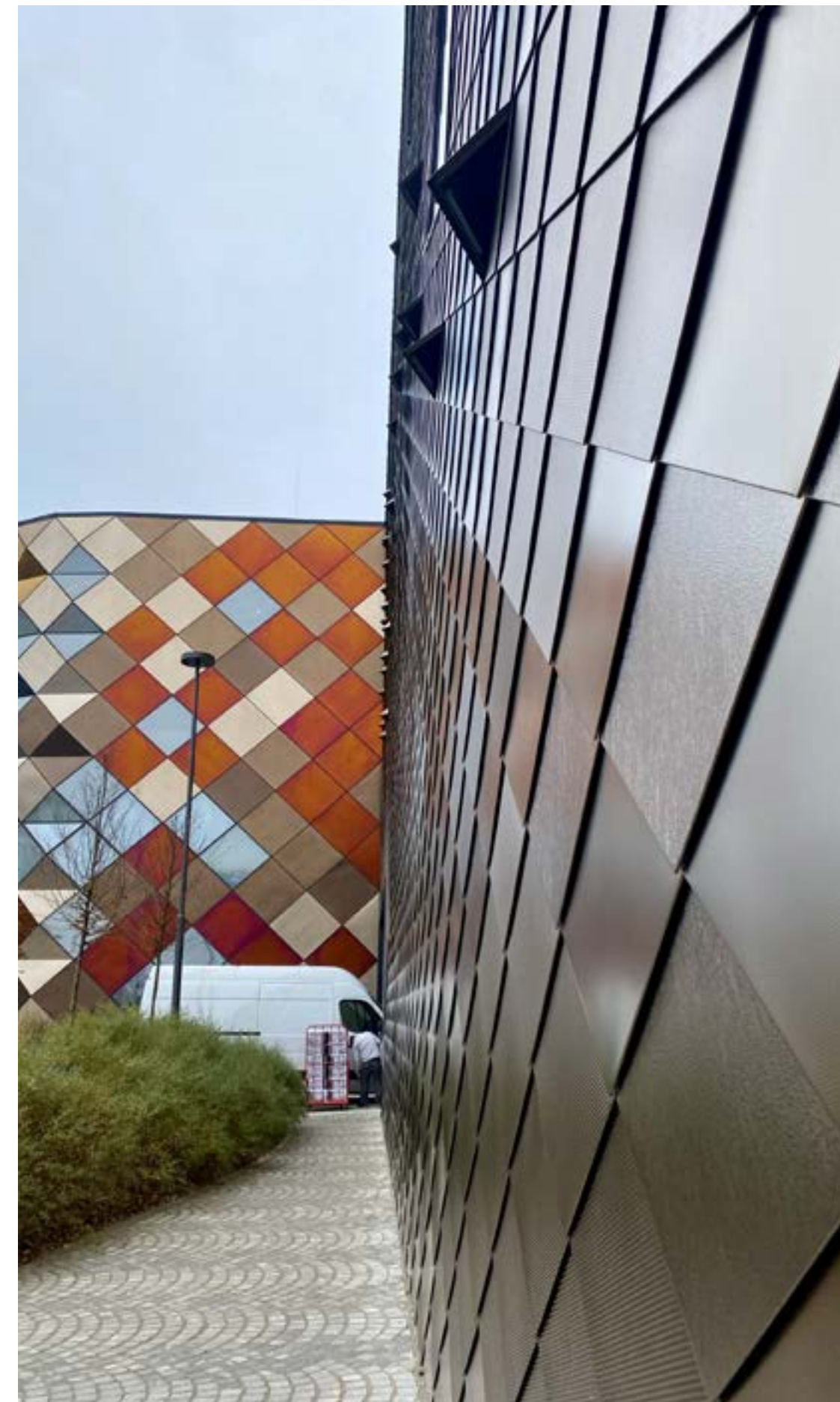


Aleja Shopping centre

History of the project

The ALEJA complex in Ljubljana, planned by ATP architekten ingenieure, is one of Europe's most modern shopping centres. The building owes its striking appearance especially to its extraordinary façade. Rows upon rows of colourful, diamond-shaped stainless steel shingles imitate the scales of a dragon – the symbol of Slovenia's capital. The curved rhombus façade of the entrance represents the dragon's head. PICHLER projects was in charge of implementing the 12,200-square-metre façade and five large glass roofs with a steel structure. Several architectural challenges had to be overcome.

For instance, the complex, rhomboidal entrance façade, which rests on a spatially curved steel substructure carrying both the diamond-shaped glass panels and their stainless-steel counterparts. Due to the



Category: Shopping

Location: Ljubljana, Slovenia

Environment: urban

Material: Stainless Steel sheet AISI 316 (EN 1.4404) grade processed to a range of coloured decorative patterned finishes from the Rimex Colourtex range:

- Colourtex Champagne Granex 9EH
- Colourtex Bronze Granex 9EH
- Colourtex Rosy Gold Granex 9EH
- Colourtex Champagne Granex SQUARES
- Colourtex Bronze Granex SQUARES
- Colourtex Rosy Gold Granex SQUARES
- Colourtex Champagne Granex 13SD

- Colourtex Bronze Granex 13SD
- Colourtex Rosy Gold Granex 13SD
- Colourtex Champagne Granex 6WL
- Colourtex Rosy Gold Granex 6WL

Material thickness: 0.6 mm

Material quantity: 5300 m² of stainless steel sheet installed largely as interlocking shingles across the façade; And to vertical fascia's to first floor levels internally.

Architect: ATP Architects

Fabricator: PICHLER projects GmbH

Manufacturer: Rimex Metals UK Ltd

Photographs: courtesy of Rimex Metals

More information: rimexmetals.com

| Aleja Shopping Centre. Picture courtesy of Rimex Metals

Why was stainless steel chosen?

Stainless steel is a well proven choice for specifiers with a wide array of global projects being clad internally or externally with this material. Despite being a relatively new-comer to cladding relative to other hard metals, it now has some history to it with the iconic Lloyds building in London now being a listed building.

It is harder than other metal options and is 3 times the density of aluminium meaning thinner product can be used without loss of strength.

Rolling patterns into the product, as with this project, further work hardens the material increasing the rigidity of the material and resists impact damage relative to flat product for this reason.

There has been very little adverse publicity about stainless steel in cladding in the internet age where news moves widely and fast, underlining its successful integration into a wide range of project environments including coastal and polluted urban sites.

complexity of the façade structure, many different nodes in the steel substructure had to be produced with special milling machines. The individual steel shapes were welded together with the corresponding node parts. Then, a steel profile was added that would facilitate the later incorporation of the glass and stainless-steel panels. Finally, the individual diamonds were welded together on site, and the fillings were installed.

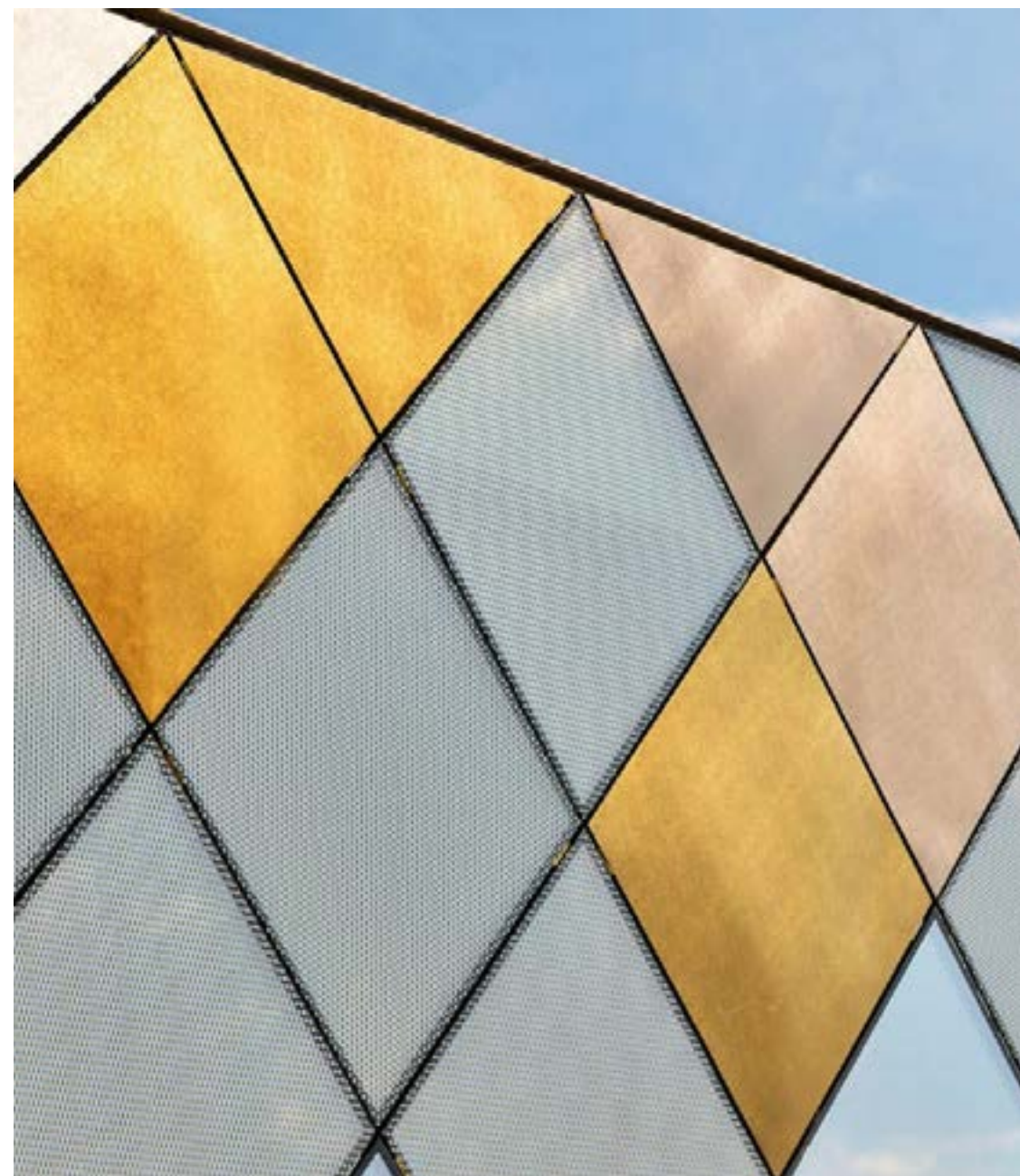
The glass-diamond façade structure of the building envelope makes the weather visible on the inside. Thanks to the alternately open, half-open and closed elements making up the façade, sunshine and clouds conjure up a breathtaking display of shadows on the building floor.

The shopping centre was opened in 2020. Rimex supplied material over 2 phases in 2019.



Competing or alternative material(s)

Other hard metals such as Aluminum, Copper Alloys or metals with painted finishes.



Aleja Shopping Centre. Picture courtesy of Rimex Metals

How did stainless steel contribute to the sustainability of the structure?

The centre was designed with sustainability in mind and meets high energy standards and with a goal of low net CO₂.

Stainless steel is a very sustainable choice for Architects for a wide variety of reasons:

- Stainless Steel is 100% Recyclable
- Stainless Steel can be recycled indefinitely without loss of quality
- Rimex Use European stainless steel from reputable mills which contains in excess of 85% recycled content.
- Stainless steel is highly recycled through a process that is commercially driven rather than purely ethically motivated, ensuring the pressure behind recycling remains consistent.
- Stainless steel is 94% reclaimed from building sites (Source: bre)
- Stainless Steel in solid form is harmless and insoluble in water ensuring that anything that ends up in landfill will not contaminate the soil. For the same reason stainless steel does not leach from cladding into ground water as say copper or copper alloys would without rainwater capture systems.
- Rimex operate an environmental management system to ISO14001
- All Rimex products have third party verified Environment Product Declarations

Aleja Shopping Centre. Picture courtesy of Rimex Metals