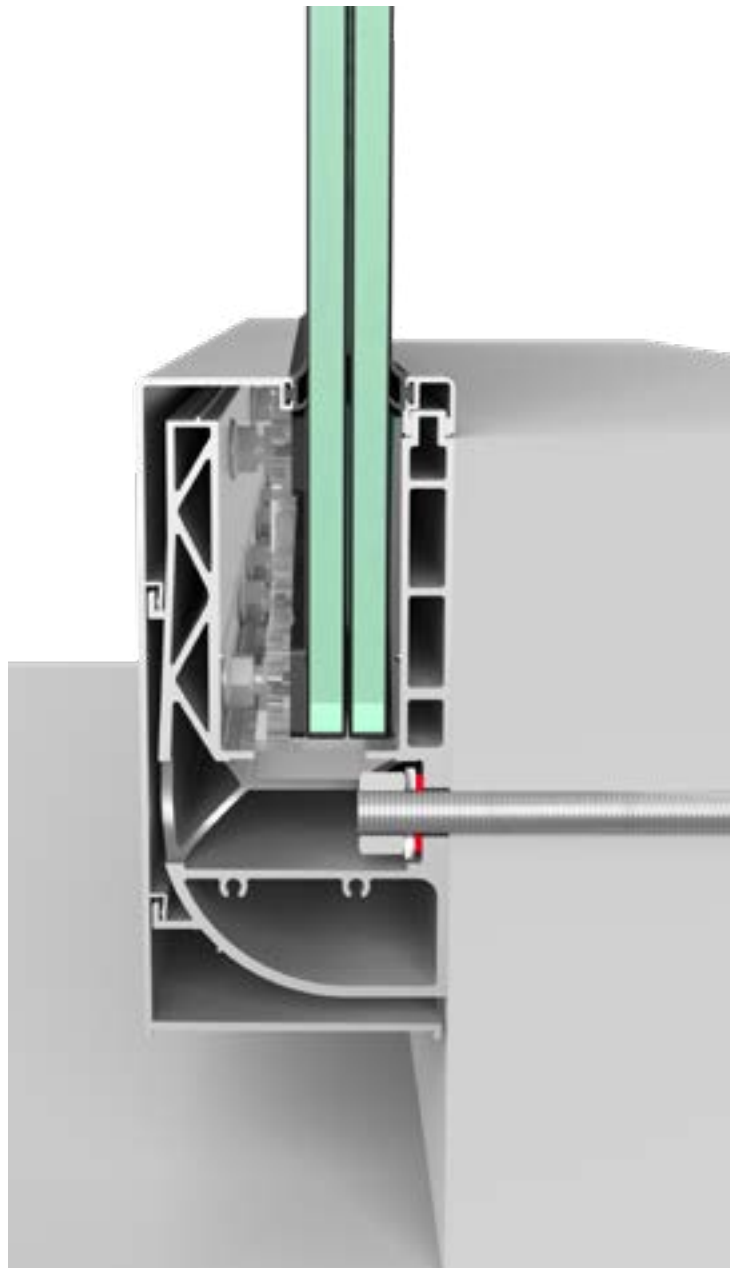
NINFA[®] 176 **P**



For very crowded environments:
Tested to 450 kg/m 302 lb/ft
impact up to 600 J 440 ft*lb

Ninfa 176 **H** (Home)

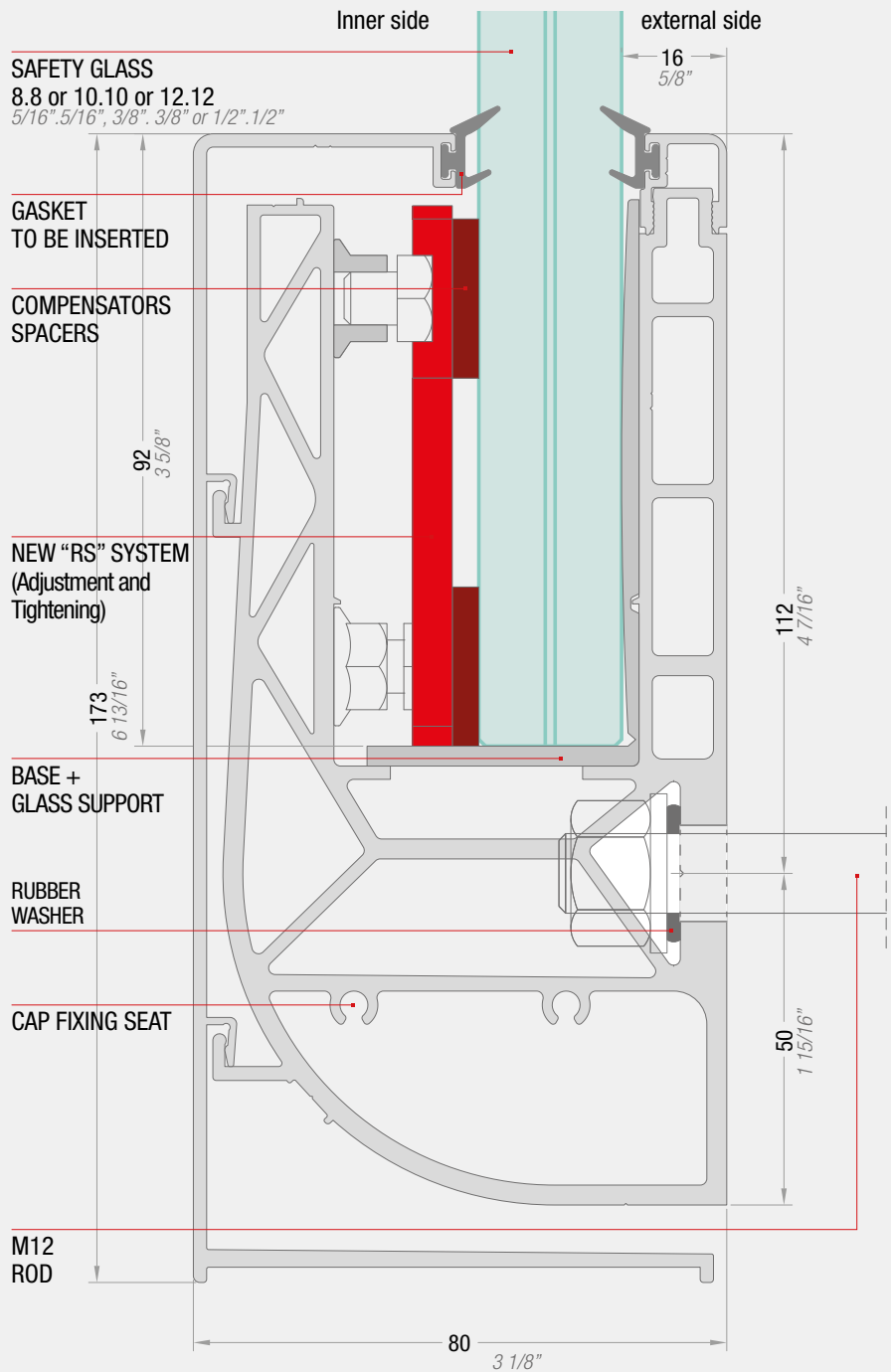
Ninfa 176 **P** (Professional)



TECHNICAL DETAILS

This page shows the complete list of the main components.

Some accessories, such as the adjusting block, the gaskets and the cladding can vary to accommodate different thicknesses of glass sheets, such as the "compensator thickness" shown in the drawing alongside.



scale 1:1



NINFA[®] 186
THE GLASS BALUSTRADE WITH EXTERNAL LATERAL FIXATION



DESIGN: R&D FARAONE - PATENTED SYSTEM



NINFA[®] 186

THE GLASS BALUSTRADE WITH EXTERNAL LATERAL FIXATION

The **NINFA 186** glass balustrade is the technology for external side mounting, ideal for private and public places thanks to its performance.

NINFA 186, like the whole new series, meet the calculation verifications with engineering software and laboratory test simultaneously (static load test and dynamic impact test), required by the Italian regulations.

The profile accommodates 8.8, 10.10 and 12.12 (5/16" . 5/16" , 3/8" + 3/8" and 1/2" + 1/2") glass thanks to the new **RS system** for adjusting and tightening the glass.

Optional: integrable LED and handrail.

Finishes: Standard and on request customizations.



NINFA[®] 186 (H)



For uncrowded environments:

Tested at 300 kg/m 206 lb/ft

Dynamic impact resistance up to 350 J 258 ft*lb



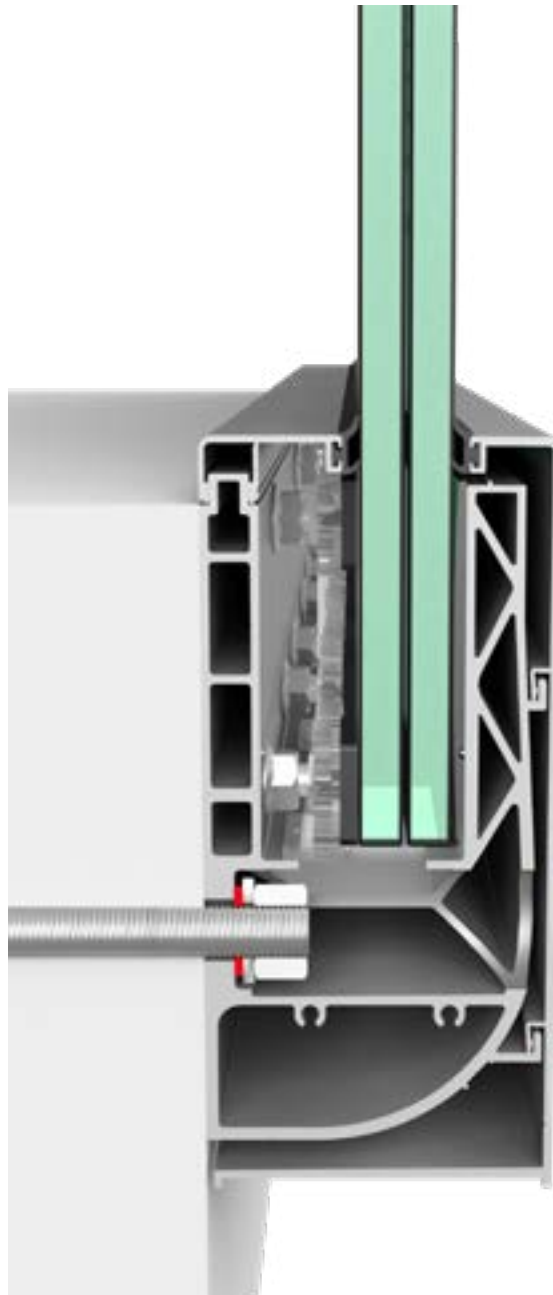
NINFA[®] 186 (P)



For very crowded environments:

Tested to 450 kg/m 302 lb/ft

Dynamic impact resistance up to 600 J 440 ft*lb



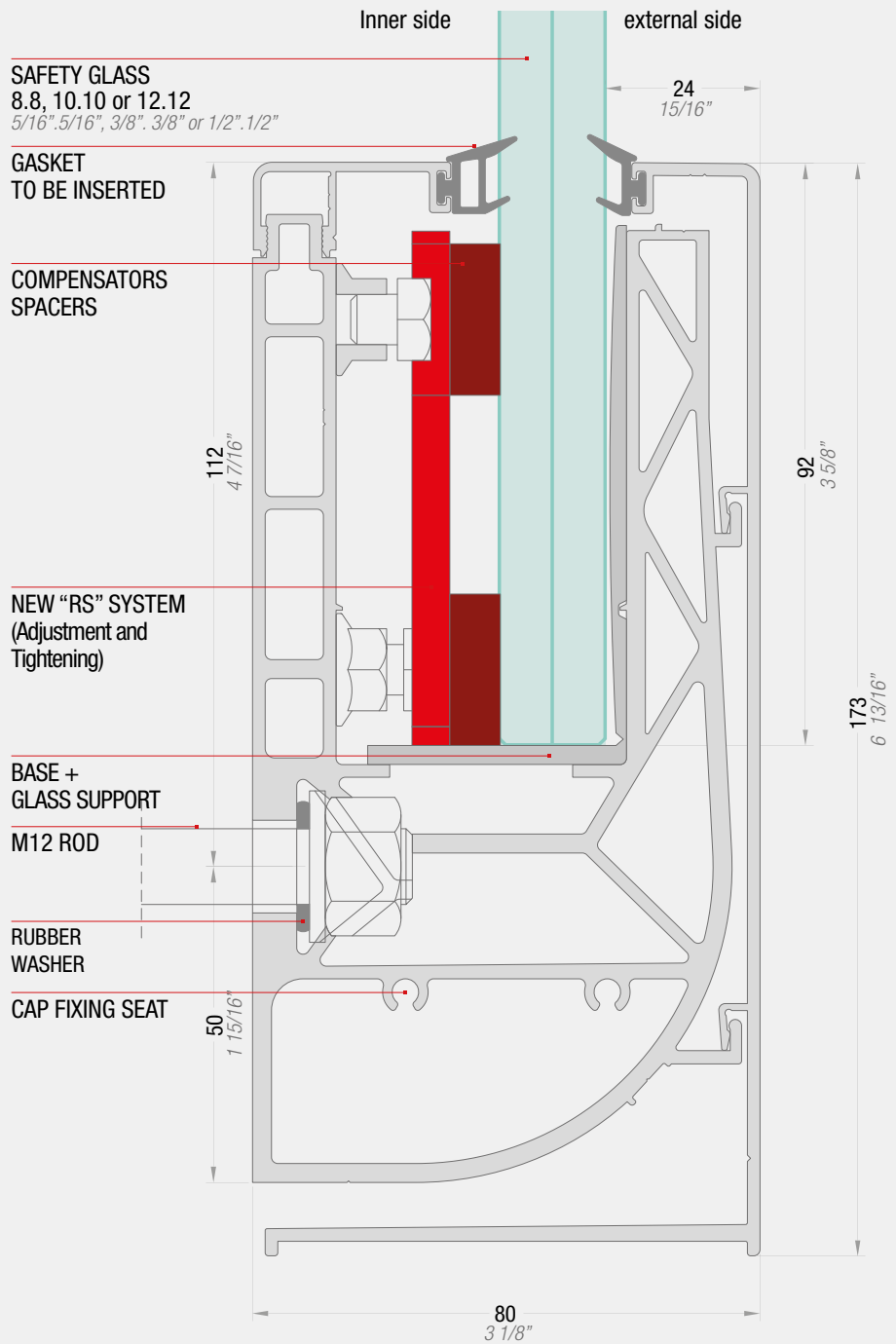
Ninfa 186 **H** (Home)

Ninfa 186 **P** (Professional)

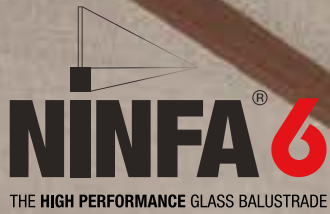
TECHNICAL DETAILS

This page shows the complete list of the main components.

Some accessories, such as the adjusting block, the gaskets and the cladding can vary to accommodate different thicknesses of glass sheets, such as the "compensator thickness" shown in the drawing alongside.



scale 1:1



NINFA[®] 6
THE HIGH PERFORMANCE GLASS BALUSTRADE



DESIGN: R&D FARAONE - PATENTED SYSTEM



The **NINFA 6** glass balustrade represents the new technology of the Faraone company with very high performance levels. It's ideal for public and crowded places, for sports stadium stands, common spaces in infrastructures, cinemas, theatres, hotels.

NINFA 6, like the whole new series, meet the calculation verifications with engineering software and laboratory test simultaneously (static load test and dynamic impact test), required by the Italian regulations.

The profile accommodates both 10.10 and 12.12 (3/8", 3/8" and 1/2", 1/2") glass thanks to the new **RS system** for adjusting and tightening the glass.

Optional: integrable LED and handrail.

Finishes: Standard and on request customizations.

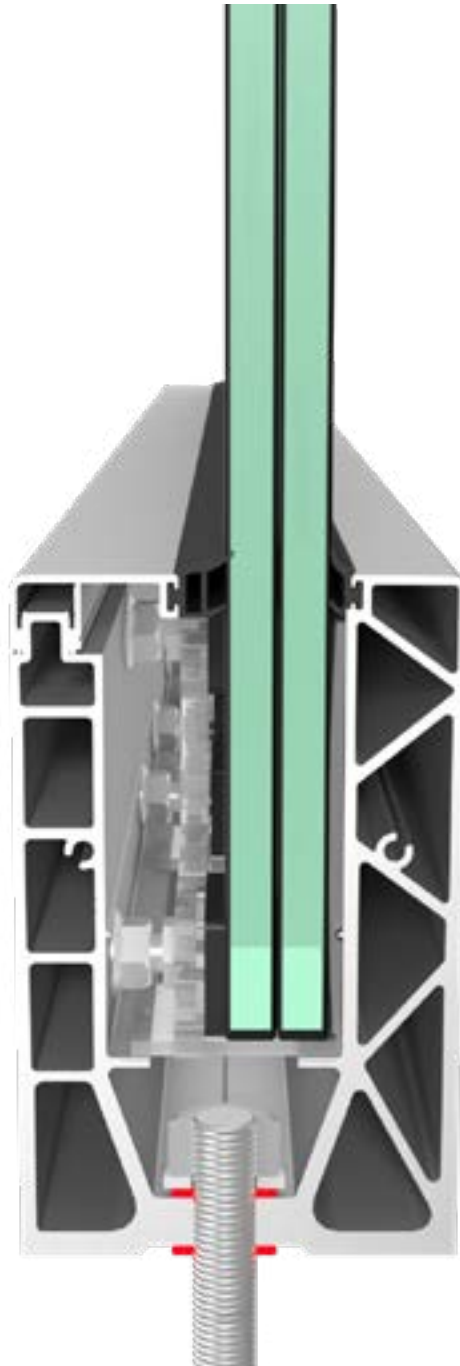


For uncrowded environments:
Tested at 300 kg/m 206 lb/ft
Dynamic impact resistance up to 350 J 258 ft*lb



For very crowded environments:
Tested to 450 kg/m 302 lb/ft
Dynamic impact resistance up to 600 J 440 ft*lb

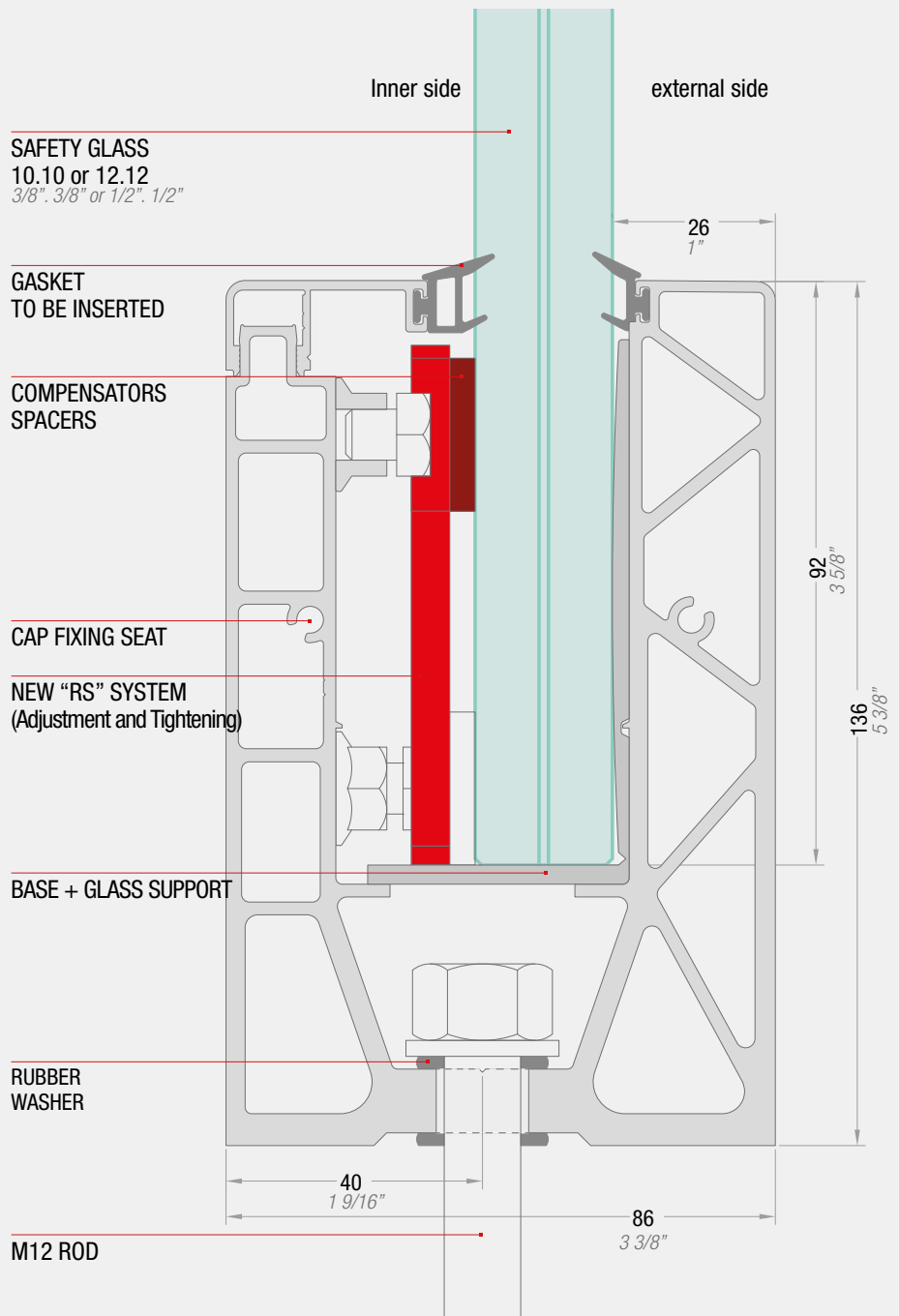
Ninfa 6 **H** (Home)
Ninfa 6 **P** (Professional)



TECHNICAL DETAILS

This page shows the complete list of the main components.

Some accessories, such as the adjusting block, the gaskets and the cladding can vary to accommodate different thicknesses of glass sheets, such as the "compensator thickness" shown in the drawing alongside.



1:1 scale

ACHIEVEMENTS WITH NINFA BALUSTRADES DURING THE YEARS.





Harbor Station,
Salerno



Mall of Berlin,
Berlin

Leonardo Da Vinci Airport
Roma Fiumicino





De Gasperi Residence,
Milan



Kennedy Residence,
Milan

F5 Multifunctional building,
Cuneo



ASSEMBLY INSTRUCTIONS NINFA THE 6TH SERIES

Download the assembly instructions in PDF format

 **NINFA® 6**



 **NINFA® 106**



 **NINFA® 116**



 **NINFA® 56**



 **NINFA® 176**



 **NINFA® 186**



NINFA TECHNICAL SPECIFICATIONS

Ninfa system glass balustrades (or similar), complying with the regulations currently in force, with relative test report containing:

_ Static load test in compliance with resistance to horizontal static linear load 2 kN/m (137 lb/ft) or resistance to horizontal static linear load 3 kN/m (206 lb/ft).

_ Dynamic load test with variable pendulum height depending on the intended use and possible breakage of glass.

_ Technical drawings with the heights and dimensions of each single component of the balustrade.

In addition, it is necessary to define the type of glass sheets and interlayer of the layered package in order to meet the "post-breakage" requirement.

1 CHARACTERIZATION OF NINFA SERIES 6 BALUSTRADES

Ninfa system balustrade or railing (or similar) made with 6060 T66 or 6063 T66 aluminium alloy profile of the model chosen by the Works Management, based on the intended use and the class to which it belongs; it is suitable for being mounted on the floor, integrated into the floor or fascia mounted, to be chosen from the following Faraone models (or similar):

1/A) Model NINFA 6 profile size of 86x136 mm (3 3/8"x 5 3/8") (base x height) with laminated glass 10+10 (3/8"+3/8"), 12+12 (1/2"+1/2");

1/B) Model NINFA 106 profile size of 74x111 mm (2 15/16"x 4 3/8") (base x height) with laminated glass 8+8(5/16"+5/16"), 10+10 (3/8"+3/8");

1/C) Model NINFA 56 profile size 64x83 mm (2 1/2"x 3 1/4") (base x height) with laminated glass with 6+6 (1/4"+ 1/4"), 8+8 (5/16"+ 5/16");

1/D) Model NINFA 186 profile size of 80x173 mm (3 1/8"x 6 13/16") (base x height) with laminated glass 8+8 (5/16"+5/16"), 10+10 (3/8"+3/8"), 12+12 (1/2"+1/2");

1/F) Model NINFA 176 profile size of 80x173 mm (3 1/8"x 6 13/16") (base x height) with laminated glass 8+8 (5/16"+5/16"), 10+10 (3/8"+ 3/8"), 12+12 (1/2"+1/2");

1/E) Model NINFA 116 profile size of 122x114 mm (4 13/16"x 4 1/2") (base x height) with laminated glass 8+8 (5/16"+5/16"), 10+10 (3/8"+3/8").

2. FUNCTIONALITY AND AESTHETICS OF THE NINFA BALUSTRADES

The aluminium profile of the balustrade will be equipped with special accessories that allow adjustment for the alignment and "plumb" of the glass sheets.

The type and quantity of the profile fixings to the floor/wall will vary according to the resistance class requested by the Works Management and the nature of the support. If the fixing is carried out on a beam or base in reinforced concrete, it will be necessary to make sure that the concrete is of minimum class C25/30.

The aluminium profiles positioned "on sight" will be anodized with silver colour class 15 micron (0,60 mil) (or other colour on request) or painted with epoxy powders in RAL colour or other colour on request.

3. PERFORMANCE IN POST-BREAKAGE CONDITIONS

For the profiles of the NINFA system, it will be sufficient to use the tempered-hardened laminate glass to obtain residual post-breakage resistance. It is advisable to pay extreme attention to the installation of the hardened sheet, which must be placed in the compressed part of the laminate, i.e. externally to the horizontal static linear load and impacts.

4. ADDITIONAL SAFETY GUARANTEES IN POST-BREAKAGE OF GLASS AND HANDRAIL

To ensure "system redundancy" and achieve the satisfaction of the post-breakage criterion, the Construction Manager may also request the upper handrail to be anchored and glued to the individual glass sheets in order to ensure, in case of breakage of the sheets, the transfer of linear loads to the adjacent intact sheets and the reduction of the risk of collapse of the laminate glass with both sheets broken. Note that this solution involves a price increase due only to the cost of the handrail.

TO KNOW MORE ABOUT IT

Consult the document "Faraone Informs 27" on the www.faraone.it website.

This documentation is the result of a long and careful experimental campaign combined with the Faraone experience, and it makes available to all that are interested the many tests that have been carried out and the behaviour/performance of the various glass solutions (all valid with Faraone systems only), as well as various examples, observations and analyses on the world of glass balustrades.

Eng. Gabriele Romagnoli

GENERALI CONDITIONS OF SALE

Transportation costs shall be evaluated with every offer, according to volume weight and destination.

COMPLAINTS:

Any complaint must be sent to Faraone within a final deadline of 8 days from receipt of goods; we do not accept returned goods unless previously authorized by Faraone in carriage collect.

Any returned products that should hypothetically arrive to the Faraone company without prior authorization will be refused without exception and returned to the sender in carriage collect.

PAYMENT METHOD:

For foreign countries, the payment of the goods is made by bank transfer in advance. Other payment methods will be agreed under the credit insurance.

- **VAT:** all prices listed in the pricelists are exclusive of VAT.

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Take care of the people you love.

With the latest generation of Ninfa balustrades.

faraone.it



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