



[www.metra.eu](http://www.metra.eu)

Architectural  
visions for  
contemporary  
living







**METRA**  
*Italian Style Emotions*



## Made in Metra protects designers' dreams

Long live Metra window and door frames! From extrusion of aluminium to the design of shapes and components...

Metra controls and guarantees excellence in all phases of manufacturing and thereby frees the designers from all material and structural constraints.

Metra supports the creation of any architectural vision with its technical assistance service to design and specifications (MAP), which is provided free of charge to designers enabling them to transform concepts, style and creativity into "real sensations"... from technical assistance to final realization. The Metra product lines have been co-created with clients to become even more satisfying and advantageous to those who experience them and offer them... extraordinary solutions for contemporary living with low environmental impact, surfaces painted with zero solvent emission pigments, natural wood coverings, automation that can be used in domotic homes.

The production cycle is also eco-sustainable through the re-use of water and fumes, the productive recycling of aluminium and the energy-saving production process that uses natural fuels. This is what it means to be Made in Metra; high-quality and high-culture production where anything can be achieved.



Metra S.p.A  
is member of GBC Italy



**METRA**

*Italian Style Emotions*

## Curtain walls Poliedra-Sky, your ideas take form



*Tamburini S.r.l., Brescia, Italy  
Project Severini Associati & Partner*



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Poliedra-Sky frees designers creativity stimulating the realization of innovative concepts of space and light. Poliedra-Sky is not only aesthetically pleasing but also a highly innovative technology for the creation of increasingly complex geometric shapes made from glass, stone, wood and composites. The wide range of extraordinarily exciting and different finishes include gloss, matt, extra-gloss, oxidized, scratch proof and self-cleaning. The thermal-break Metra profiles and the Poliedra-Sky photovoltaic system enable to save and produce energy. Moreover, Metra guarantees absolute air tightness against all atmospheric agents, unbelievable durability as well as acoustic and thermal insulation for every climate and latitude on the planet. Enjoy your vision... with Poliedra-Sky.





## Curtain walls

*Dauphin Cosmetici, Boves (CN), Italy  
Project M. Pellegrini & E. Rosso*

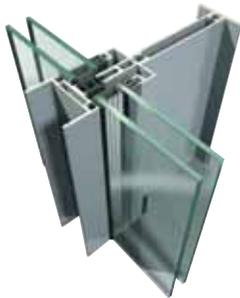


*Interbrennero S.p.A. new Headquarters, Trento, Italy- Project M. Facchini*

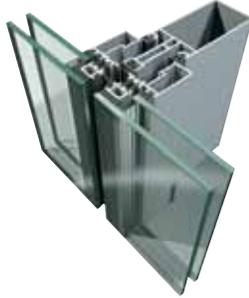
Poliedra-Sky 50



Poliedra-Sky 50 I



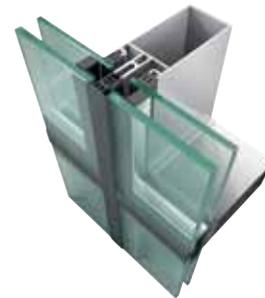
Poliedra-Sky 50 S



Poliedra-Sky 50 S  
(continuous curtain walls)



Poliedra-Sky 50 CV



Poliedra-Sky 60



*Snow Hill, Birmingham UK - Project Sidel Gibson Architects*



*Tower B, Area Garibaldi Milan, Italy - Project Massimo Roj /Progetto CMR*



Poliedra-Sky Fast 80



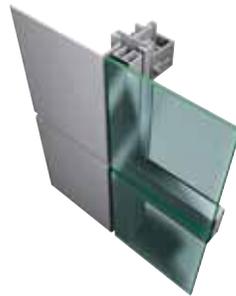
Poliedra-Sky Glass 130



Poliedra-Sky Glass 180



Urano Wall



**Customized designs**

Profiles as  
special as  
your ideas

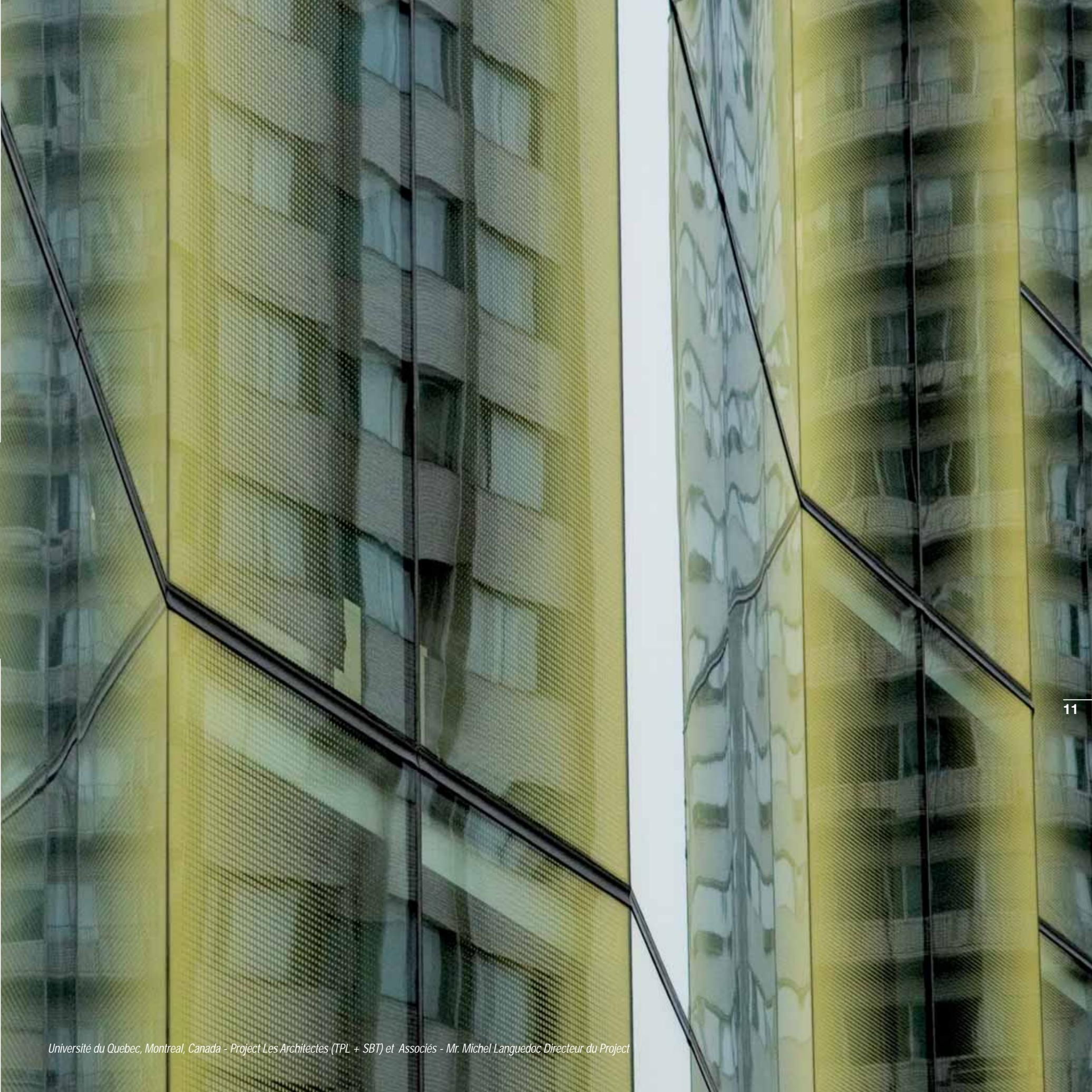


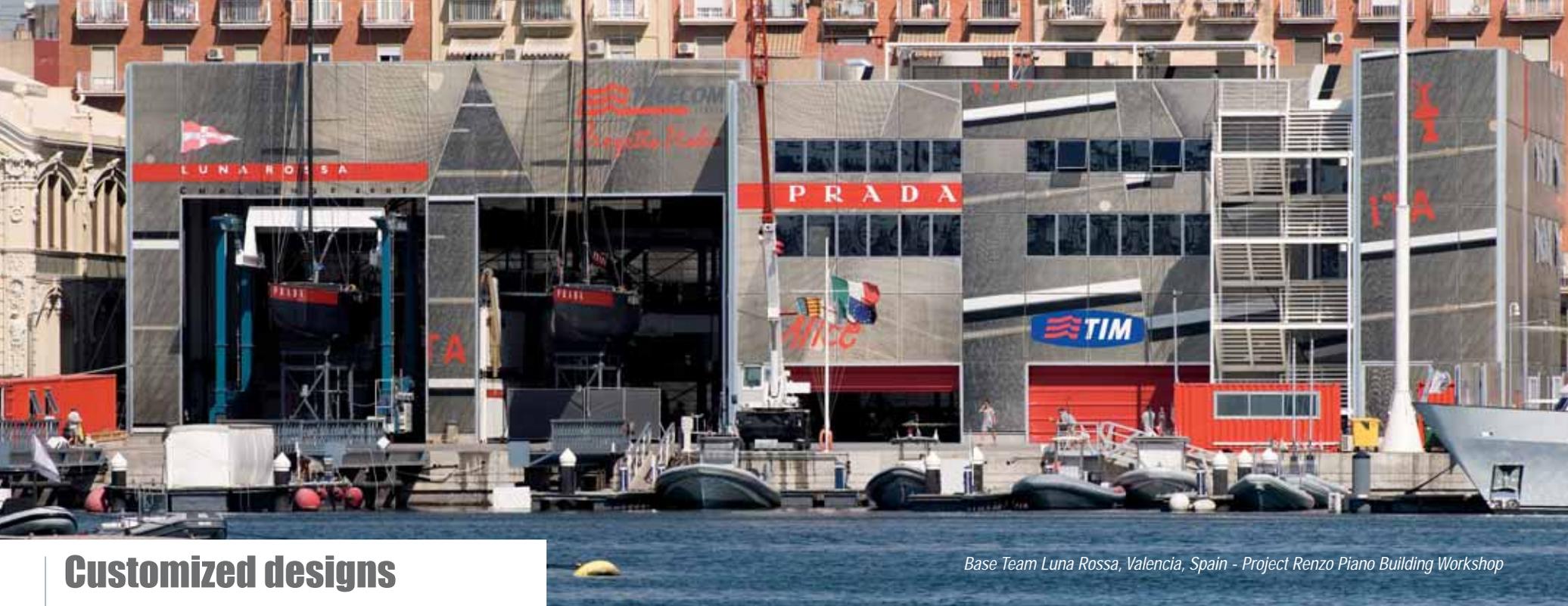
*Foppa 49 Building, Brescia, Italy  
Project Studio Architetto G. Lisciandra*



Metra also represents special made-to-measure curtain walls according to your design... nothing is impossible if sustained by great ideas and Metra profiles.

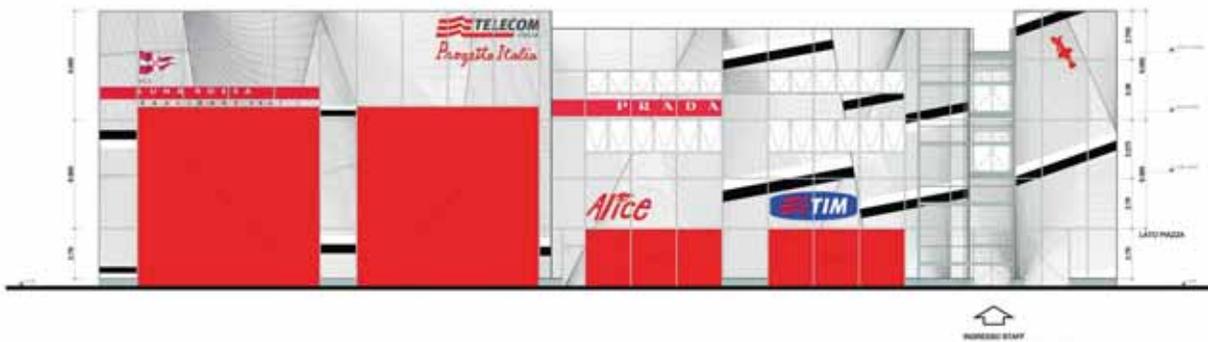
Metra's mission has always been to produce windows, doors and their finishes with complete respect for the environment, with high-durability and performance levels capable of satisfying your every wish. And when you need something truly unique, distinctive and complex, the highly-skilled MAP team (Metra service for Assistance to the Projects) are always available to support designers' wishes and visions ...anywhere in the world.





## Customized designs

Base Team Luna Rossa, Valencia, Spain - Project Renzo Piano Building Workshop



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Civil and criminal Court, Rimini, Italy  
Project Studio Bevivino e Costa Architetti Associati



City Point, London, UK  
Project Sheppard Robson



Docklands, Hamburg, Germany- Project BRT Bothe Richter Teherani



Royal Ontario Museum (ROM), Toronto, Canada - Project Studio Daniel Libeskind, B+H Architects Bregman + Hamann

## Sunblades systems

The design  
that protects  
and recharges  
your ideas  
with energy



The evolved and contemporary style offered by Metra sunblades systems is extraordinary. The new sunblades series is not simply a sun protection device - its use ranges from buildings to private homes and adds aesthetic value to any architectural design. Every home becomes more enjoyable and more liveable when you can choose between light, twilight or darkness... easily and at any time of the day. The simple insertion of photovoltaic panels in the blades produces clean energy with low environmental impact.

The sunblades can be supplied with all Metra systems surface finishes; automation can be managed by a home domotic system.





*Private house, Cattolica (RN), Italy - Project Ing. Christian Profili*

## Sunblades systems



*Sede Social de la Empresa Municipal de la Vivienda Rivas Vaciamadrid Spain  
Project Beirak y Ulanosky Arquitectos*



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*Regional TV Production Centre of Friuli Venezia Giulia, Italy*

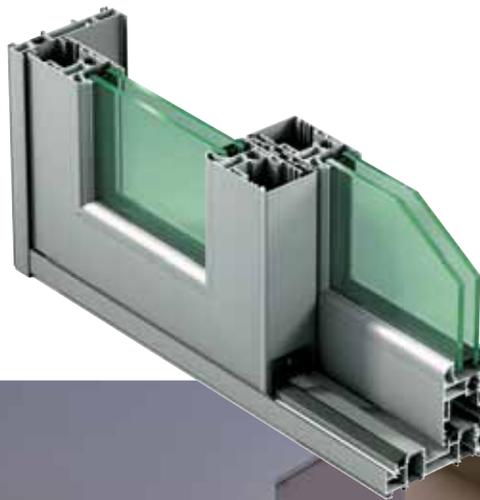


*Juzgados de Mula, Murcia, Spain - Project Arch. Antonio Martin Bernaldo De Quiros*



## Sliding windows

# The landscape becomes a benchmark for living



*Private house, Valtio Terme (BS), Italy  
Project Arch. Paolo Livi*



Choosing and offering a Metra sliding system means adopting a lifestyle that is increasingly contemporary and comfortable. Metra's sliding systems encompass all the technology and design a designer needs to enhance interior and exterior design solutions. Large windows, refined designs, even ultra-thin windows (ranges from 50 mm to 150 mm) with an aluminium core. Compared to solid wood or PVC, Metra sliding systems offer performance, aesthetics, safety, air-tightness, durability and comfort... to this we add a vast range of stunningly stylish surfaces, including natural wood.

Maximum air-permeability, water-tightness, wind resistance performances in all climates, but also salt resistance and exceptional thermal and acoustic insulation.

- Burglar-proof glass - Suitable for anti-theft system - Suitable for household automation and domotics - Suitable for combination with sunblade systems - Extremely smooth sliding action.





Private house, Vallio Terme (BS), Italy  
Project Arch. Paolo Livi



Private house, Lignano Sabbiadoro (UD), Italy  
Project Arch. Marco Marchesi, Fedro Architetti Associati

## Sliding windows

NC-S 65 I



Roma line

Tahiti line

NC-S 65 STH



Roma line

Miami line

NC-S 120 STH



Montreal line

Europa line

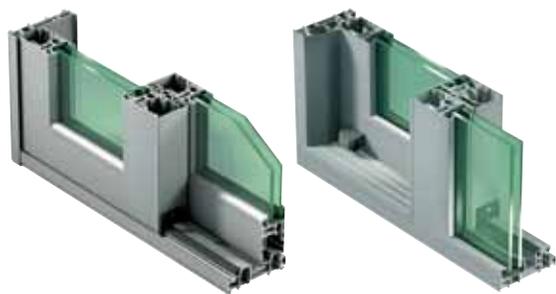


Villa Fabro, Udine, Italy - Project Prinic  
& Partners Architects - Arch. Alessio Prinic



Giornale "Il Sole 24 ore" - Uff. Direzionali, Milan, Italy - Project Renzo Piano Building Workshop

NC-S 150 STH



Rodos line

Petra line



## Casement windows

From  
regulatory  
compliance  
to thrilling  
designs



28 Duca D'Aosta Building, Brescia, Italy - Project M. Fuksas



Aesthetic and structural excellence, taste and technology combine to enhance and protect your living experience. Great versatility that never sacrifices the external appearance. Metra's casement windows and entrance doors are suitable for all your living needs: from town centre to contemporary architecture, from mountain refuge to seaside or countryside villa. Resistant to any type of atmospheric agent or climatic condition and with great long-term performance. Metra's casement systems, with an aluminium core, guarantee thermal and acoustic insulation to your home while saving a significant amount of energy. Design can be chosen from eight aesthetic lines available in a wide range of thicknesses (from 50 to 75 mm). There are many types of opening, accessories, coloured surfaces and coverings that can be applied in compliance with all municipal regulations, including heritage or protected sites.





Palazzo "Mezzopreti" - Music Conservatory, Pescara, Italy  
Project Laterza Arnaldo - Ufficio Tecnico della Provincia di Pescara



Private house, Chicago, USA - Project Nicholas Clark Architects

## Casement windows

NC 50 I



NC 50 STH



NC 65 STH



NC 65 STH-I



NC 75 STH

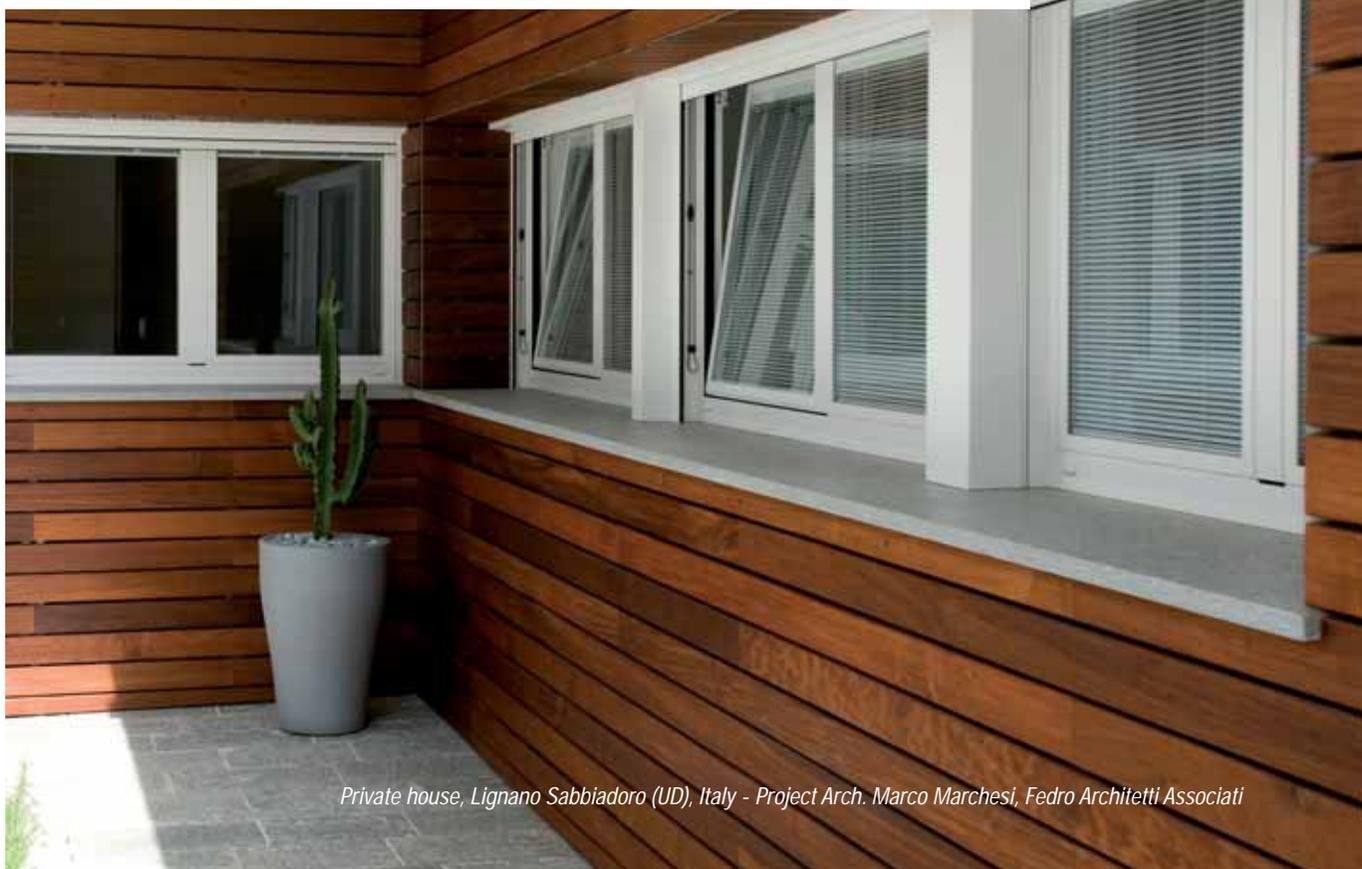


NC 75 STH-I



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NH Hoteles, Milan, Italy - Project Dominique Perrault



Private house, Lignano Sabbiadoro (UD), Italy - Project Arch. Marco Marchesi, Fedro Architetti Associati



## Doors and partition walls

# Divide your spaces with style



**Metra doors** can be used in private living areas as well as in office spaces... in both cases, these solutions are perfect for many architectural settings. The **partition walls** are part of a complete system of profiles and accessories that optimize and demarcate spaces according to individual needs.

The common thread is without doubt style, structural synthesis and quality. Aluminium, natural wood, monolithic glass (8 mm)... the raw material is moulded according to the requirements and aesthetics of the project. Door and wall thicknesses can be ultra-thin and frames can have different shapes and aesthetic lines. There are many types of exciting finishes, from multilayered natural pigments to various effects such as metallic, oxidized or sandblasted. Metra doors and partition walls guarantee solidity, perfect air-tightness, durability and acoustic comfort. The numerous accessories ensure a wide range of choice and cater to all aesthetic tastes.



*SIMES S.p.A Headquarter, Timoline di Cortefranca (BS), Italy - Project Studio Associato Falconi*



*INTER@CTIVE S.p.A., Treviglio Bergamo (BG), Italy - Project Studio Zero - Arch Rossini*

## Design complements

Aesthetic  
choice down  
to the last  
detail



Handles and hinges... "Made in Metra" takes care of every detail.

The complements and accessories are suitable for all Metra systems.

Contemporary forms with unique and exclusive styles are designed to enhance every last detail in all types of living space, bringing together aesthetics and function.

The wide range of finishes ensures a vast assortment of aesthetic solutions and combinations in line with individual style.





## Design complements

Mod. Roto



Mod. Atlanta



Mod. Toledo





**MAP Assistance service**  
**Metra: the  
partnership that  
supports your  
dreams**



The Metra service enters into the mind of the designers and leaves only after dreams have been turned into reality. With MAP (Metra Assistance for Projects), Metra approaches designers and supports them by supplying everything technical they need to achieve their ideas. From design analysis to development, from defining specifications to creating the actual structure... all free of charge. MAP are the best partner an architect could ever wish for.



## Finishes and coverings

An endless  
choice of  
contemporary  
sensations



There's more to Metra than just top-quality components... there's also the surface.

Choosing a surface finish or covering is certainly the most enjoyable and creative part of choosing a Metra door or window system. Even "natural wood" enthusiasts can envision a natural wood door, but one with an aluminium core that never warps.

Surface finishes are made from natural pigments and have zero environmental impact, extraordinary beauty and durability, such as: oxidized paint that can be matt, gloss, and extra gloss, or paints with a sandblasted effect - wonderful to the eye and to the touch... then there are the bicoloured windows and doors which respond "outside" to architectural and regulatory requirements of the building and "inside" to the total personal freedom of choice and the desire for a particular interior.

Today, choosing a Metra window and door means choosing not only the best possible aluminium form and structure, but also its outer aesthetic... pure contemporary excitement.





## Aluminium-Wood



## Evolution

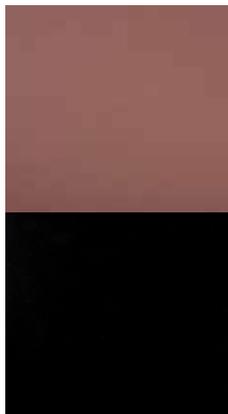


## Sablé



For those who love natural wood applied to contemporary forms, aluminium-wood is the perfect choice. Great resistance, security and airtightness with an aluminium core... as well as the stunningly stylish shades and look of various types of wood.

*For graphic reasons, the colours shown in this page are only indicative. Ask your Metra dealer the sample of the colour chosen.*



Natural oxidized effects, matt, gloss, and even extra-gloss, produce a cool and trendy effect. The Evolution line was inspired by architects to enhance modern lifestyles. Evolution is highly sought after for all types of living spaces because of its strong aesthetic and durability in any type of climate.

*For graphic reasons, the colours shown in this page are only indicative. Ask your Metra dealer the sample of the colour chosen.*



The Sablé finishes have a multi-sensorial effect. They are fantastic to look at and rough or satin to the touch. The sandblasted effect is quite versatile, trendy and easy to use in renovations and innovative living.

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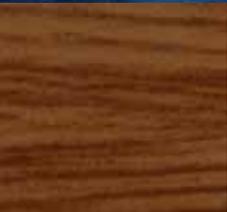


## Natur-Plus



The Natur-Plus line combines the sturdiness and reliability of aluminium windows and doors with the colours of the wood. Two layers of powder reproduce the typical grain and hues of the various types of wood.

*For graphic reasons, the colours shown in this page are only indicative. Ask your Metra dealer the sample of the colour chosen.*

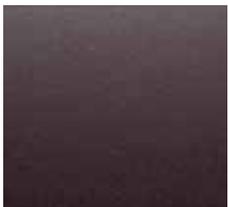


## Raffaello



The Raffaello line was developed in collaboration with important design boards and offers two different finishes: smooth and hammered. Thanks to the specific use of the "pointillist" method - obtained by a controlled mix of several different shades of colour - both finishes have an original and exclusive feel and look.

*For graphic reasons, the colours shown in this page are only indicative. Ask your Metra dealer the sample of the colour chosen.*



## Decor



Decor combines the strength of aluminium with the aesthetics of wood. This line faithfully reproduces the grain of traditional types of wood thanks to the sublimation process carried out on the painted layer.

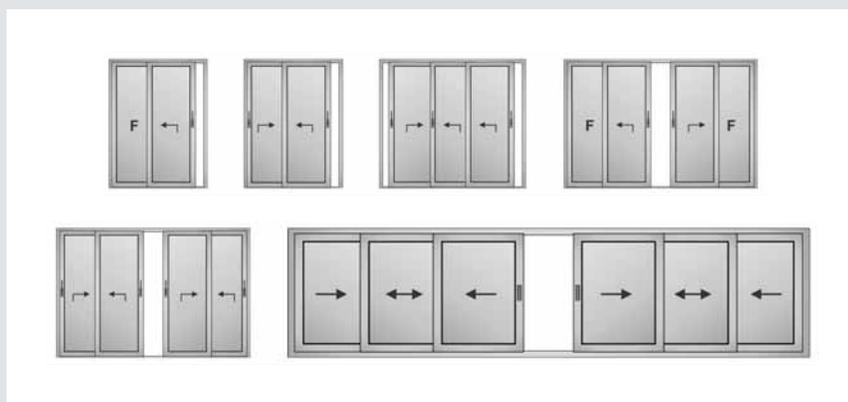
*For graphic reasons, the colours shown in this page are only indicative. Ask your Metra dealer the sample of the colour chosen.*





## Sliding windows

### Opening typologies



#### NC-S 65 I

##### Roma line

Base size: 50-90 mm

Type of air-water-wind seal: with brush gasket

Glass thickness: monolithic 6-8 mm, maximum 24 mm

Maximum load per sash: 150 kg

##### Thaiti line

Base size: 50-90 mm

Type of air-water-wind seal: with brush gasket

Glass thickness: monolithic 6-8 mm, maximum 24 mm

Maximum load per sash: 150 kg

#### NC-S 65 STH

##### Roma line

Base size: 50-68-98 mm

Type of air-water-wind seal: with brush gasket

Glass thickness: maximum 28 mm

Maximum load per sash: 150 kg

##### Miami line

Base size: 50-68-98 mm

Type of air-water-wind seal: with brush gasket

Glass thickness: maximum 28 mm

Maximum load per sash: 150 kg

#### NC-S 120 STH

##### Montreal line

Base size: 100-120 mm

Type of air-water-wind seal:

with Elaprene and brush gasket

Glass thickness: maximum 20-32 mm

Maximum load per sash: 200 kg

##### Europa line

Base size: 100-120 mm

Type of air-water-wind seal:

with Elaprene and brush gasket

Glass thickness: maximum 20-32 mm

Maximum load per sash: 200 kg

#### NC-S 150 STH

##### Rodos line

Base size: 140-150 mm

Type of air-water-wind seal:

with EPDM or brush gasket

Glass thickness: maximum 43 mm

Maximum load per sash: 300-400 kg (lift-and-slide solution)

##### Petra line

Base size: 140-150 mm

Type of air-water-wind seal:

with EPDM or brush gasket

Glass thickness: maximum 43 mm

Maximum load per sash: 300-400 kg (lift-and-slide solution)

## Casement windows

### Opening typologies



#### NC 50 I

Base size: 50-60 mm

Type of air-water-wind seal: open joint (windows and French windows);

Double rabbet gasket (entrance doors)

Glass thickness: 4-42 mm

Aesthetic lines: Sagomata, Piana, Classica, Stondata

#### NC 50 STH

Base size: 50-60 mm

Type of air-water-wind seal: open joint (windows and French windows);

Double rabbet gasket (entrance doors)

Glass thickness: 4-42 mm

Aesthetic lines: Sagomata, Raggiata, Ferro, Tonda, Piana, Classica, Stondata

#### NC 65 STH

Base size: 65-85 mm

Type of air-water-wind seal: open joint (windows and French windows);

Double rabbet gasket (entrance doors)

Glass thickness: 14-58 mm

Aesthetic lines: Sagomata, Raggiata, Ferro, Scomparsa, Piana, Classica

#### NC 65 STH-i

Base size: 65-85 mm

Type of air-water-wind seal: open joint (windows and French windows);

Double rabbet gasket (entrance doors)

Glass thickness: 14-58 mm

Aesthetic lines: Sagomata, Raggiata, Ferro, Scomparsa, Piana, Classica

#### NC 75 STH

Base size: 75-95 mm

Type of air-water-wind seal: open joint (windows and French windows);

Glass thickness: 24-68 mm

Aesthetic lines: Sagomata, Raggiata, Scomparsa, Piana, Classica

#### NC 75 STH-i

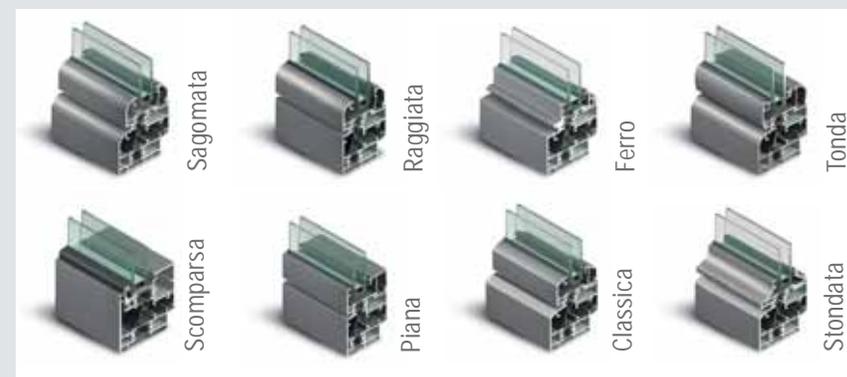
Base size: 75-95 mm

Type of air-water-wind seal: open joint (windows and French windows);

Glass thickness: 24-68 mm

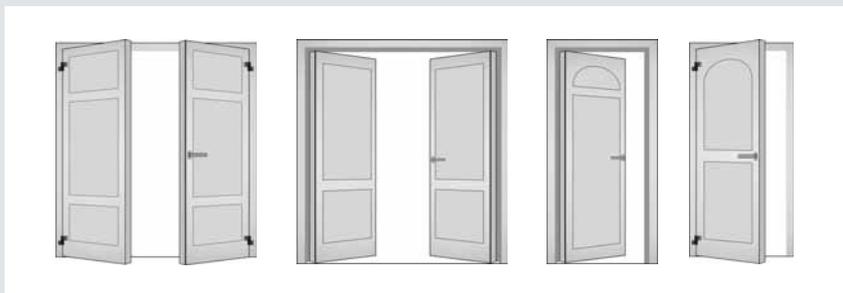
Aesthetic lines: Sagomata, Raggiata, Scomparsa, Piana, Classica

### AESTHETIC LINES



## Doors

### Opening typologies



#### NC 65 STH Doors



Base size:  
65-75 mm  
Type of air-water-wind seal:  
Rabbit double gasket  
Glass thickness:  
4-48 mm  
Aesthetic lines:  
Sagomata, Piana

#### NC 75 STH Doors



Base size:  
75-85 mm  
Type of air-water-wind seal:  
Rabbit double gasket  
Glass thickness:  
14-58 mm  
Aesthetic lines:  
Sagomata, Piana

#### METRA-Flex Internal doors



#### Overlapping solution

Doors can be made with panel and/or glass pane:  
- Sash 53 mm with lock mounted on panel  
- Sash 86 mm with lock mounted directly on jamb  
- Door with overlapping sash having a double rabbit gasket



#### Coplanar solution

Doors can be made with panel and/or glass pane:  
Construction variations:  
- All panel  
- Panel trimmed with aluminum frame  
- Sash 36-68-92 mm  
- Door with rounded sash, coplanar with frame



#### Embedded sliding solution

Doors can be made with panel and/or glass pane:  
- Sash 36 mm with lock mounted on panel  
- Sash 92 mm with lock mounted directly on jamb  
- Elastic safety gaskets introduced in compensator sections  
- Door with sliding sash embedded in the wall



#### Glazed solution with hinge

Doors can be made with glass:  
- Sash 36 mm with glass to slip 8 mm shim  
- Glass shimming wedges  
- Opening by hinges  
- Door with aesthetic elliptical shape sash

## Assistance for designers

**MAP assistance** Every year Metra's Assistance service for Projects creates hundreds of new aluminum profiles for special solutions or specific projects: a vast wealth of experience archived and made available to designers to solve even the most unusual cases.

The MAP service is offered free of charge all over Italy through a network of qualified professionals.

**Electronic Catalogue** "Aluminum Systems for Architecture" contains:

-All the technical catalogues of our systems in PDF format, multimedia films of some phases of assembly;

-Animations to illustrate concepts such as acoustics, thermodynamics and the recognizability of the METRA product.

**Metra LIB** is an electronic library supporting design with Metra systems in AutoCAD environment. The software offers multiple searches and direct input into the CAD interface to any of the AutoCAD releases available on the market today. The library contains over 7400 drawings of: accessories, profiles, gaskets, catalogue pages, updates, wall mountings... in addition to particular technical solutions for any architectural setting.

**Metra Uw** Software for calculating thermal transmittance. Metra Uw is the new software for calculating the average thermal transmittance of Metra windows according to the standard EN-ISO 10077-1. The program allows to build countless types that can be realized with METRA series and, after having defined sizes and types of glass panes, to calculate the Uf value of each section of the structure and determine the Uw value of that typology.

**www.metra.eu** is the new institutional website, providing even more technical information and services for designers and doors/windows installers. Under the heading "services" you can request, by filling out the forms, the Metra software programs, updates, catalogues, assistance, newsletters and participation in training courses.

**Metra Web Edilizia** Metra enables Web access to a set of services with the data updated in real time:

- Entering and managing orders - Order status - Classes to which items belong - Video catalogue of profiles and accessories.

**PressRoom service** On the website Metra.it the PressRoom areas are accessible to all and are divided in: Press folder, Press releases, Press review, Adv, Calendar of trade fairs and conventions, Newsletter, Photo Gallery, Contacts.

**New allMetraNews service** If you want to be informed about the Metra world, register and you will receive our newsletter in your mailbox. Thanks to the RSS feed system you can be updated in real time on the latest news at the website allMetraNews.com. The service is free. For any information, visit: [www.allmetranews.com](http://www.allmetranews.com)

**Metra Awards** Every year with the International Competition "Sistema d'Autore", Metra awards the creativity of designers, builders and clients who are the creators of large and small projects using the Metra aluminum construction systems and special customized profiles that blaze new trails for architecture.

**FP-PRO Wizard** The rapid window estimation program enables:

- The graphic design of windows, French windows and shutters in different shapes and sizes, in the casement and sliding typologies.

- The use and visualization of any profile type,

- Application of accessories individually or in kits,

- Management of the costs of profiles, glass, panels, accessories and gaskets, differentiated by type of surface treatment,

- Generation of a cutting list for direct use by the cutting machine and list of machining operations for direct connection to work centres,

-Optimization of segments and sections.

**Training courses:** strong with the experience that for years has distinguished Metra in the technical training of its own engineers and sales force as well as those of its customers' companies, we are aware of the growing need for more competence to create a more aggressive and modern presence on the market. Therefore we propose a training program that differs according to be goals and the recipients. Subjects offered:

- Aluminum and environmental sustainability,

- Extrusion and surface protection: characteristics and certifications,

- Systems for doors and windows and curtain walls,

- Standards and tests on doors and windows and curtain walls,

- Brief outline on standards in force,

- Air/water/wind performance,

- Thermal and acoustic performance,

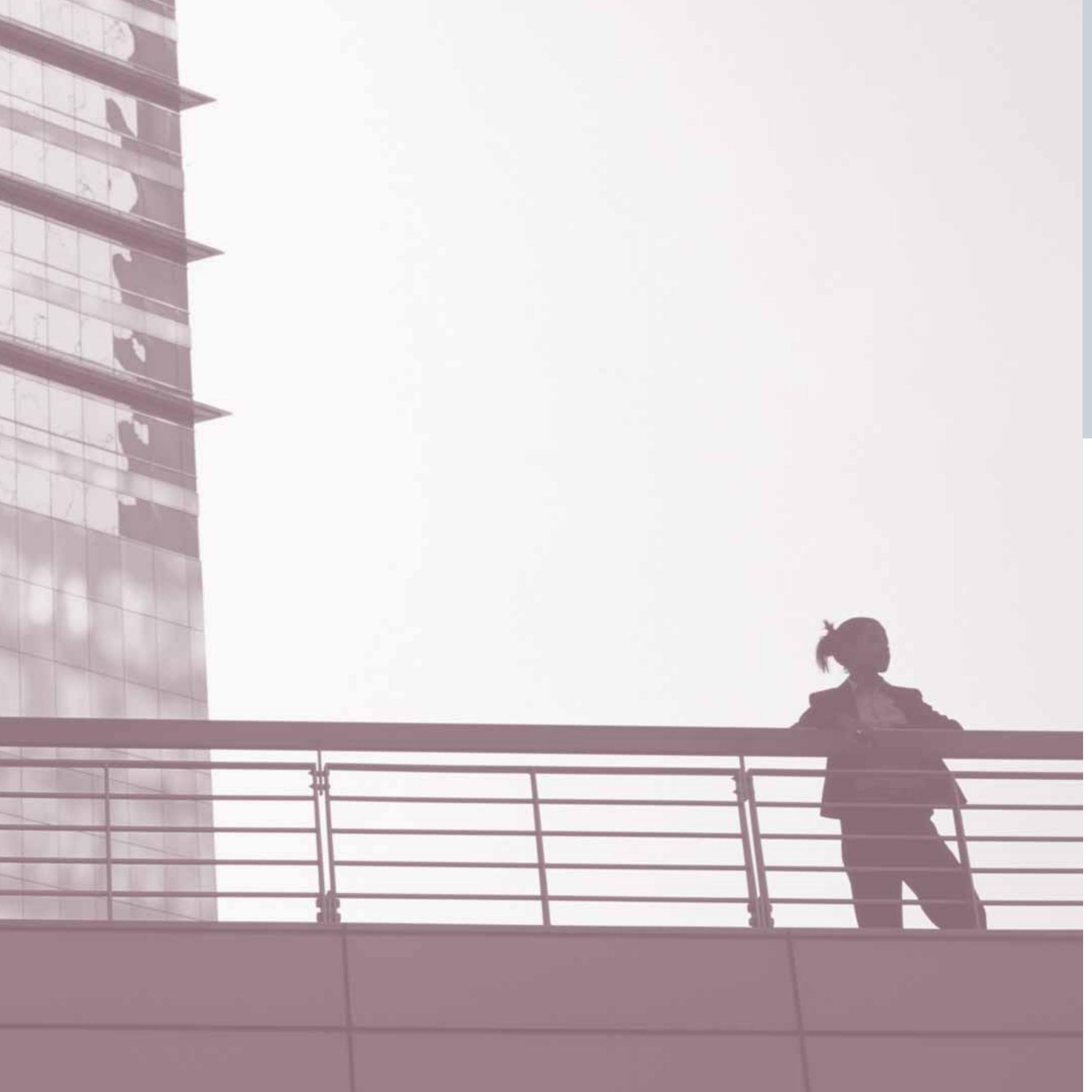
- CE marking of doors and windows and curtain walls,

- Technical-economic considerations on the use of thermal break,

- METRA Energy for energy-saving in construction,

- Design with the Sun,

- METRA software and services: including METRA-Web, METRAUw, METRA Lib.





**METRA S.p.A.**  
**Via Stacca,1**  
**25050 Rodengo Saiano (BS) Italy**  
**Tel: +39 030 6819.1**  
**Fax: +39 030 6819 990**  
**www.metra.eu**

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METRA uses ecological paper for its documentation and low  
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