

System for
Curved Walkways
and Roof Lights

Cintro

Reynaers Satellite system®

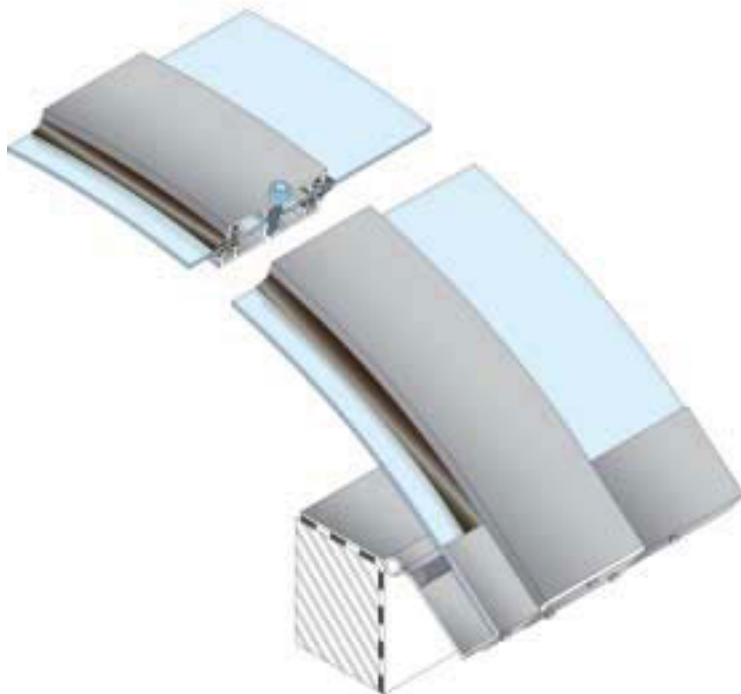
Bringing Aluminium to Life

Reynaers
ALUMINIUM

Cintro:

Versatility of shape

The profiles within the Cintro range have been developed as an architectural solution for bending profiles. The possibilities for application are numerous and may even include light roofs. The system is able to incorporate a variety of glazing styles including plate glass and is the ideal system for applications where abundant daylight is required.



Ideal for barrel vaults

- The system is extremely suitable for fabricating aluminium barrel vaults. The minimum permissible radius is 400 mm. Flat capping adds a streamlined finish to the roof.

Variety in glazing

- The system may incorporate a wide variety of different glazing styles: laminated glass, acrylic sheets, polycarbonate sheets (of thickness 2 - 32 mm). It is also possible to place several sheets one above the other.



A wide range of colours

- Reynaers offers a choice of over 400 RAL colours: gloss, matt, metallic, anodised or wood structure.
- Surface treatments are carried out in accordance with Qualicoat standards for painting and Qualanod standards for anodising.
- The Cintro system allows contrasting colours to be used on the interior and the exterior.



Guarantee

- Reynaers Aluminium offers a 10 year system guarantee on Cintro. ISO 9001 certification ensures that all orders are handled professionally from the time they are placed through to aftercare.



Cintro:

Technical characteristics

GENERAL		CINTRO
Description		system for glazing spans with arched profiles
DESIGN		
Inner view width		60 mm
Outer view width		60 mm
TECHNICAL CHARACTERISTICS		
Height of the covers		8 mm
Height of the bearing profile		8 - 35 mm
Inertia of the bearing profile		$I_x = 0.2$ to 9.8 cm^4
Glazing		dry glazing by means of EPDM sealing
Thickness of the glass		2 - 32 mm

Cintro:

Brief description

(Product description available on request)

Construction

The tubular-built aluminium profiles have a width of 60 mm. The free width of the arch and the radius of the arch determine the height of the bearing profiles.

The outer profile, which is of equal width and has a height of 8 mm, clamps the glazing tightly to the bearing structure by means of stainless steel screws.

A construction with several glazing panels placed one on top

of the other is made possible by the introduction of an intermediate profile.

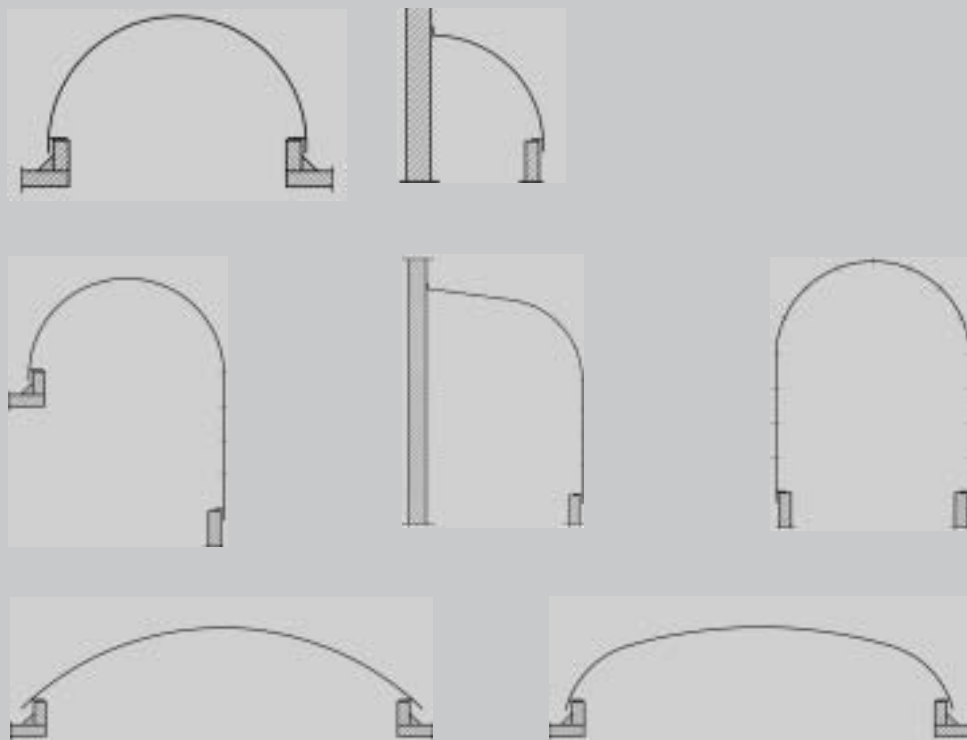
The bearing profiles are secured by means of a hinging profile which accommodates a variety of arch radiuses.



Cintro



Cintro: Application possibilities



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[Your Reynaers Aluminium fabricator]

1. Profiles

The hollow aluminium profiles have a width of 60 mm. The height of the structural profiles is determined by the free width and the radius of the arch. The profiles consist of a central screw channel, two drainage channels and two small grooves for the inner glazing gaskets. The profile on the inside forms the structure of the skylight. The glazed units are fixed thereto by means of screws which are visible from the outside.

The outer profile clips either the glass or the glazed units onto the structure by means of rust-proof screws which are supported by synthetic washers. This clipping profile has two small grooves for the outer glazing gaskets. The screws are either flat (thickness 8 mm) or trapezium-shaped (height 26 mm). For arches with a large radius, a plate on the end of the profiles covers the attachment point and thereby protects it. The plates are secured with stainless steel screws in the central screw channel.

A construction with several glazed units placed on top of each other can be made by inserting an intermediate profile. This intermediate profile allows a thicker panel (by 10 mm) to be used plus the thickness of the glazing gaskets.

The structural profiles are secured by means of a hinge profile which is able to accommodate various arch radiuses. The hinged fastening profile consists of a fixed channel profile with a hollow profile inside, which enables a variety of angles to be created. These anchoring profiles have drainage openings for the mullion arch profiles.

2. Sealing gaskets

The glazing and drainage gaskets are made of EPDM.

Small differences in thickness between the glazed units (glazing or panels) can be overcome using different gaskets with the same appearance.

If silicone is used in place of EPDM glazing gaskets, nylon spacers must be placed on the screws.

3. Glazed units

The glazed units or round glazing are kept in position by a screw connection.

The system allows for edge ventilation of glazed units.

4. Fitting and anchoring

The mullion profiles are fastened to the structural elements of the building by means of adjustable anchoring pieces in aluminium or galvanised steel. The anchoring of the aluminium elements to the building must be arranged in such a way that movement of the building and the elements are absorbed without any loads being passed onto the aluminium construction.

Anchoring is made with elongated screw holes which, on the one hand, allow for positional adjustment and, on the other hand, allow free expansion of the aluminium construction. Anchoring pieces are either fastened using nuts and bolts or by means of rails already present in the building. Anchorings must also comply with strength calculations.

In accordance with mandatory tolerances for the building, an adjustment distance between the building and the aluminium construction is maintained.

A sealing membrane (butyl, EPDM, ...) is placed between the inner structure of the building and the drainage level of the outside wall construction. This membrane guarantees wind and water resistance. In the corners, the membrane is welded or glued.

At the bottom of the aluminium construction, the sealing membrane drains infiltrating water in the mullion profiles to the outside.

A distance block made of a material with a low thermal conductivity and a thickness identical to the filling material of the curtain wall, guarantees the correct placement of the clamping profiles around the aluminium construction.

On the outside of the exterior wall construction, the building connections depend on the nature of the building and the materials used. The building connections must match the material and thickness of the surrounding materials. However, when an aluminium profile is used (standard profile or folded plate), the connection must always have a joint sealing strip and an elastic joint filling compound.