



FACADE DESIGN WITHOUT LIMITS

PRODUCT OVERVIEW



ALPOLIC[™]

A WORLDWIDE LEADING MANUFACTURER OF ALUMI-NIUM COMPOSITE PANELS FOR THE ARCHITECTURE

A strong brand for strong partners and large projects

ALPOLICTM is a brand of Mitsubishi Plastics, Inc. For more than 45 years, architects worldwide have been relying on our high-quality products for the building facade: In addition to our innovative strength, we offer the world's largest selection of surfaces with products that are extremely environmentally friendly and of excellent quality.

Trendsetter in many areas

In recent years, numerous ALPOLIC™ innovations have had a significant influence on market trends:

- First supplier of aluminium composite panels with decorative surfaces, natural metals and genuine anodized aluminum in the coil-coating process
- Only supplier of A2 in 2-meter width
- Maximum fire protection: All aluminum composite panels are available as standard in ALPOLIC™/fr (flame retardant) ALPOLIC™/fr and ALPOLIC™ A2 (non-flammable) grades
- Largest selection of colors and finishes worldwide

Up to 20 years quality guarantee thanks to LUMIFLON™

For its color coatings, ALPOLICTM exclusively uses $\underline{LUMIFLON^{TM}}$, based on a fluoropolymer coating (FEVE).

The advantages:

- Good color stability and scratch resistance
- Outstanding UV, light and weather resistance as well as dirt resistance
- Protection against moisture, corrosion, oxidation and acid
- The only coating that is suitable both for coil-coating processes and spray painting, guaranteeing consistently high color stability for both processes
- No other technology allows so many shades and gloss levels – from matte to high gloss
- Up to 20 years warranty

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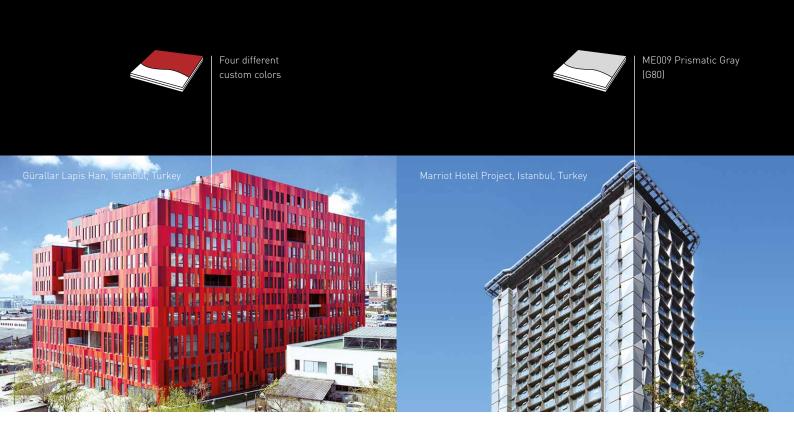
THE POSSIBILITIES ARE ENDLESS

Light, rigid and incredibly flat, ALPOLIC™ maintains these characteristics while being easily formed into curves and shapes of your design.



ALPOLIC™A2

ALPOLIC[™] A2 is an aluminum composite panels (ACM) with a high fire-retardant core, used as exterior and interior claddings and roof coverings in new buildings and retrofit applications. ALPOLIC[™] A2 has been classified as having a superior fire-safety grade compared to various other types of ACM.

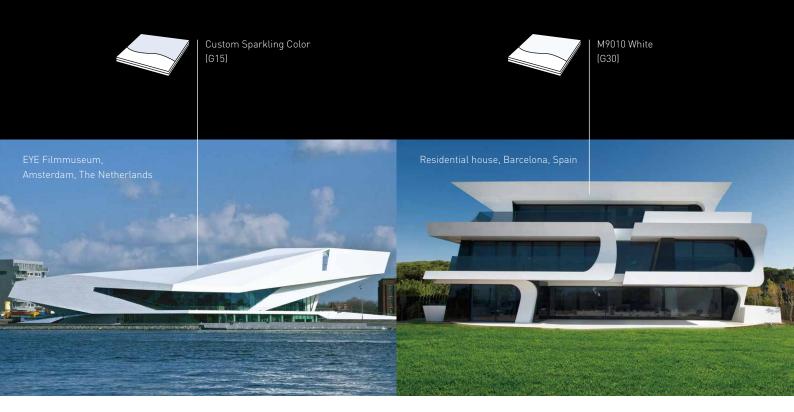


90 %

ALPOLIC™ A2 consists of approx. 90 % of non-combustible ingredients within the core material.

ALPOLIC*/fr

ALPOLICTM/fr is a fire-retardant ACM composed of aluminum skins and a fire-retardant core (using non-combustible mineral in the core). It passes most countries' fire safety codes for exteriors and interiors. Compared to solid aluminum panels, ALPOLICTM/fr is lightweight, rigid and flat. The surface finish is a coating of fluoropolymer paint (LUMIFLONTM). With continuous coil coating and an advanced coating process, ALPOLICTM/fr provides a consistent and smooth finish with uniform color. Coating variations include Stone, Timber, Metal and Abstract patterns produced with a unique image-transfer coating.



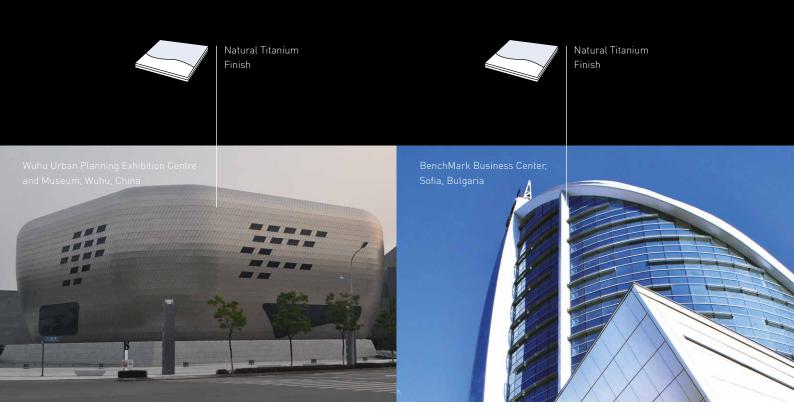
70 %



ALPOLIC[™]/fr consists of approx. 70 % of non-combustible ingredients within the core material.

ALPOLIC / fr TCM

ALPOLIC™/fr TCM is a titanium composite panel composed of a 0.3 mm thick titanium sheet on the topside, a fire-retardant core and a 0.3 mm thick stainless steel sheet on the reverse side. Titanium metal quickly forms a stable oxide film (called 'passivated film') at room temperature and is known for its unparalleled corrosion resistance. ALPOLIC™/fr TCM is suited to the external claddings and roof coverings of buildings located in highly corrosive environments.



99,5 %

Titanium, the top surface metal skin of ALPOLIC[™]/fr TCM, contains approx. 99.5 % of pure titanium.

ALPOLIC / fr SCM

ALPOLICTM/fr SCM is a stainless steel composite panel composed of two sheets of 0.3 mm thick stainless steel and a fire retardant core. Both sides of the panel are NSSC220M, a highly rust-resistant ferritic stainless steel, which has an outstanding rust resistance comparable to stainless steel 316. ALPOLICTM/fr SCM is suitable for the external claddings and roof coverings of buildings.

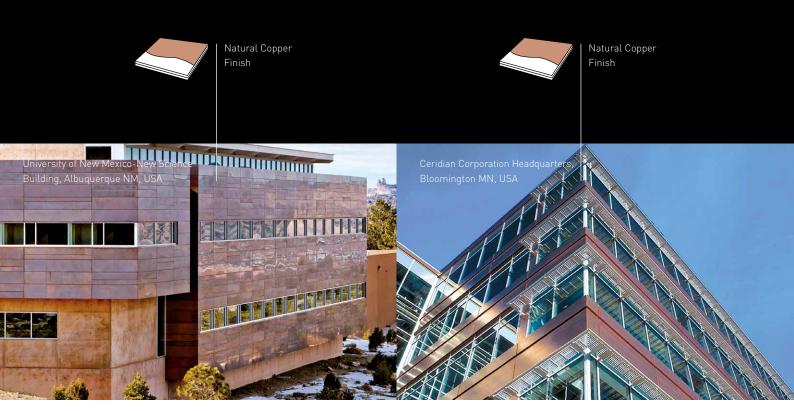


46 %

4 mm thick ALPOLIC[™]/fr SCM is equivalent to 2.9 mm thick solid stainless steel in terms of bending rigidity but ALPOLIC[™]/fr SCM is lighter, about 46 % of the solid stainless steel weight.

ALPOLIC*/fr CCM

ALPOLIC[™]/fr CCM is a copper composite panels composed of a copper sheet on the topside, a fire-retardant core and a copper sheet on the reverse side. Like solid copper, ALPOLIC[™]/fr CCM is perfect for architectural wall cladding applications and accent trim on buildings.

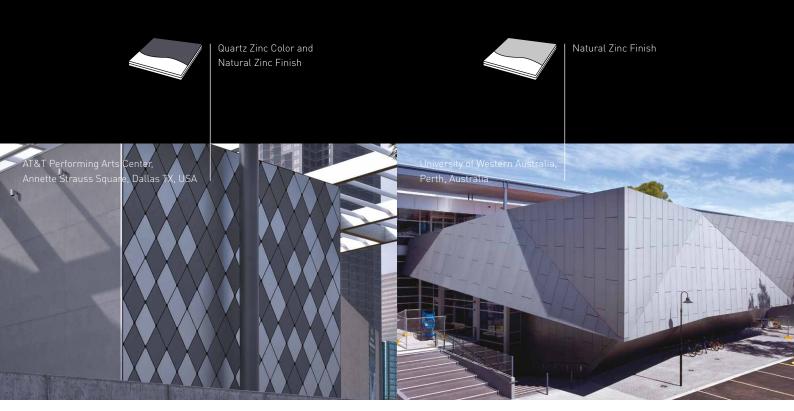


Features

Natural copper's ever-changing surface finish constantly evolves, adding richness and depth to any building's facade. ALPOLIC $^{\text{TM}}$ /fr CCM offers the rigidity of heavy gauge sheet metal in a lightweight copper-faced composite material. ALPOLIC $^{\text{TM}}$ /fr CCM also features such attributes as exceptional flatness, vibration dampening, durability and ease of maintenance.

ALPOLIC / fr ZCM

ALPOLIC™/fr ZCM is a zinc composite panels composed of a chemically-weathered zinc sheet on the topside, a fire-retardant core and a zinc sheet on the reverse side. ALPOLIC™/fr ZCM is suited to exterior applications such as soffits, awnings, parapets, rain screens, external claddings and roofs, especially where conventional building materials fall short.



Features

The topside skin is a real zinc alloy weathered with a chemical conversion process, which later takes on a distinctive gray appearance through natural weathering. Protected by the surface layers, zinc alloy has a long life. The annual erosion rate is normally 1 to 7 microns (3 microns on average), which indicates that 100 micron (0.1 mm) thick zinc takes as long as 35 years to erode.

ALPOLIC FEATURES



Fire Performance

The core material between the metal panels plays the main role in the fire performance of composite materials. ALPOLICT $^{\text{M}}$ /fr and ALPOLIC $^{\text{TM}}$ A2 are exclusively designed in order to meet most of the world's fire regulations without limiting building cladding applications. Without losing the original properties of ALPOLIC $^{\text{TM}}$, such as flatness, strength, durability and easy processing, Mitsubishi Polyester Film GmbH aims to achieve a total balance in the panel while also reaching the best fire safety performance.



Production & Recycling

ALPOLICTM is produced in Japan, the USA and Germany. In all our production plants we recover aluminum, other metals and the core material for recycling using our original system, in order to keep our operation environmentally-friendly. ALPOLICTM and its affiliated materials are virtually 100 % recyclable.



Paint System

ALPOLIC[™] paint coating offers a variety of colors and patterns and a wide range of gloss effects from 15 % to 80 %. With its 45 years of experience, ALPOLIC[™] paint coating is recognized as the most durable and reliable paint coating system in the external cladding field.

Principle

ALPOLICTM for external applications is regularly coated on its exposed surface side with a first-class fluoropolymer paint system (LUMIFLONTM). The standard coating comes with a 20 year conditional warranty. ALPOLICTM quality control ensures that the customer looking for high-end products is completely satisfied. We have confidence not only in the high grade of the paint itself, but also in the color consistency throughout the production lots. ALPOLICTM paint coating is usually evaluated with chamber tests such as accelerated weathering, salt spray, etc. It is also checked regularly by means of actual decades of exposure in harsh coastal climates.

Prêt-à-porter

The colors displayed in our color chart cover most popular finishes used in many buildings throughout the world for decades. $ALPOLIC^{TM}$ standard colors have represented tradition in modern architectural buildings. $ALPOLIC^{TM}$ paint coating has proven its long-lasting durability and overwhelming presence throughout the history of external cladding applications.

Haute couture

ALPOLICTM paint coating provides unlimited styles in a wide variety of colors with or without gloss effects. Our outstanding color coating technology enables us to offer tailor-made color solutions that highlight your personality. We offer excellent service once you have chosen from the widest range of colors, gloss and patterns available. All colors feature an extraordinary resistance performance for external cladding.



ALPOLIC REFERENCES

1 City Green Court, Prague, Czech Republic | 2 Civil Justice, Manchester, UK | 3 Mercator Shopping Center, Ljubljana, Slovenia | 4 Maranello Village, Italy | 5 Office building, Servograd, Serbia | 6 Oz Retail & Shopping Mall, Krasnodar, Russia | 7 Central Station, Arnhem, The Netherlands | 8 Astra building, Sofia, Bulgaria | 9 Konti confectionery factory, Ukraine | 10 Student house, Slovenia | 11 Pablo Serrano Museum, Zaragoza, Spain | 12 Mosae Forum, Maastricht, The Netherlands | 13 Residential house, Gava, Spain | 14 Gigantium swimming arena, Aalborg, Denmark | 15 Slika Maros, Ljubljana, Slovenia | 16 Prague Airport, Czech Republic | 17 Mahler Office Tower, Amsterdam, The Netherlands | 18 Medpark International Hospital, Chisinau, Moldova | 19 Cubis, Sencur, Slovenia | 20 IBG Office building, Groningen, The Netherlands | 21 Kragujevac Plaza, Serbia | 22 A.T. Kearney, Ljubljana, Slovenia





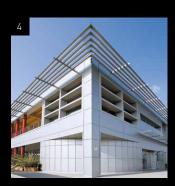










































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Quality made in Germany





Our materials are almost 100% recyclable. Even waste from $\mathsf{ALPOLIC^{TM}}$ plants is collected and recycled.





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