LET'S BUILD THE CITY OF THE FUTURE
De Rotterdam (the Netherlands): a city within a city

Completed in November 2013 after four years of construction, De Rotterdam is a vertical city within a city. With its three towers of 44 floors per structure, De Rotterdam is the largest building constructed in Europe over the last few years. It covers 160,000sq m of multi-functional space, comprising offices, apartments, a four-star hotel, parking, and other facilities. Designed by OMA (Office for Metropolitan Architecture), the towers have become the city’s icon of modernism and an example of contemporary architecture on the continent. WICONA developed a specific solution for this significant project: a WICTEC 50 EL type unitised façade that seamlessly integrates both folding and sliding elements.
As an internationally renowned German brand, WICONA develops, creates and markets aluminium solutions for buildings: façades, windows, sliding systems, doors and sun shading. As a manufacturer known for its products's performance and reliability, WICONA has a two-fold mission. Firstly, to provide planners, architects, contractors and clients the means to achieve their ambitions and secondly, to supply fabricators with the necessary tools to create safe, ingenious solutions that push the limits of the imagination.

This is WICONA’s raison d’être and promise that reflects the company’s brand signature that was adopted globally in 2009: “Technik für Ideen”. By always listening to its partners, WICONA ensures a fluid and efficient collaboration between those re-inventing the city, those designing the buildings and those developing bespoke, project-specific aluminium construction. To ensure that this collaboration is effective, the company provides all the technical solutions to create the most innovative projects. This is how WICONA helps to provide answers in a constantly changing world.

» Everyday WICONA innovates, to be the first to supply the technologies that push the boundaries of the imagination and bring ideas to life.
REINVENTING THE CITY
With its rich culture of innovation, WICONA has positioned itself as a key stakeholder in the evolution of cities. The company develops highly energy-efficient aluminium solutions for sustainable, urban design and places users’ comfort at the heart of the debate.

Today, 50% of the global population is urban and by 2050 this figure is set to increase to over 70%. The construction sector already accounts for over 40% of global CO2 emissions. New challenges have emerged and are becoming increasingly pressing. It is inconceivable to continue building in the same way as in the past. Sustainable urban design is a major issue and there are many challenges for improved design practices, products and procedures, as well as uses and behaviours. WICONA’s expertise in the field of aluminium and construction, positions it as a key player in the evolution of cities.

The city of the future looks set to be a complex system consisting of increasingly sophisticated construction projects, requiring more and more technical components. In addition to buildings providing shelter and comfort, there are now forms of employment and resources that are diversified to the extreme: energy production, recycling, waste transformation, creation of a social fabric and pooling of services and food crops. There is also an increase and intensification of obstacles in the legal, economic and social environment.

For WICONA, such new demands, far from restricting creativity, are an invitation to create new, innovative landscapes that are dedicated to the buildings and cities of the future. WICONA integrates this change in its products and services and embraces new technologies in its communications.

As a key player in the construction industry, WICONA is driven to provide the market with new ways to build, that place people at the heart of the debate.

Fornebuporten – Fornebu (Norway):
modern functionality and urban design

Featuring 50,400 m² of office space, 3000 m² retail space and a 30,000 m² basement, Fornebuporten is located at the start of the Fornebu peninsula. This spectacular building complex offers modern and functional office spaces for approximately 3,000 people. The building is designed to be welcoming and transparent with optimised daylight. On the ground floor the floor to ceiling continuous curtain wall creates a ceiling height of more than five metres. The WICTEC 50 EL SK unitised curtain wall system was used throughout the upper floors of this building with WICONA’S patented unitised gasket system, whilst the ground floor facade comprises Wictec 50 stick curtain walling.
As early as 1957, WICONA anticipated the changes in the construction sector by developing the first aluminium profile systems with thermal breaks. Over the years, several of the patents filed by the company have gradually entered the public arena becoming accepted best practice, and are now widely adopted. Some of these patents have shaped the course of aluminium profile systems. This has been achieved by pushing the dimensions and performance of building systems, together with increasing productivity and reducing environmental impact. Most importantly, WICONA has often been the first to put forward new, certified technological concepts that have enabled real progress in the building envelope.

CREATING TOMORROW’S STANDARDS

Innovation has been integral to WICONA since the company was founded in Germany in 1948. During the course of its history, true to its pioneering spirit, the brand has filed 176 patents, of which 55 are still active.

Orona Ideo (Spain): LEED Gold and BREEAM Excellent certification

The Orona Ideo building houses Orona’s Innovation Eco-system, bringing together the work of its 4,500 members of staff, researchers and students. WICONA wrapped the façade of this building with a WICTEC 50 SG curtain wall consisting of over 2,000 triangular pixels that behave differently (in terms of opacity, translucence and transparency) depending on their orientation, exposure to solar radiation, use of interior spaces and need for privacy.
Strips made from recycled polyamide: a turning point in the industry

A demonstration of WICONA’s ongoing commitment to sustainable development includes the company’s decision in 2014 to source recycled polyamide for the production of thermal break strips for profiles. WICONA is the first and only company to have adopted such an approach. This move has significantly improved the environmental impact of strip production; fossil fuel consumption dropped by 89%, CO2 emissions by 84%, and water requirements reduced by 32%. Performance is in no way compromised, as the recycled material has an equivalent certification to that of traditional 6.6 polyamide material.

» Technological advances that have revolutionised the sector

1991 Façade with concealed glazing system  
1991 Concealed opening frame on casement window  
1998 Façade with fixed glazing system on aluminium frame  
1999 Sliding system with concealed drainage  
2001 Breathable aluminium façade  
2001 Direct positioning system for hardware  
2009 Intelligent façade, incorporating energy production, solar control and heating capabilities TEmotion façade system  
2013 Closed Cavity Façade  
2014 Launch of recycled polyamide
CONTROLLING THE ENVIRONMENTAL IMPACT
Striving for environmental performance should not affect a building user’s comfort. Specific constraints relating to a project, including climate, its usage, and safety requirements, should not have a detrimental impact. Efficiency and efficacy is needed; WICONA’s ultimate priorities.

The environmental performance of a building is measured by the energy and resource consumption that it requires during its entire life cycle. This should take into account the production of the materials used, the construction phase of the building, its operations and ultimately its demolition. The environmental aspects of a project must be controlled and energy and natural resource consumption should be minimised as much as possible.

These environmental aspects are embedded in WICONA’s philosophy and are major considerations in any new project.

WICONA’s commitment to the environment is not an abstract value or an empty promise. On the contrary, it is an extremely practical approach that hinges on a series of leading-edge initiatives. For many years, WICONA has been committed to preserving natural resources, lowering CO2 emissions and reducing waste while meeting clients’ quality requirements. This daily approach towards sustainable development is present from the product design stage through to manufacture, implementation and distribution.

Many of the projects that WICONA is involved with have obtained the most stringent environmental certifications, including BREEAM and LEED. WICONA’s most highly performing products have been awarded Passive House (Germany) or Minergie (Switzerland) certification. By developing global thinking on the relationships between technology and ecology in the construction sector, WICONA is deeply aware of its responsibilities in limiting the planet’s energy consumption.

» WICONA’s commitment to the environment is not an abstract value or an empty promise. On the contrary, it is an extremely practical approach that hinges on a series of leading-edge initiatives.

Bharati station (Antarctica): comfort and energy efficiency under extreme conditions

Designed by BOF Architecten of Hamburg, Bharati - the Indian scientific research station - located in Antarctica 5,200 km south of the African coast, shows that even under extreme climatic conditions, it is entirely possible to create buildings that are both comfortable and energy-efficient.

Solutions specially developed by WICONA were applied to the aluminium envelope of the station and to its large window façades. They provide reinforced fire resistance and unsurpassed visual impact, with exceptional panoramic views of the surrounding scenery.
Building renovation, particularly in the commercial sector, is a major 21st century challenge and a key factor in reducing energy consumption. The building envelope plays a crucial role in this process. WICONA develops high performance, specific solutions to overcome this challenge.

The renovation of 1970s buildings is a real opportunity to overcome city challenges. These challenges include the growth of urban population, shortage of available land, changing land prices and the pursuit of energy efficiency. The residential and commercial sectors together account for 43% of final energy consumption and over 20% of greenhouse gas emissions. However, even though most individual houses have benefited from thermal refurbishment, the situation in the commercial sector is less successful. Most of the work remains to upgrade these notorious energy sieves. The challenge is here and now. Significant building renovation needs to be carried out and this should start with the replacement of old façades and aging window systems. This is a matter of great urgency: work has begun and projects are on the rise. This process is structured around a series of guidelines for national regulations as well as European directives. WICONA can meet this challenge given the development of its high performance solutions.

The building envelope plays a crucial role in helping to make an urban development sustainable, thus reducing its carbon footprint. Intelligent, double-skin façades, react in real-time, adapt to climatic conditions leading to a significant reduction of energy demand for heating, air conditioning, ventilation and lighting. The implementation of aluminium solutions contributes to a large extent to the energy performance of the buildings by transforming “energy guzzling monsters” into buildings with low energy consumption and even into energy-positive buildings.
The renovation of the building envelope, with intelligent aluminium façades, can lead to savings of up to 50% in energy consumption.

La Mabilais (France): new life, new performance

The former telecommunications centre in Rennes by Antony Rio is an example of how a building can be successfully refurbished to become more energy efficient. This 16,000 m² historical monument, which is a city centre landmark and typical example of 1970s architecture, was entirely restructured. The La Mabilais project was developed to respect the original architecture of Louis Arretche, and restore its former brilliance. Joinery treatment was essential to the project’s success. A total of 1,600 aluminium frames were made and fitted to the structure, successfully retaining the unusual aesthetics of the original joinery, while ensuring that the building employed essential low-energy features.
Velodrome in Glasgow: process optimised with BIM

Designed by architects 3DReid and built by Sir Robert McAlpine for the Glasgow City Council, the Emirates Arena complex and Sir Chris Hoy Velodrome is one of the largest sports installations in Europe and the city’s first covered velodrome. The BIM concept was used in this project to validate the design, improve safety, eliminate errors and maximise prefabrication. Following the building’s curve and adapting itself to the complexity of its various modules, the curtain wall, which envelops the façade, is from the WICTEC 50 range. Implemented by Dane Architectural System, one of WICONA’s partners, the curtain wall was developed as a BIM object as specified for this project.

Architect: 3DReid
Fabricator: Dane Architectural System
Photo: Graham Mathers
The construction sector is rapidly evolving towards a collaborative model - Building Information Modelling (BIM). WICONA’s ambition is to provide an IT suite to connect all the players involved in the building process and to simplify data exchange.

Complex tasks such as the design, planning, costing, preliminary work, production management, stock management and flow organisation are supported by WICONA’s suite of specially developed IT solutions. All those involved in a project need to employ sophisticated software, each compatible with one another’s systems. Each player in the process has an IT solution that responds to their own set of requirements enabling effective communication with others. WICONA’s inter-connected IT solutions provide answers to BIM challenges by simplifying and accelerating processes during a project’s development. Enabling close collaboration between all parties. WICONA’s solutions ensure smooth information exchange from the first sketch of the building until final delivery.

BIM is a collaborative work concept that uses specific, virtual, digital models of buildings. These models ease the design, improve analysis and control and once completed, provide the geometric information and data necessary to build, manufacture and supply. WICONA is fully committed to this approach, recognising the benefits BIM brings to the design and construction process.

Perfect connection between the architect, the manufacturer and WICONA

WICONA’s WIC3D software is used by architects to design aluminium solutions in a quick and simple manner. WICONA’s WIC3D also enables direct communication with the company’s WICTOP software package, providing accurate costing and technical feasibility. Developed for WICONA’s manufacturing partners WICTOP enables them to deliver an architect’s requirements faster and more accurately. Furthermore the WICTOP software provides for automated production, interfacing directly with the customer fabrication plant.

» WICONA’s provision of IT solutions enables all parties involved in the project development process to be connected and simplifies all aspects of information management.
CHANNELLING A TEAM’S PASSION
WICONA believes that the foundation to a successful business partnership is the quality of the relationship. The company has around 800 members of staff across the world who wear WICONA’s colours with pride and share a deep passion for technological challenges and for work done well.

WICONA’s priority is to establish a fluid and lasting relationship with each of its partners, based on collaboration and trust. The company always listens to its partners to provide suitable solutions at an appropriate cost. This receptiveness is shown at all levels, from the very first contact and commercial follow-up, through to technical assistance and redesign of WICONA’s websites. This service requires constant collaboration between WICONA and the various client contacts, in order to provide personalised support and a co-ordinated approach of the solution to suit the clients’ needs. Such organisation and receptiveness builds strong and lasting partnerships.

WICONA’s staff share a common passion for delivering large scale, complex projects. Each team member is motivated, trained and competent within their own field of expertise, working as part of a team to deliver customer satisfaction. WICONA’s staff develop and implement global solutions to meet clients’ needs, be they technical, logistical, IT-driven or commercial. WICONA understands that time constraints are paramount and that local standards and regulations must be respected.

WICONA’s role is to anticipate, listen, react, collaborate and innovate, while simultaneously managing risk. In short, doing everything necessary to ensure clients have a positive and trusting experience with a fluid and collaborative flow of information. All WICONA’s staff are a trustworthy point of contact for clients and will support them fully throughout the project design and execution process.

Motivated, trained and competent, WICONA’s staff can innovate, anticipate, mitigate risks, control and decide. In short, they can do all that is necessary to meet WICONA’s partners’ requirements.
ENSURING THE PERFORMANCE OF CONSTRUCTION SYSTEMS
What sets WICONA apart from its competitors is the sheer scale of its bespoke designs. WICONA is a partner of choice for contractors, architects and façade consultants and supports them every step of the way even in the most ambitious of projects.

Beyond the richness of its product portfolio, WICONA has developed a renowned expertise in distinctive, bespoke designs, adapting its solutions to the creativity of planners, architects and contractors. To this end, WICONA provides a dedicated service for special projects, bringing together over 30 engineers to put forward specific solutions for large architectural projects. The engineers rely on WICONA’s research unit in Ulm to guarantee the quality and homogeneity of the company’s range. They gather, adapt and approve all the products in accordance with the requirements of clients in Europe and worldwide. For each new design, the engineers control the process from start to finish, ensuring that all performance commitments are met.

Specific solutions are rigorously tested to ensure optimal performance is achieved once installed on site. Most products are tested by the innovation and test centre in Bellenberg, Germany (which approves all WICONA products), and certified by IFT Rosenheim Institute, and independently accredited Notified Body. The technical centre has four test areas, two for façades up to 10m in height, one for windows, doors and joinery, and one for mechanical resistance tests. The test centre is also equipped with high-tech installations to measure the impact of temperature and solar radiation as well as performance in real-life situations. This testing process validates the computer simulations carried out during the development phase of any solutions.

The mechanical, thermal and acoustic performance of both WICONA’s standard and bespoke products, are thoroughly tested. Every component is checked and urban planners, architects, contractors and clients are ensured of a solution that meets their requirements.

35 West 15th Street (New York, USA):
Specific solution, tested, with guaranteed results

35 West 15th Street is a residential building designed by FXFOWLE Architects and is characterised by its spectacular aluminium and glass façade. It is a source of unsurpassed comfort for its occupants who benefit from unparalleled views of the city and optimal daylight. The structure’s complexity, with all its angles, represented a major challenge. The combination of verticality and a 20º incline, with many openings, generated a series of complex, technical constraints, particularly on the units located along the ridges. A bespoke, technical solution was developed using the WICTEC range. A full-scale mock-up of part of the façade was developed by Intercom, one of WICONA’s partners, to ensure the final performance of the façade treatment. It successfully passed the stringent air-tightness and water resistance tests that were carried out in the Intertek-Architectural Testing laboratory in York, Pennsylvania.

For each new design, experts from WICONA’s research team based in Ulm, check the integrity of the process and ensure optimal performance is achieved.
Chamber of Commerce Innovations Campus in Hamburg (Germany): a successful adaptation for a daring architecture

This unique building, with a radical design, is in the Nikolai business district, positioned between two historical buildings and opposite the impressive classical façade of the old stock exchange. Aside from the complexity in implementing the work, it was essential to preserve architectural unity with the adjacent buildings, without renouncing the eco-construction principles. The result: a spectacular skyscraper façade created by adapting a window system from the WICONA catalogue. Johann von Mansberg, the project’s architect, fitted the frames with illuminated strips giving the appearance of supporting columns, a typical feature in classical architecture.
Renowned for its pioneering spirit, WICONA combines aluminium façades and joinery solutions with innovative technology, aiming to exceed market standards and be the first point of reference for professionals. Today, the company provides the construction industry with an extensive panel of solutions and a comprehensive service package.

Beyond technology, WICONA employs a unique development concept called Unisys, which optimises and secures the production process of its construction systems. Applying a modular approach, this concept re-uses a maximum number of components across all products from the range. Unisys has a number of significant benefits, which include, reducing manufacturing costs, increasing product reliability and flexibility, minimizing stocks, standardizing tools and improving information flow and team training. Faster production and better control are also achieved.

**Fire safety and protection of people**

The protection of the building, its users, and its content are the main and daily concerns of any owner and occupant. The building needs to be comprehensively guaranteed, particularly for aluminium joinery. The WICONA range of doors, windows and curtain walls illustrate this thorough approach, offering burglar resistant bulletproof systems and variants. WICONA also offers a full range of fire protection solutions and a selection of guardrails.

» WICONA solutions, the technological first point of reference.
WICONA’s strength lies in the solid collaboration that the company has progressively built with its partners. WICONA shares a common culture, based on the same values: commitment, pride in work done well and an appetite for technical challenges.

Each company within the aluminium joinery sector has its own specialism. Some focus on aesthetics and design, others on the service given to clients or cost. WICONA has an entirely different priority: to deliver the best solution for complex envelopes, large-scale joinery and configurations that overcome technological challenges, while ensuring end performance. This is how the company adds value and makes a difference.

WICONA’s project partner approach relies on a close collaboration with its counterparts as a level of risk taking is required, which makes it essential for everyone involved to implicitly trust one another. WICONA works worldwide with the best manufacturers and fitters of aluminium joinery on both local and international projects, and shares their passion for high-quality work when faced with the most audacious of technical challenges. Similarly, urban planners, contractors or architects who choose WICONA are passionate about technological challenges and are looking for a highly competent partner for their project. When there is trust and understanding between partners, a good result is guaranteed.

This privileged relationship between WICONA and its clients is reflected on several levels. Service is at the heart of WICONA’s ethos. The company believes that by listening to the needs of its partners, by training them, supporting them and advising them, WICONA is laying the foundation of success.

Projects in which WICONA collaborates with urban planners, contractors, architects, manufacturers usually requires some level of risk sharing: collaboration and trust are essential.
Designed by the architect Christoph Mäckler, Tower 185 is a 50-storey building in the heart of Frankfurt’s financial district. As the fourth tallest building in Germany, one of the striking characteristics of the project is its imposing 27,000 m² façade, a bespoke unitised solution designed by WICONA and fitted by FKN, one of our fabrication partners. To optimise lead times, ensure process efficiency and end performance, an assembly robot was developed to fit the panels. This radically innovative solution enabled a spectacular increase in the productivity of the build. Regardless of weather conditions, 20 panels were installed daily, and each panel measured 7 m² and weighed half a tonne.

Tower 185, Frankfurt (Germany): A challenge overcome together!
At the heart of WICONA’s work is the development of aluminium solutions, but its ambition extends further. The company controls key elements of the value chain to ensure homogeneity, coherence and efficiency is achieved in its solutions. This is the fundamental difference of WICONA compared with its competitors and ensures an optimal service to its partners and a high performance of end products.

Between the primary production of aluminium and fitting the building façade, there is a complex value chain where each stage affects the end performance of the implemented solution. WICONA has always chosen to control key elements of the value chain, thereby ensuring an optimal service to its partners. It is one of the only companies in its sector to have integrated its own extrusion, polyamide insertion, and coating production. These industrial stages higher up the manufacturing process allows WICONA to control the quality of the profiles delivered and reduce lead times. By integrating these specialist plants into the manufacturing process, WICONA has an advantage over its competitors.

Further down the aluminium profile concept and production stages, WICONA also has top-level storage facilities; to develop, harmonise and regulate the supply flows with those of the final deliveries. These are optimised with the sophisticated logistics systems designed by the company to ensure that its clients receive the best service. This might seem trivial, but in reality, it is a fundamental aspect of the value chain. For example, a delivery on site of damaged profiles due to poor packaging, a delay or incomplete delivery, could have serious implications, which is why WICONA maintains a rigorous control of the storage and delivery phases.

WICONA’s attention to detail is applied in all stages of the value chain. WICONA provides a full range of cutting, assembly and fitting implements to enable its products to be installed easily. Powerful, robust, pneumatic tools are available with each range, delivered with detailed manuals. This attention to detail goes as far as providing a special glue to assemble the profiles and a specific product to clean the windows. This thorough approach reflects one of the company’s fundamental commitments: to be fully accountable and to assist its clients and partners as best it can. Every single detail matters for WICONA and the benefits are undeniable: a reduction in non-quality costs, optimised manufacturing time, and controlled manufacturing processes to guarantee performance. Development, production, documentation, logistics and training are continually reviewed to meet market requirements to ensure optimal service.

Development, production, documentation, logistics and training are continually adapted to meet market requirements in the best manner possible and to ensure optimal service.

**Industrial capacity in Europe:**

- 3 extrusion sites with an annual capacity of 58,000 tonnes
- 16 certified polyamide integration lines, with an annual capacity of 20,000 km

OPTIMISING THE ENTIRE VALUE CHAIN
Courmelles (France): a symbolic, representative site

WICONA is constantly investing in its logistics equipment. Its logistics centre in Courmelles is a prime example. It was designed to ensure an optimal level of service to its clients, from the storage of raw profiles, to the coating, polyamide insertion and dispatch. The aim is to reduce the time between order and delivery. The site is ISO 14001 Qualicoat and Qualimarine certified.
WICONA began in Germany and is now present in 48 countries and over four continents. At least 25 languages are spoken daily in WICONA’s offices and 85% of its sales are conducted outside of its home market.

WICONA offers solutions that are adapted to the most sophisticated, international requirements in terms of energy and performance. Its service provision is exceptional and it offers maximum flexibility, making it an ideal partner for urban planners, contractors, architects and aluminium fabricators around the world. Until the late 1990s, the company’s international strategy was mainly European. Gradually though, Eastern Europe revealed itself to be a market with high growth potential and significant investments were made in that region. WICONA later focused on China and the Middle East, which today represents 20% of its sales. Over the next few years, developing new markets will be a significant challenge.

WICONA’s teams around the world are multilingual and multicultural, and can therefore offer local support to architects and manufacturers. In an increasingly globalised world where more and more architects and contractors leave their country of origin in search of export markets, WICONA’s multi-disciplinary project teams work closely with them. Offering a global approach regardless of the project’s country this assistance includes design support for the architects vision and the provision of technical responses arising from local regulations. WICONA’s engineers manage projects and varying challenges, from initial client requirements to project delivery in an ever changing international market.

WICONA continues to demonstrate its ability to innovate on a technical and commercial level, consolidating its leadership position in sustainable building.
Today, WICONA’s multi-disciplinary project teams are involved in transnational collaborations, providing support to architects and manufacturers internationally.
RELying on the synergies of a leading group
WICONA is a brand of the Sapa AS group, the world leader in aluminium solutions. The company benefits from all the advantages of belonging to a group, with the following vision: “Shaping a sustainable future through innovative aluminium solutions”.

The Norwegian group, Sapa AS, whose head office is situated in Oslo, is the leader in its sector. Sapa AS has 100 production sites in over 40 countries, 23,500 members of staff, 5.6 billion Euros in sales revenues in 2014, over 20,000 clients and 45,000 suppliers. Tightly organised around the sectors of extrusion, construction system design for buildings and the development of precision tubes for industry, the group creates sustainable solutions to help reduce CO2 emissions and mitigate the environmental impact of its activity. The group has industrial facilities that reflect its ambition: 155 presses, 39 anodising plants, 24 coating plants, 21 moulding plants and 14 welding lines - an unparalleled infrastructure. Sapa AS’s high profile enables it to make significant economies of scale across all levels (procurement, operations, commercial management), ensuring its clients a cost reduction, an increase in productivity and an improvement in terms of quality and delivery times. The group’s engineers also collaborate to provide clients with an expertise in research and development – a service that is unparalleled in the world of aluminium.

Belonging to the Building Systems branch of Sapa AS, WICONA is the premium brand in the company’s portfolio, which also owns the Technal and Sapa Building System brands. Being part of the Sapa AS group provides many advantages for WICONA. It offers its clients and partners a guarantee of total financial safety and a lasting impact.

WICONA shares with Sapa AS, its parent group, a series of founding principles that reinforce a common culture. These include, putting the client first, a sense of responsibility, an entrepreneurial spirit, transparency and collaboration.

Aluminium, a material for the future

A natural and perennial resource
After oxygen and silicon, aluminium is the third most abundant element on the Earth’s surface.

An aesthetic, robust, lightweight and versatile material
Aluminium is a material three times lighter than steel. It is robust (the life duration of a window is 30 years) and easy to maintain (no dust, particles or vapours). Aluminium also provides architects with a highly versatile material that can be adapted to suit all shapes and dimensions, and is used to optimise light output. Aluminium’s remarkable resistance to weight ratio makes it possible to design light, but exceptionally stable structures. Its rigidity enables the manufacture of windows and curtain walls with very narrow frames, thereby maximising solar gain and daylight.

A high performance material
Aluminium profiles with thermal breaks provide a real thermal barrier system, in compliance with the most stringent applicable standards. Used with technical glazing systems, they provide thermal comfort, acoustic insulation and security.

100% recyclability
Aluminium is 100% recyclable without any degradation of its properties. Today, 93% of aluminium products from buildings are recycled at the end of their lives.