

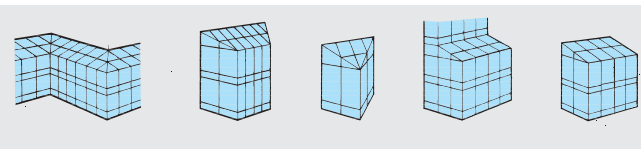
The Poliedra-Sky system is part of the evolution process of METRA Systems for the building industry, enabling with its versions Poliedra Sky 50, Poliedra Sky 50 I and Poliedra Sky 50 S to design and fabricate curtain walls or aluminium frameworks (combined with glass, stone, and composite materials) of different shapes and special dimensions, offering a wide range of functional and aesthetical solutions. The system rightly owes its name to the "polyhedral nature" of its constructive and application possibilities.

APPLICATION

Unlike the past years, nowadays the buildings covered with curtain walls structures require more evolved and complete systems to achieve particular geometric shapes, even complex, and to enliven the curtain walls with dynamic and airy pictures.

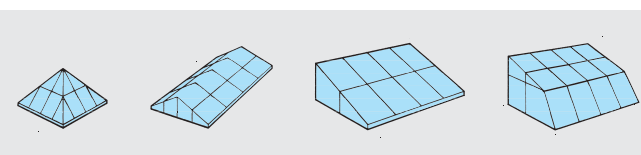


Thanks to its aesthetics, tightness and energy-saving features, the Poliedra-Sky system can be employed both in building and in restyling, replacing or integrating new volumes. By using profiles and proper fittings, the system allows to



make vertical or horizontal curtain walls, such as:

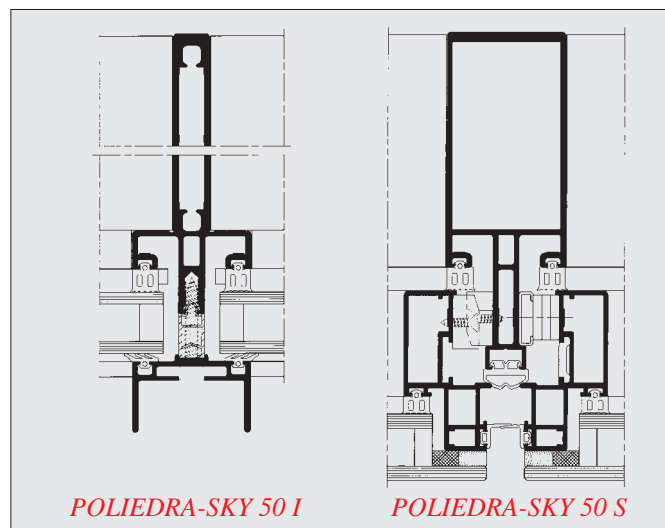
- **Traditional curtain walls** (mullions and transoms)
- **With "standard" elements** (glass check edge)
- **With "structural" elements** (bonded glass without visible metallic parts)



Other particular structures are also possible such as: roofs, pyramids, sky-lights, verandas, patios, solariums, winter gardens.

TECHNICAL DESCRIPTION OF THE SYSTEM

- **Extruded aluminium profiles:** alloy EN AW-6060 (EN 573-3 and EN 755-2)
- **Temper designation:** EN 515
- **Dimensional tolerances and thickness:** EN 12020-2
- **Air-water tightness:** by pressure equalisation
- **Profile type:** with or without thermal break
- **Glazing or panel application:** from outside
 - by pressure profile (mullion and transom system)



- by sliding in the frames ("standard" element system)
- bonded onto the frames ("structural" element system)
- **Glazing seat height:** net 19,5 mm (usable 14 mm)
- **Glazing and/or panel thickness:** from 4 to 45 mm
- **System basic dimension:**
 - mullion: 50 mm wide up to 225 mm deep
 - transom: 50 mm wide up to 174 mm deep.



MAIN FEATURES

The wide range of profiles, accessories and gaskets of the system enables the manufacture of aluminium structures of such a particular design and technical application among the most complete systems available on the current market. Furthermore, thanks to the interchangeable profiles, engineers and buyers are free to choose both the inside and outside aesthetic look of the structures.



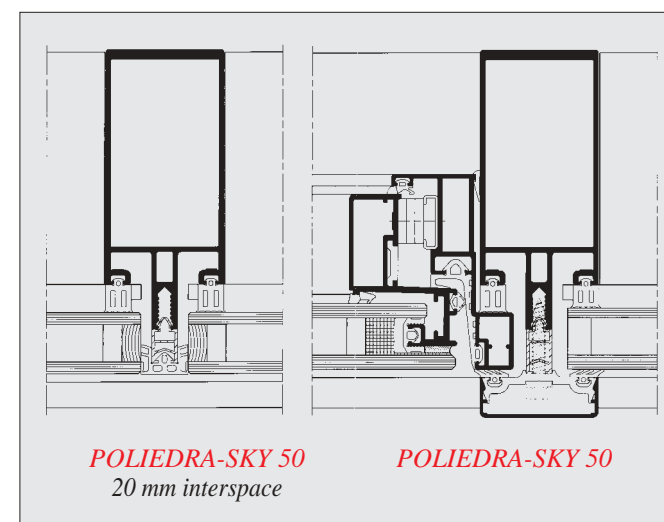
SURFACE FINISHING

Protection and finishing of the aluminium profile surfaces must be carried out by means of anodising or painting. METRA carries out these finishing touches according to the European standard QUALITAL (QUALANOD for the anodising and QUALICOAT for the painting).

- **The anodising and the thermopainting** are carried out by a complete cycle with various checks in many work stages in order to offer maximum quality and durability warranty.
- **The layer of oxide** artificial crystalline can be colourless (obtaining the silvery finishing of the aluminium) or coloured by absorbing procedure or by electrocolouring, varying from a light bronze to black. The average thickness guaranteed is 15 microns.
- **The paints applied** are of linear polyester powder with an average guaranteed thickness of 60 microns in the principal parts in view. The available colours are those present in the RAL colours chart. Asside from these, there are also RAFFAELLO original colours, especially made by METRA with the collaboration of expert architects to obtain aesthetically nice opaque finishing colours, much appreciated and easy to be introduced both in the restricting or new realisations.

CERTIFICATION

The METRA systems are certified by the most important European tests labs, with maximum level results of performances. See technical documentation of the system for this



data. The quality of METRA systems is guaranteed by manufacturing process certified by "European trade mark" and by the company quality certified by IGQ-IQNET on the terms ISO 9001:2000 for this purpose.



THE ADVANTAGES

METRA systems offer the following main advantages:

- **complete systems** which, individually or combined among them, enable the production of many types of frames by using profiles with or without thermal insulation;
- **accessories, gaskets and original fittings**, of high quality;
- **technical documentation** supported by technical catalogues and software (DXF for CAD);
- **distribution and technical assistance** widespread and guaranteed by qualified personnel;
- **unlimited choice of colours** offered by METRA painting and anodisation METRA with European quality label;
- **thermal, sound & security insulation values** correspond to project needs and are in conformity to the legal regulations in force.

METRA systems, thanks to the great variety range, offer a valid solution to all designer and producer project requirements.

