metalltech

WE MANUFACTURE EXPANDED METAL DIFFERENTLY

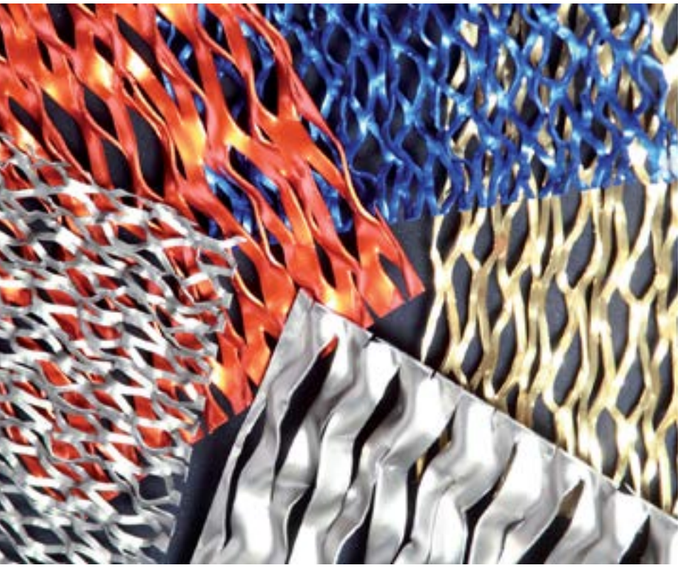
We produce expanded metal differently
Whatever you sketch we make it possible
We produce tailor made pieces ready to be installed

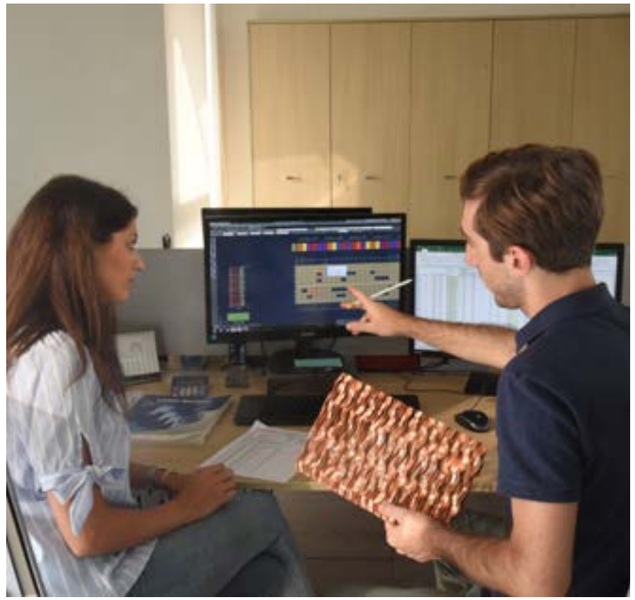
metalltech

TABLE OF CONTENTS

40 YEARS OF TAILOR-MADE INDUSTRIAL SOLUTIONS

Metalltech was founded in 2008 due to the increasing demands of expanded metal mesh in architecture by Davide and Riccardo Fumagalli, who had worked on expanded metal since 1984.
L Holding srl (formerly known as Longhi Group) is a shareholder in Metalltech and is the biggest expanded metal mesh producer in Europe.





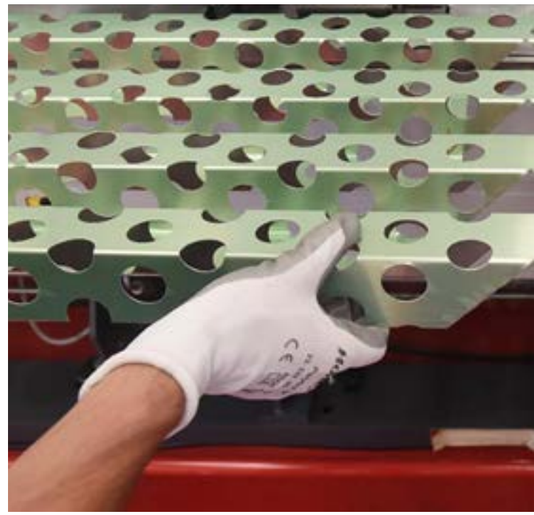
A HISTORY OF CHALLENGES AND INNOVATION

We create facades, false ceilings and mounting systems in expanded metal mesh with tailor-made pieces ready to be installed.
We proudly produce in Italy and deliver worldwide.
We have been collaborating with renowned international design studios to create iconic buildings through innovative use of meshes, colours and shapes.

We manufacture expanded metal differently

VERSATILITY, ENGINEERING, CLEVERNESS

One of our major strengths is the transformation of desires into engineered and clever projects. We ensure great variety and great versatility for tailor-made industrial solutions.



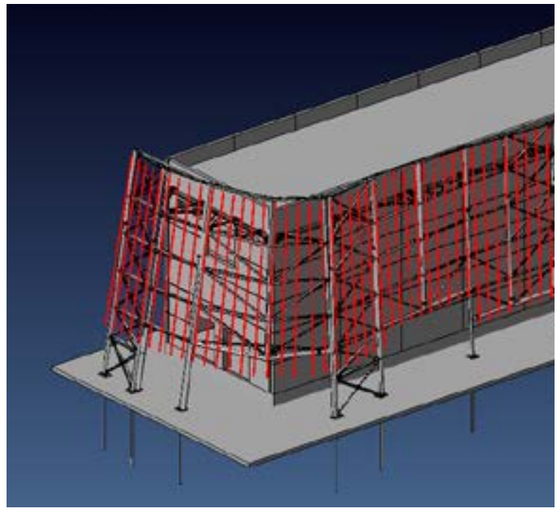
A QUALIFIED AND CERTIFIED SERVICE

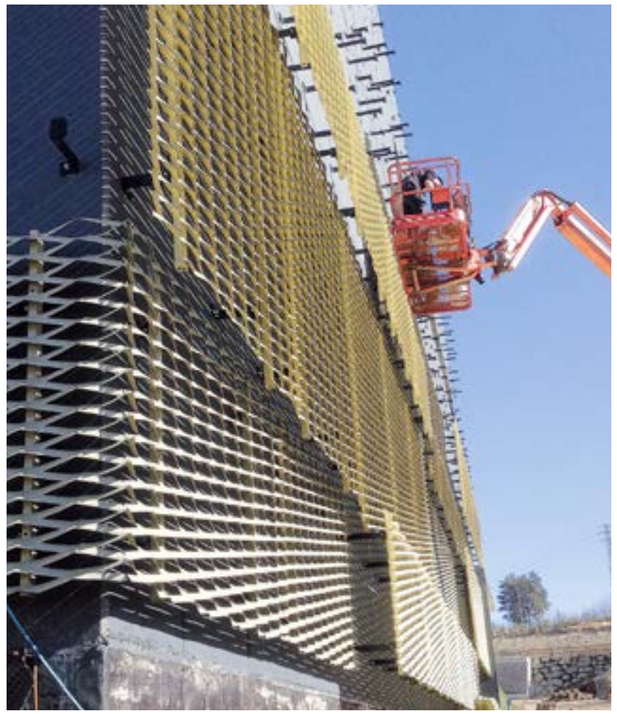
We guarantee qualified assistance at every stage of the project and we offer an exclusive service to architects. Our products and services can benefit from the most important certifications in the industry, including “UNI EN ISO 9001:2015 - Manufacture and installation of structural steel structures according to customer specification (IAF 17, 28)”.

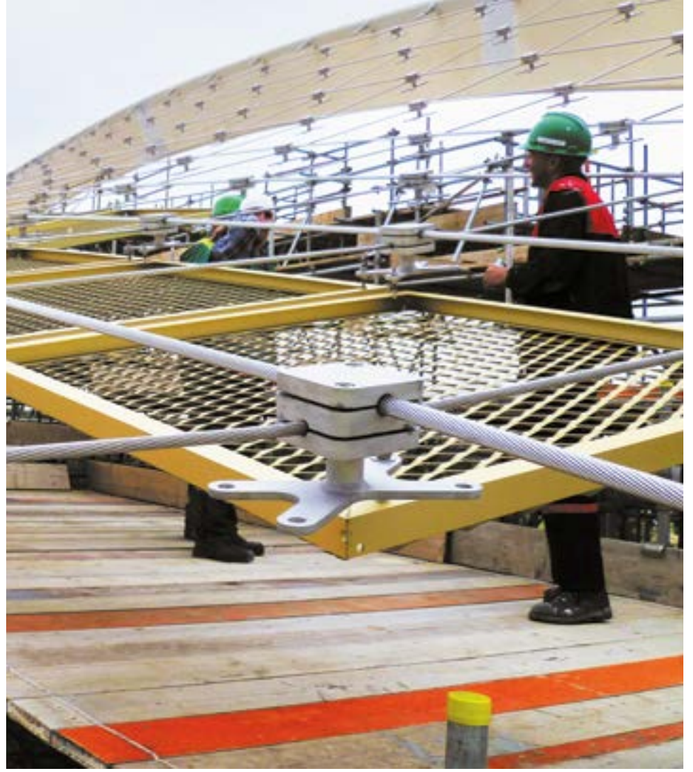
From the idea to the particularity of the project

FROM THE IDEA TO THE REALISATION

We work side by side with architects and facade builders to transform ideas into engineered and efficient structures.







From the desired effect to the final design

KEY FIGURES OF THE GROUP

17,900 m²

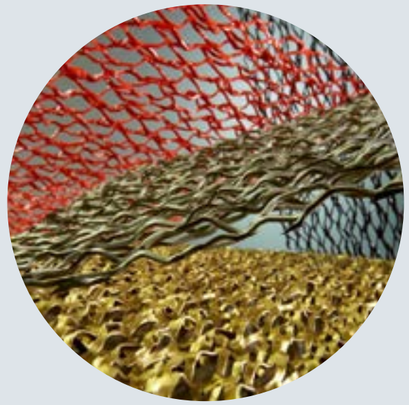
Total **10,450 m²**
Covered plants m²

190 KW of electricity
produced by solar panels

Seriate Head office
2008

2,100 m²

Total **2,100 m²**
Covered plants on 3 levels



Costa di Mezzate Manufacturing plant
2014

15,800 m²

Total **8,350**
Covered plants m2

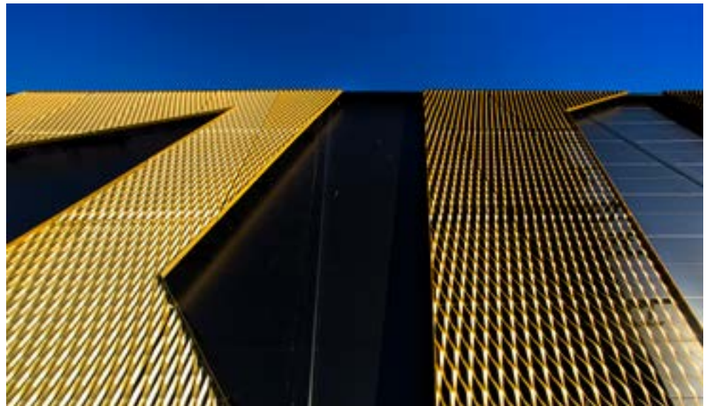
MANUFACTURING AND INNOVATION FOR UNIQUE EFFECTS

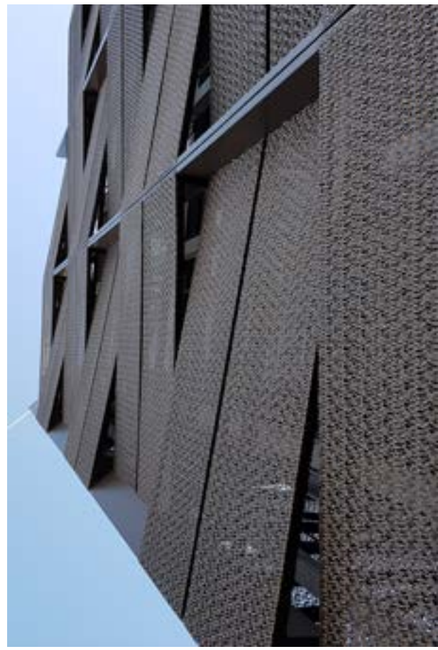
Expanded metal has few limits in architectural applications. Everything is possible and adaptable thanks to our manufacturers and our ever-new robotic machines.

We process expanded metal mesh up to 6.4 metres in length and up to 80/90 millimetres thick.

We work on shapes, colours, finishes, 3D effects and fixing systems with:
// BENDERS
// PUNCHING MACHINES
// CONTROL MACHINING CENTRES
// MACHINING CENTRES FOR PROFILES
// WATER JET CUTTING
// LASER CUTTING
// MACHINES FOR SPECIAL CUTS

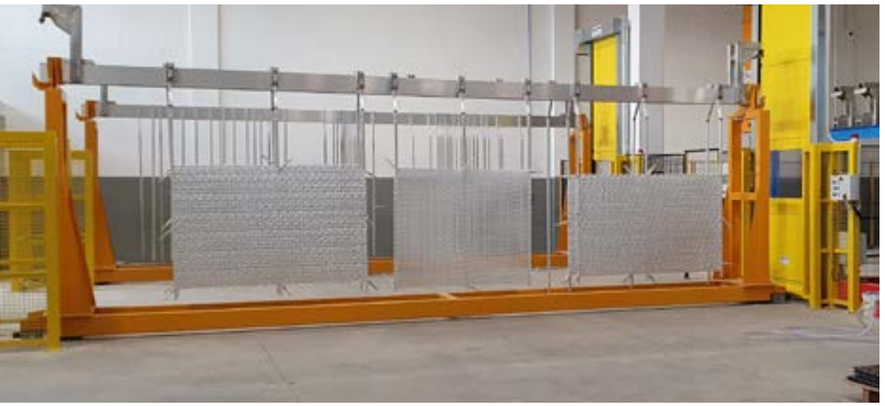
Moreover, our plant is equipped with machinery for expanded metal processing (calendaring, bending, folding, cutting), built to specific Metalltech designs.

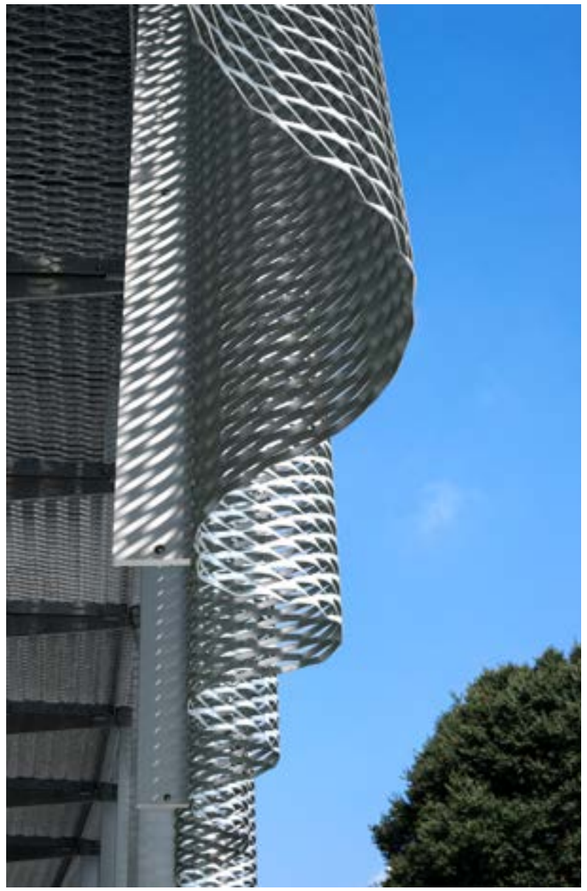




OUR ANODISING SYSTEM

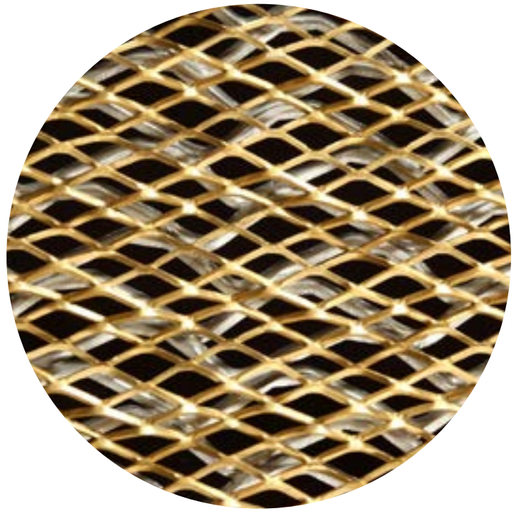
We have constantly introduced and developed new machinery in our plant. The aim is to make ùthe industrial production of expanded metal even more efficient, cutting costs and continuously innovating.
2,100 m² of our plant are reserved for a completely automatic anodising system to carry out many of our in-house processes, achieving cost savings and projecting the company towards an Industry 4.0 perspective.
Thanks to this system we can colour pieces of expanded metal measuring 2 x 7.5 metres.



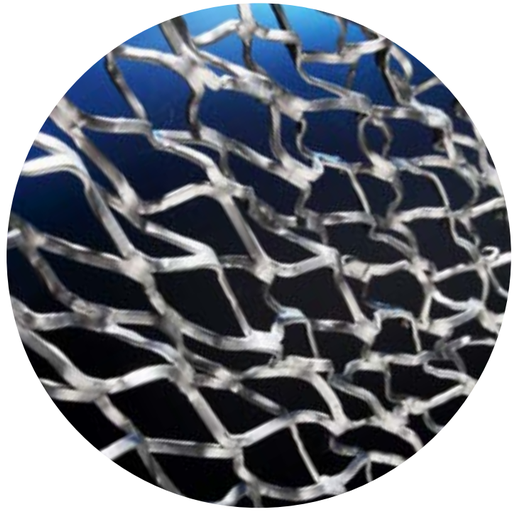


MTC 3D LS 29 ®

MTC 3D LVR A91-A95 ®



MTC 3D LV 43 ®

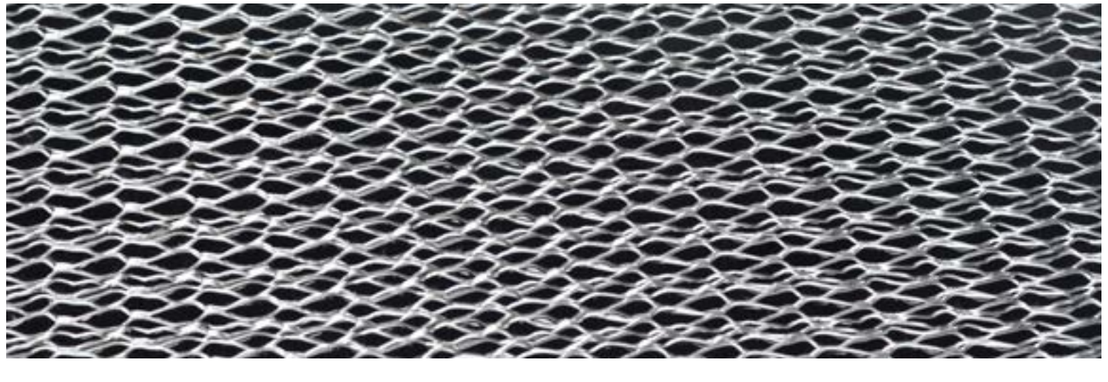


MTC 3D LV 28 ®

MTC 3D LS 75 ®

MTC 3D LS 50 ®

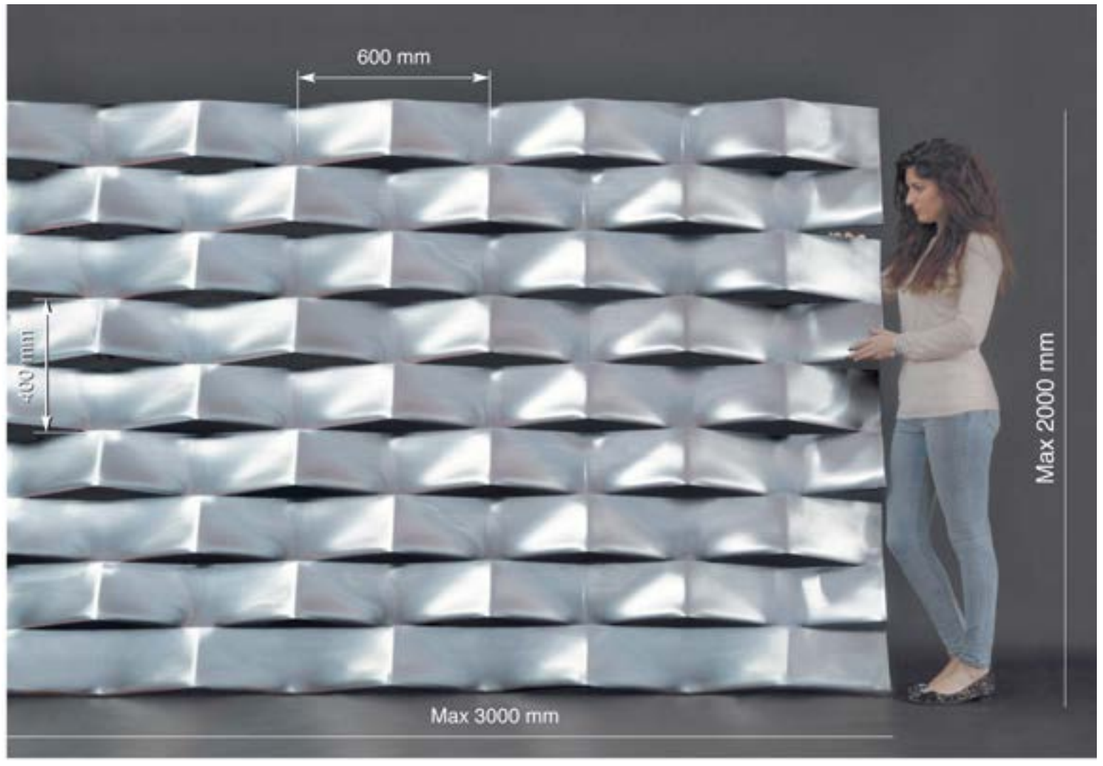
MTC 3D LS 29 ®



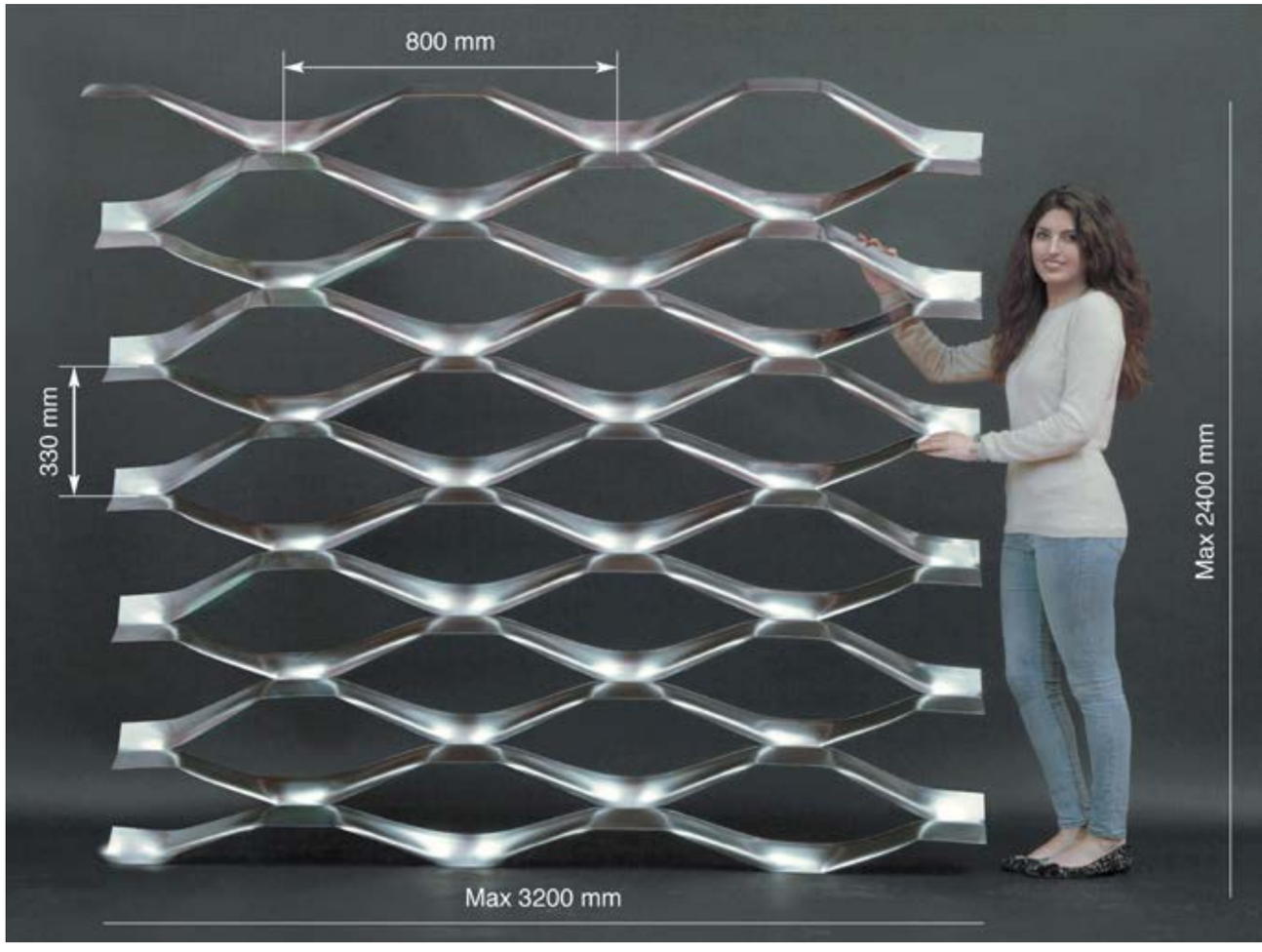
ULTRA LIMITES

The new frontier of the stretched net: large meshes for large surfaces and big effects.

ULTRA LIMITES MTC BIG 600

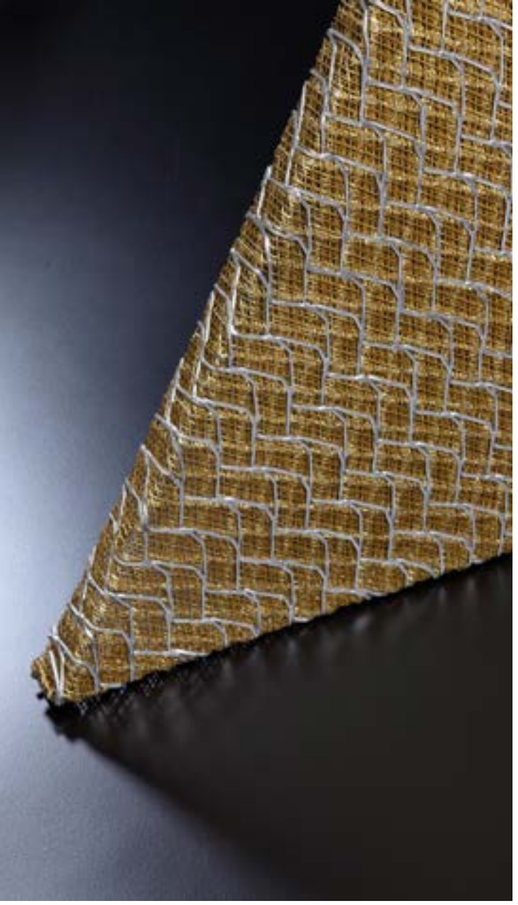


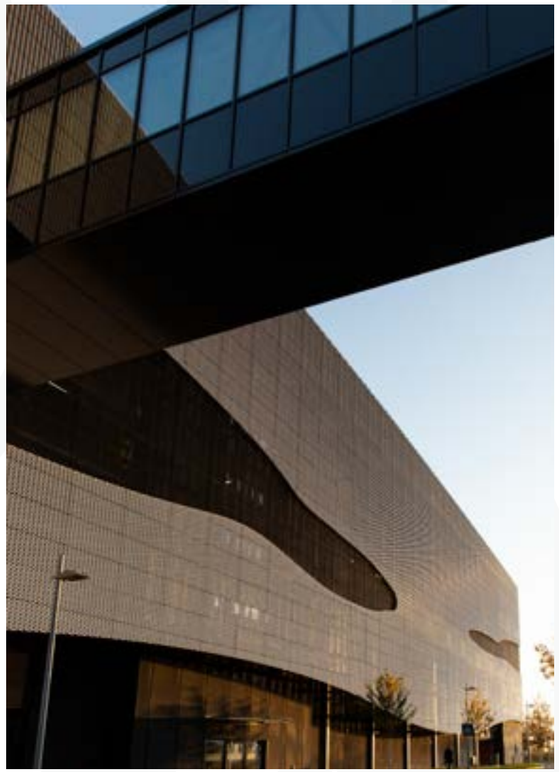
ULTRA LIMITES MTC BIG 805

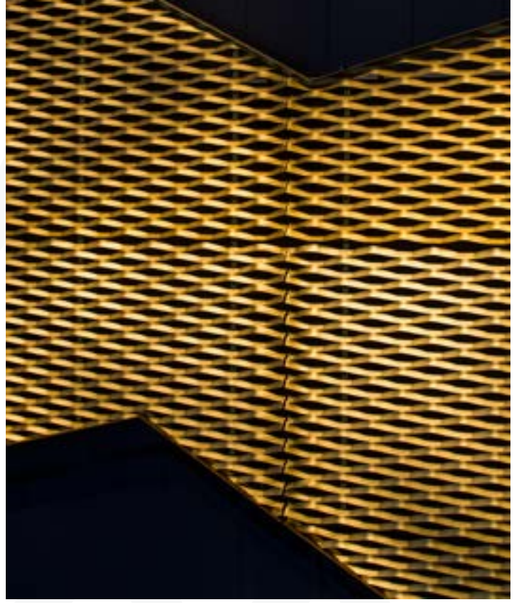


SHAPES

There are few limits to sizes and shapes
for the expanded metal mesh in architectural
applications. Everything is possible and adaptable.





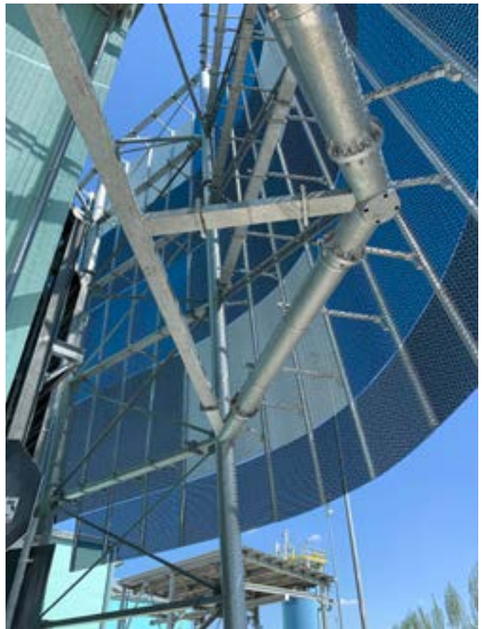


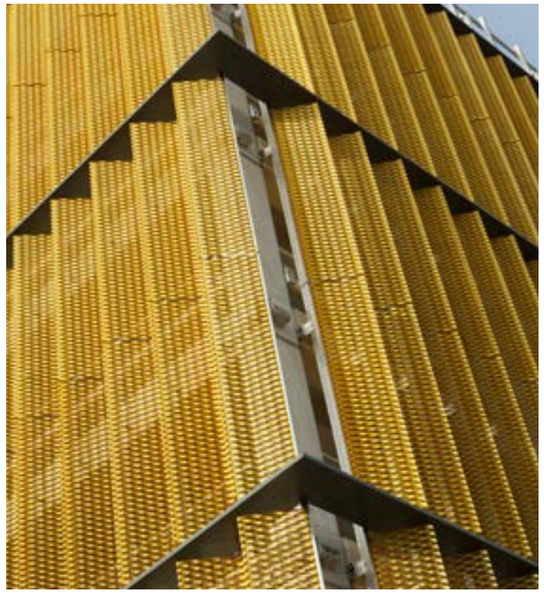
VARIABLE MESH

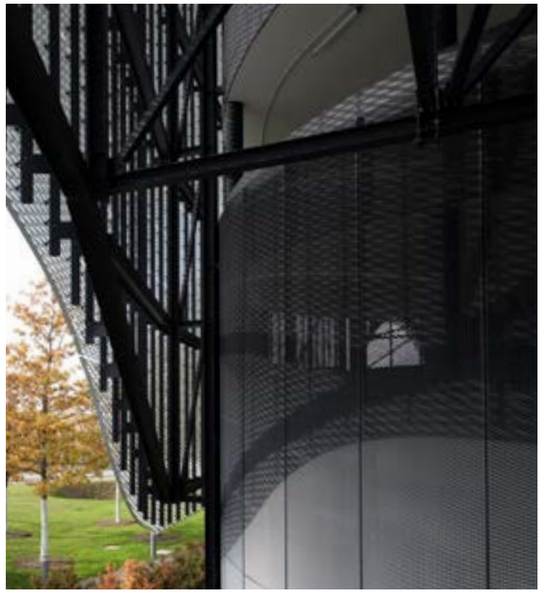
Expanded metal facade with variable mesh apertures.
An efficient sunscreen with graduated transparency
to manage the sun’s rays on the glazed walls.

FIXING STRUCTURES AND SYSTEMS

We offer flexible and innovative solutions, specifically designed to meet every customer's needs.
We provide structural calculations for both the substructures and the expanded metal panels.







OPTIMISATION FOR COST REDUCTION

// dimension
// finishing
// doors/windows
// thickness
// corners
// panel junction
// fastening load
// bearing substructure

ASSISTANCE

// numerical labelling for sequential installation
// fire regulations and study of accesses for firefighters
// nuances and analysis of solar exposure
// emergency regulation
// division of panels to optimise costs

CERTIFICATIONS AND GUARANTEES

// certificate of the raw material
// painting certificate
// welding operator qualification certificate
// certificate of transmittance and reflectance/certificate of structural compliance
// certificate of panels for maximum tensile strength (ULS) and yielding tensile strength (YLS)
// calculation verified by the certified EN Eurocodes

TRANSPORT

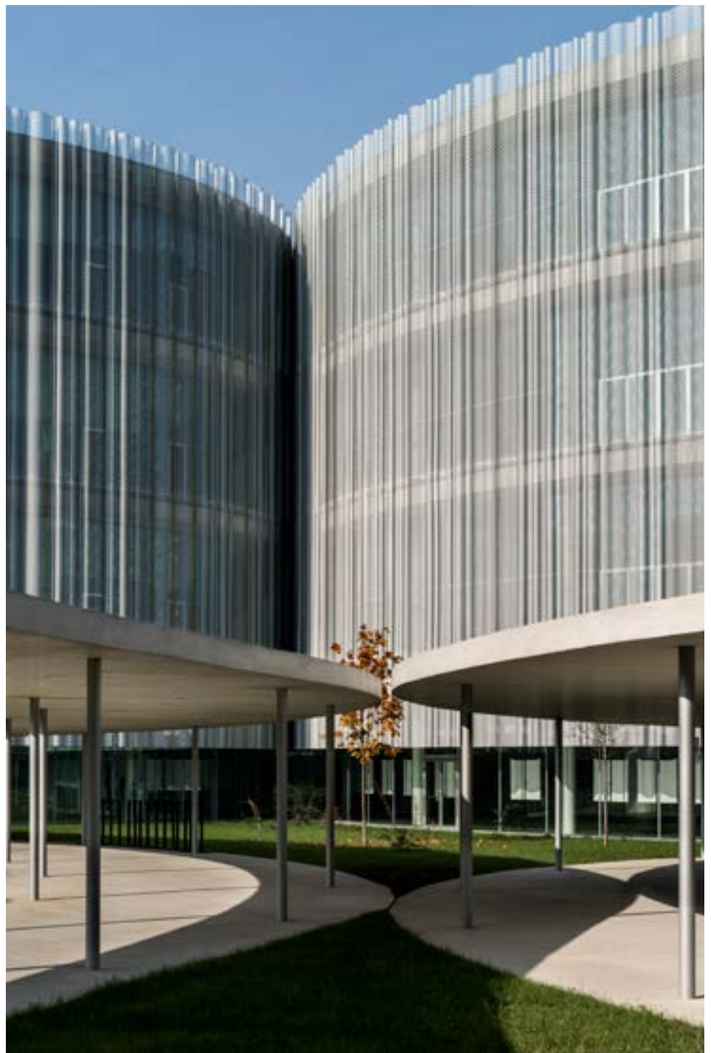
// Safe and secure packaging
// Priority delivery on request

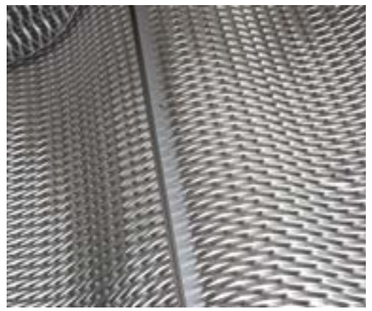
OUR ACHIEVEMENTS IN ARCHITECTURE

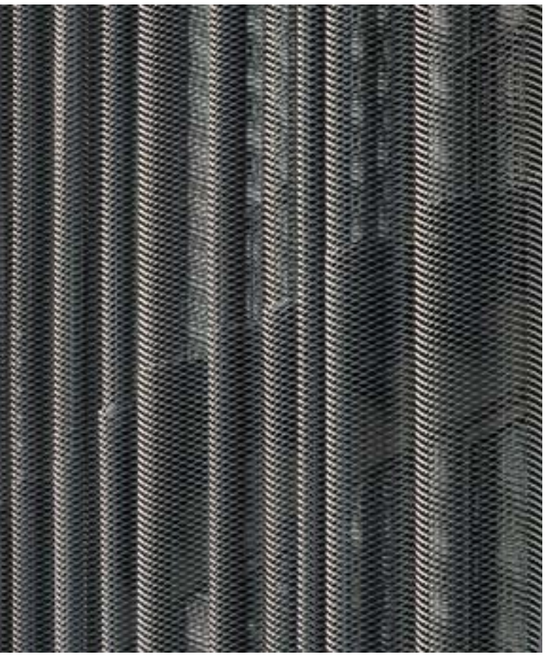
Università Bocconi
Milan (I)

PROJECT BY	STUDIO SANAA
MESH	MTC BOC-1

The project involves cladding with panels up to 6 metres long, consisting of a single piece of stretched metal. The mesh, realised with 500 unique pieces, is shaped to form a play of waves. The resulting transparencies and shading make the visual impact of the coating, which measures 27,000 m², almost impalpable.
The panels are self-supporting. Their profiles are welded to the expanded metal and provide anchoring to each floor which is also equipped with a maintenance walkway made of expanded metal. It guarantees maximum transparency and a reduced visual impact, respecting the statutory loads. We have provided structural calculations, wind tunnel tests, fatigue tests for structural vibrations, transmittance and reflectivity for energy saving calculations.







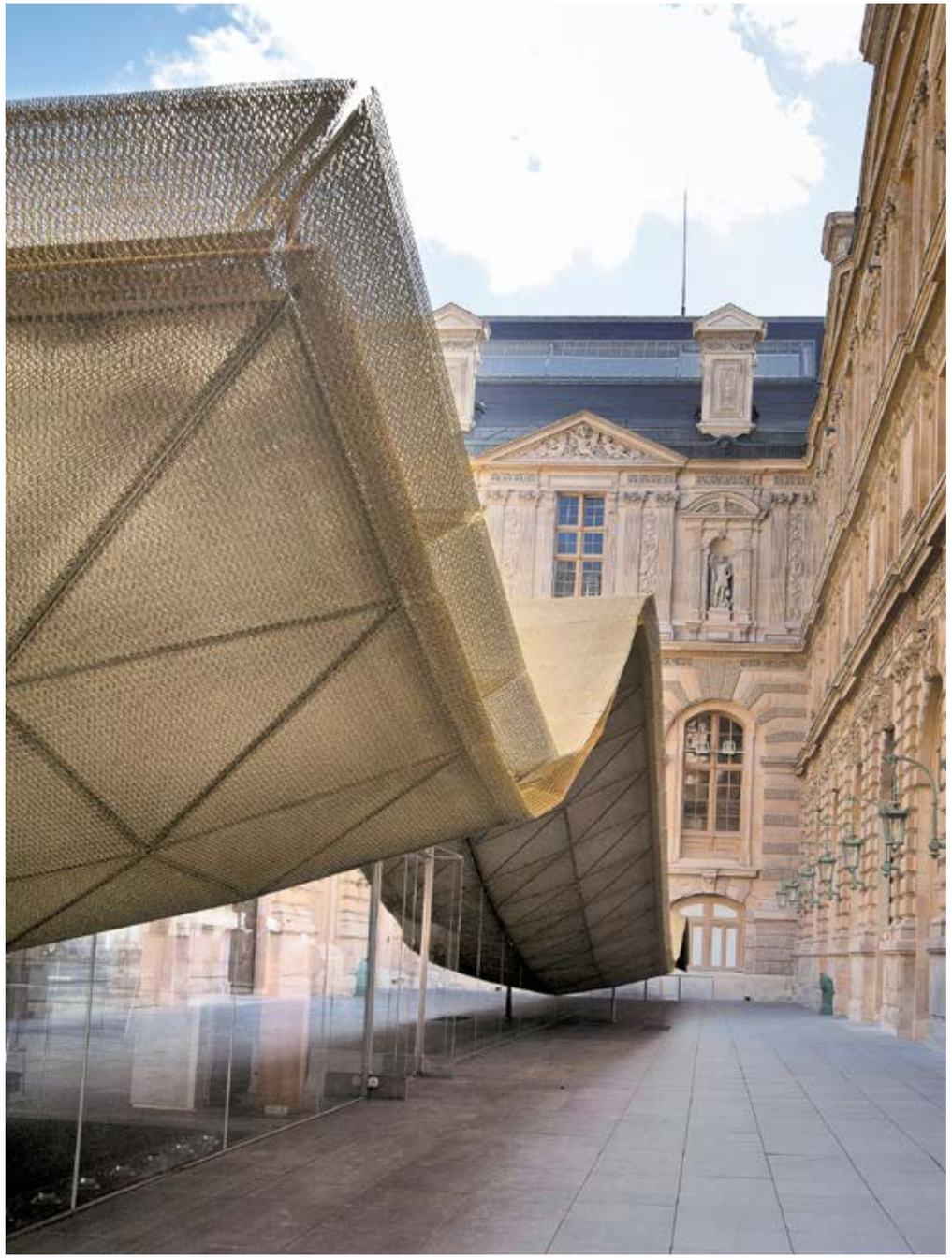
Louvre: new Department of Islamic art
Paris (F)

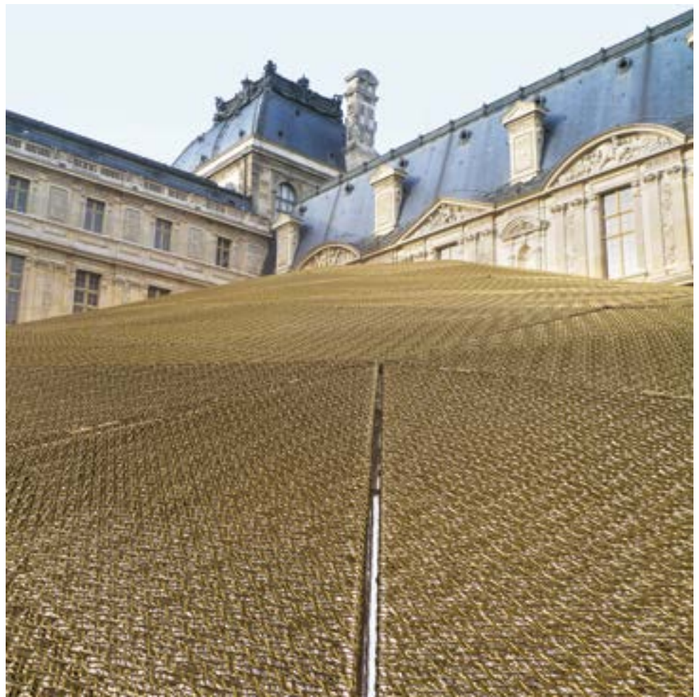
PROJECT BY ARCH. MARIO BELLINI - ARCH. RUDY RICCIOTTI

MESH MTC 3D LVR A91-A95

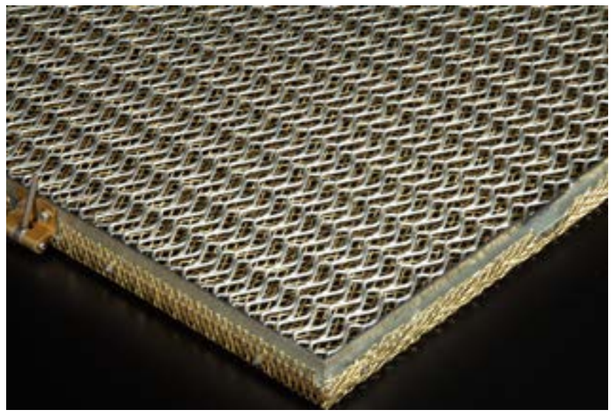
The architect wanted to create a kind of veil to express lightness and transparency, like a silk scarf on a windy day. The result was achieved by welding a silver anodized metal mesh to another golden, creased metal mesh, for a total of 7,100 m². We also modelled 4,700 unique pieces in a harmonious structure.
Our company analysed wind and snow loads, paying particular attention to the maintenance and cleaning process. For this reason, a particular structure was implemented in order to open the different panels for cleaning operations.

Museo Louvre Parigi (F)





Museo Louvre Parigi (F)

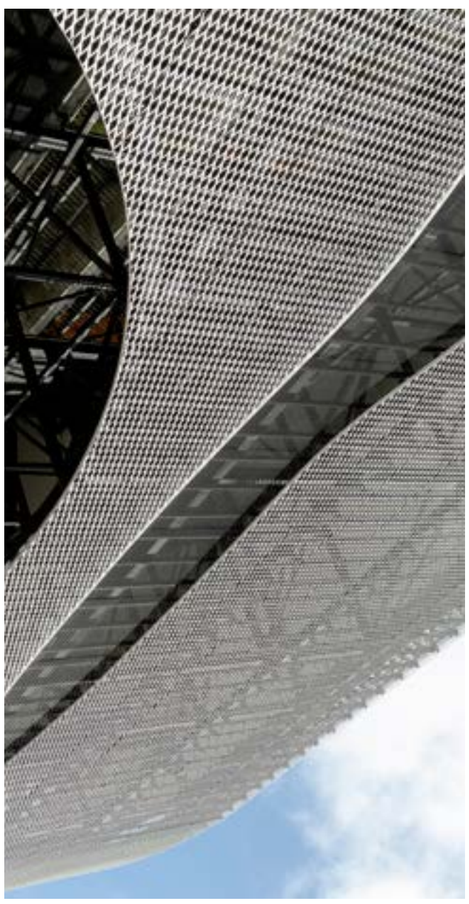


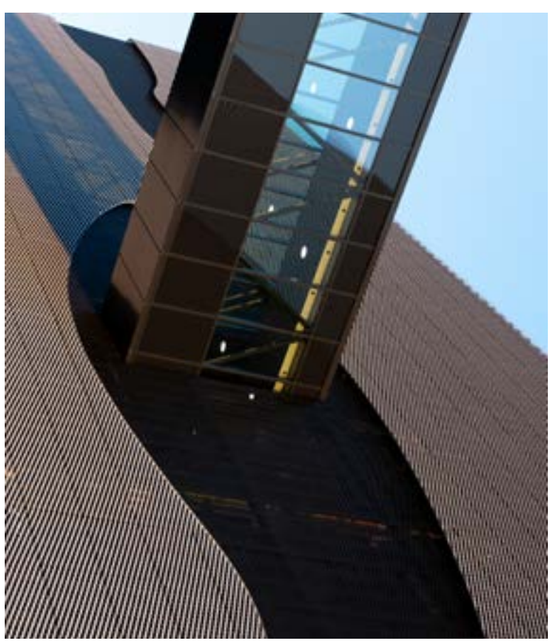
LIDL car park
Neckarsulm (D)

PROJECT BY	PLANUNGS- UND BAULEITUNGSBÜRO HANNES BUCK - DIPL.-ING. U. FR. ARCHITEKT
MESH	MTC R257

The concept of this garage is expressed in an elliptical facade composed of two layers of curved expanded metal mesh panels, measuring respectively 8,000 and 3,5000 m².
We manufactured 5,000 unique pieces of mesh to create an impeccable mix. The black mesh, in fact, fits perfectly within the white cut-out spaces, creating a distinct background. To achieve this effect, each panel has a welded profile to create holes with clean outlines.

LIDL car park Neckarsulm (D)

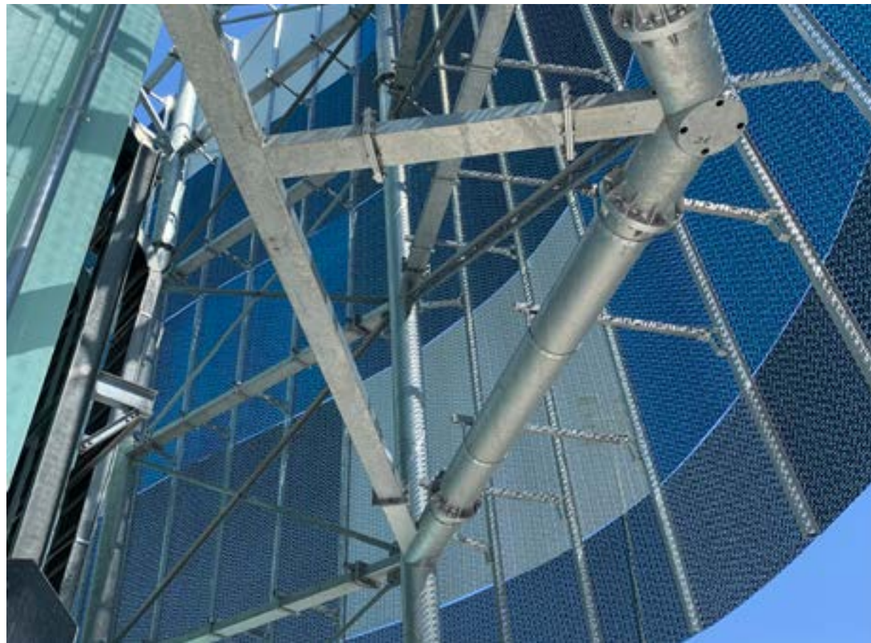




Italgas
Lodi (I)

PROJECT BY	STUDIO AMERI ARCHITETTI
MESH	MTC 3D LS 50

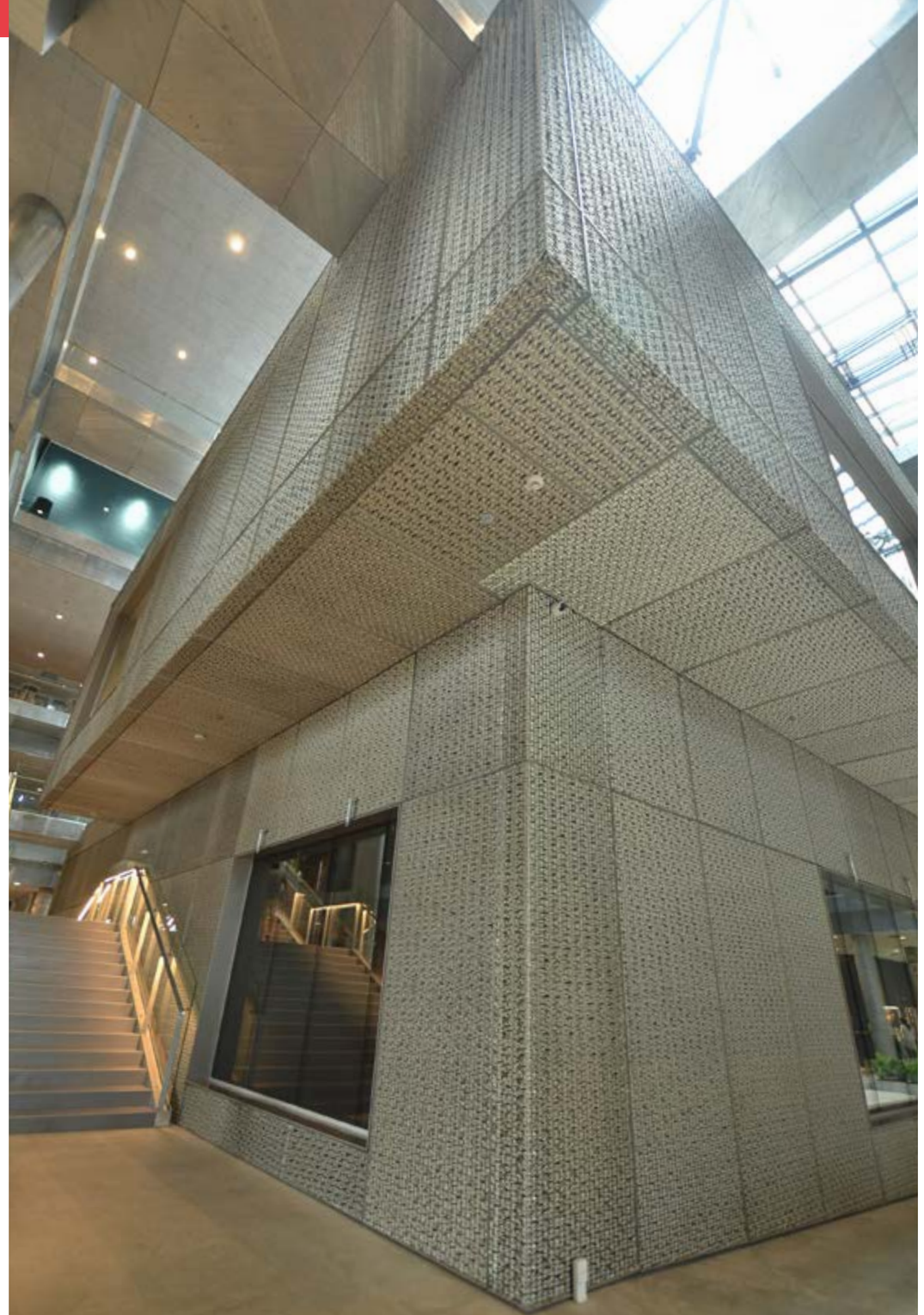
The Italgas building in Lodi is a light structure which blends in with the surroundings and the colours of the sky. We made 467 unique pieces to assemble 1,8000 m² of expanded metal mesh. Accuracy of detail is combined with attention to engineering quality and the installation of elements that make the building earthquake-proof.



Blixens
Aarhus (Denmark)

PROJECT BY	ARKITEMA
MESH	MTC 3D LS75

The Blixens complex is a meeting and exchange hub for the inhabitants of the Gellerup district in Aarhus (Denmark). A mix of materials - from expanded metal mesh to reused bricks and recycled wood - marks the interiors of the five buildings that make up the structure, creating a sense of diversity, belonging and inclusion.
Housing over 1,000 people, the project covers an area of 23,000 m², in addition to 12,500 m² reserved for parking.



Park49
Gothenburg (S)

PROJECT BY	ARKITEKTBYRÅN DESIGN
MESH	MTC E 337

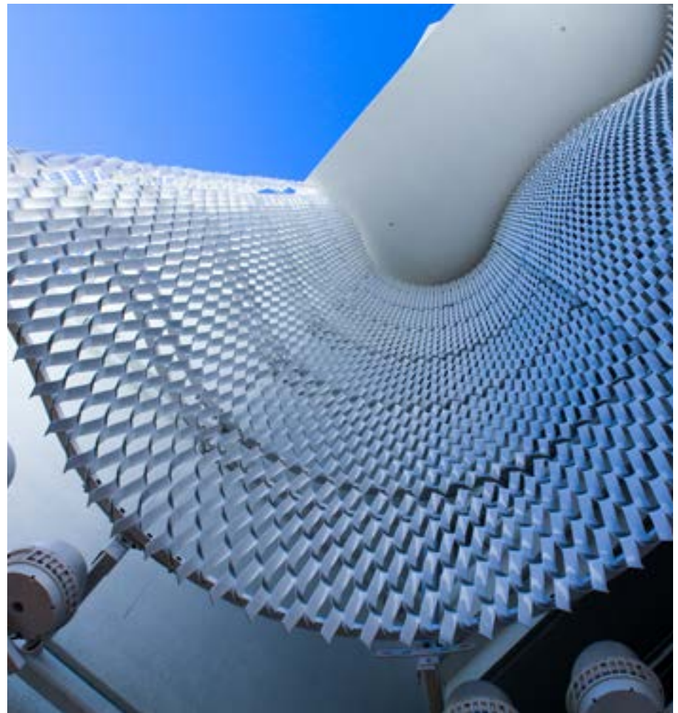
This building was designed to be completely made of glass and therefore heavily exposed to sunshine. To protect the people working there, the architect predisposed expanded-metal sunscreens. Furthermore, the building is in Gothenburg, Sweden, so it had to sustain a heavy snow load in winter.
To achieve both goals, our skilled staff created a specific 337 mm mesh in white aluminium.

Beverly Center
Los Angeles (USA)

PROJECT BY ARCH. MASSIMILIANO FUKSAS

MESH MTC LA 400

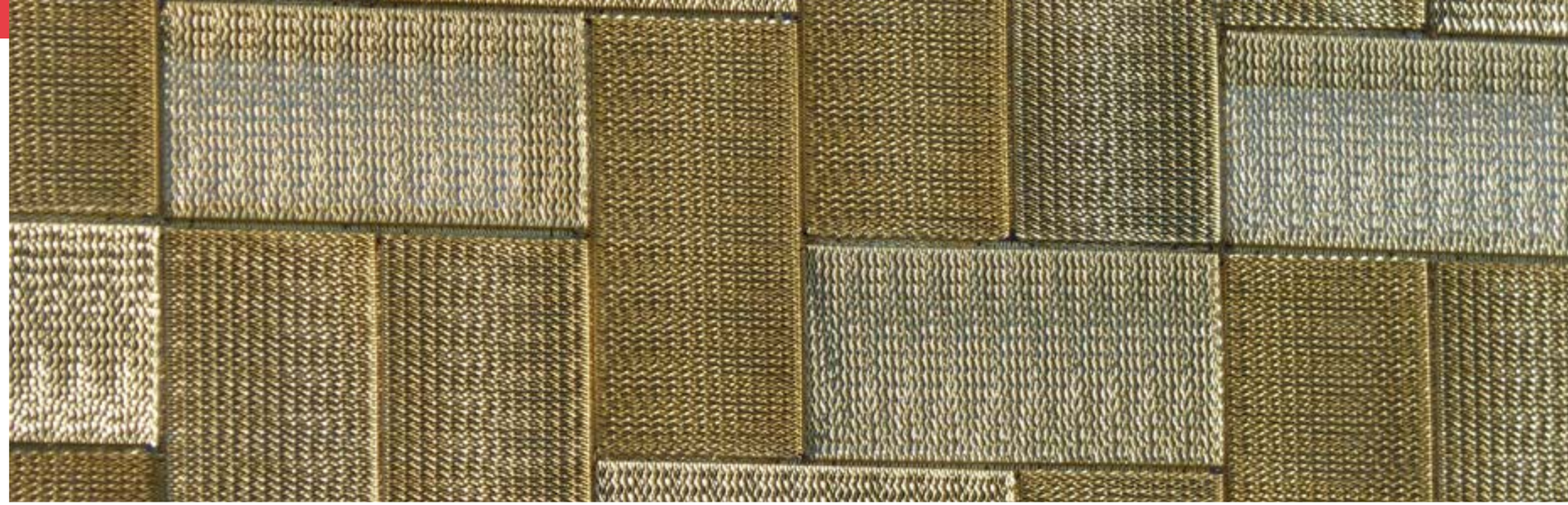
This project aimed at modernising one of the most famous shopping centres in the United States. The architect conceived an aluminium skin with an organic shape on all the perimeters of the structure.
The size of Beverly Center and the irregularity of the shapes' design led us to develop a specific large mesh and to manufacture thousands of unique panels.



Terre Ségala
Toulouse (F)

PROJECT BY	COCO ARCHITECTURE
MESH	MTC 3D LS 29

The multifunctional building is inspired by the distinctive traits of the French landscape in Ségala, with its corn plains and the straw bales lying on the sunny fields.
To translate the singularity of this region in the architectural language, the architects opted for an exterior design in gold tones so that it recalls the details of the landscape and, at the same time, it integrates them. To obtain the desired effect, therefore, we mounted the frame panels in all the four possible positions to highlight the different shades of colour and create an iconic 3D effect on the facade.



metalltech

Catena Bring
Gothenburg (S)

PROJECT BY	JKAB ARKITEKTER
MESH	MTC LA 400

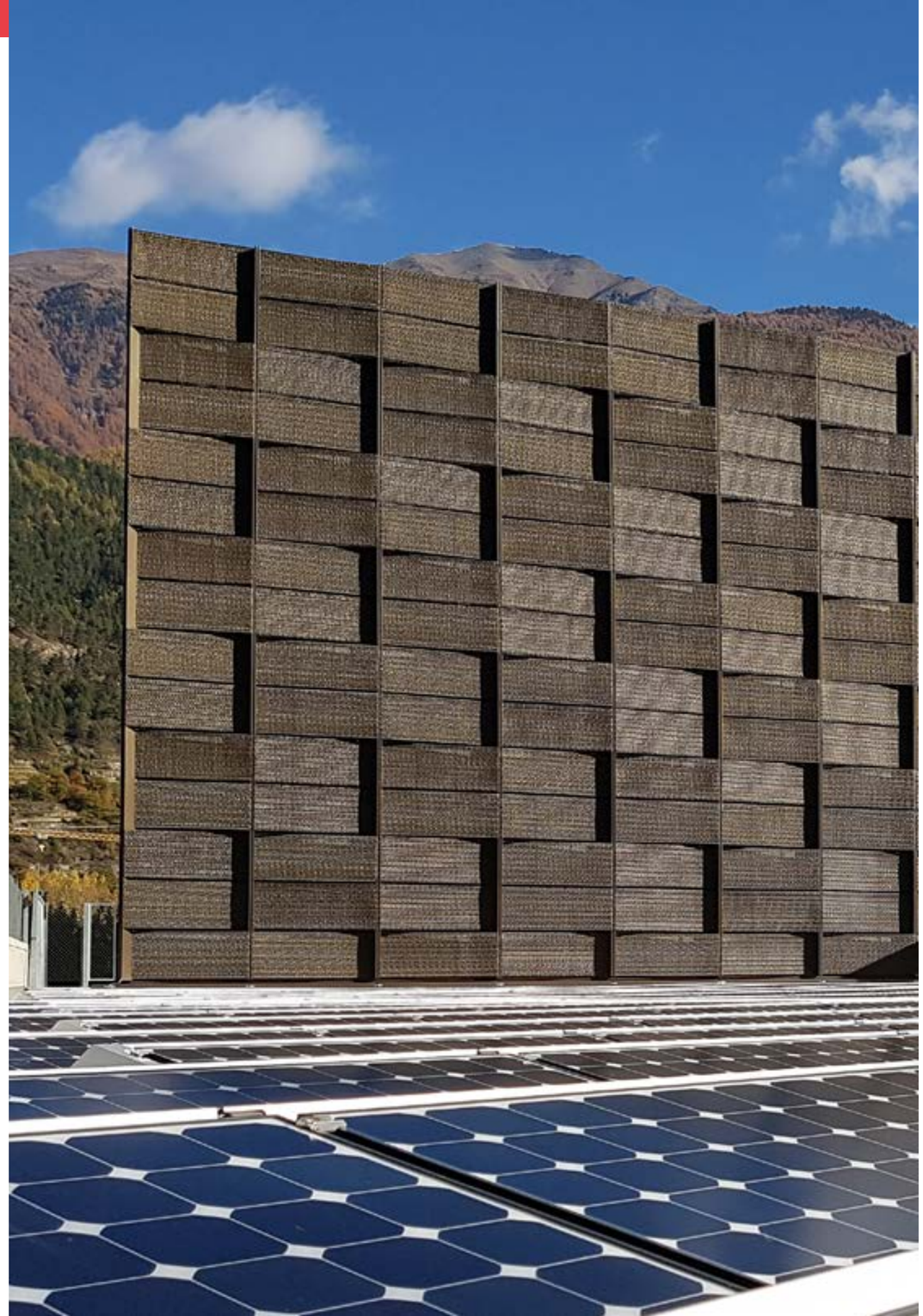
To create the facade of Catena Bring in Gothenburg and satisfy the vision of the architects, we created 3,200 x 2,000 mm self-supporting panels with welded and shaped profiles to form 9.5 metres high letters from the runic alphabet. The substructure design features punctual fixings on a black sandwich panel. Finally, the backlighting enhances the gold colour and the transparency of the expanded metal mesh.

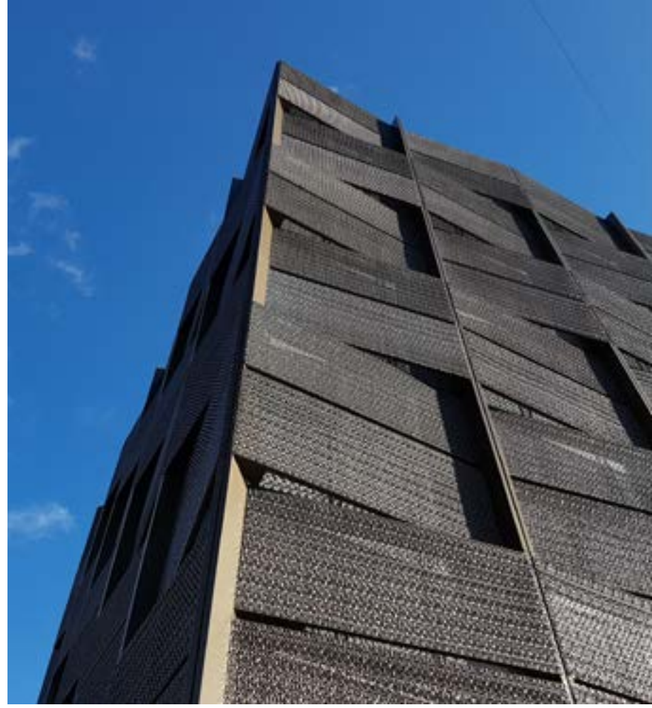
GEOS Warehouse
Bolzano (I)

PROJECT BY INNENARCHITEKT MAYR MANFRED ALOIS

MESH MTC 3D LS 50

To create the facade of the refrigerated warehouse for GEOS agricultural company, we transformed the architect's drawing into a construction that resembles a wicker basket for transporting apples. To do this, we used 100 unique pieces of creased metal mesh, the material we employ when we want to obtain particular three-dimensional effects.
In fact, the creased metal mesh allows you to maintain the same transparency and the same aesthetic result from every perspective, which is not the case with traditional expanded metal (that instead has different transparencies depending on the angle from which you look at it).





NAI
Netherlands Architecture Institute
Rotterdam (NL)

PROJECT BY JO COENEN & CO. ARCHITECTEN

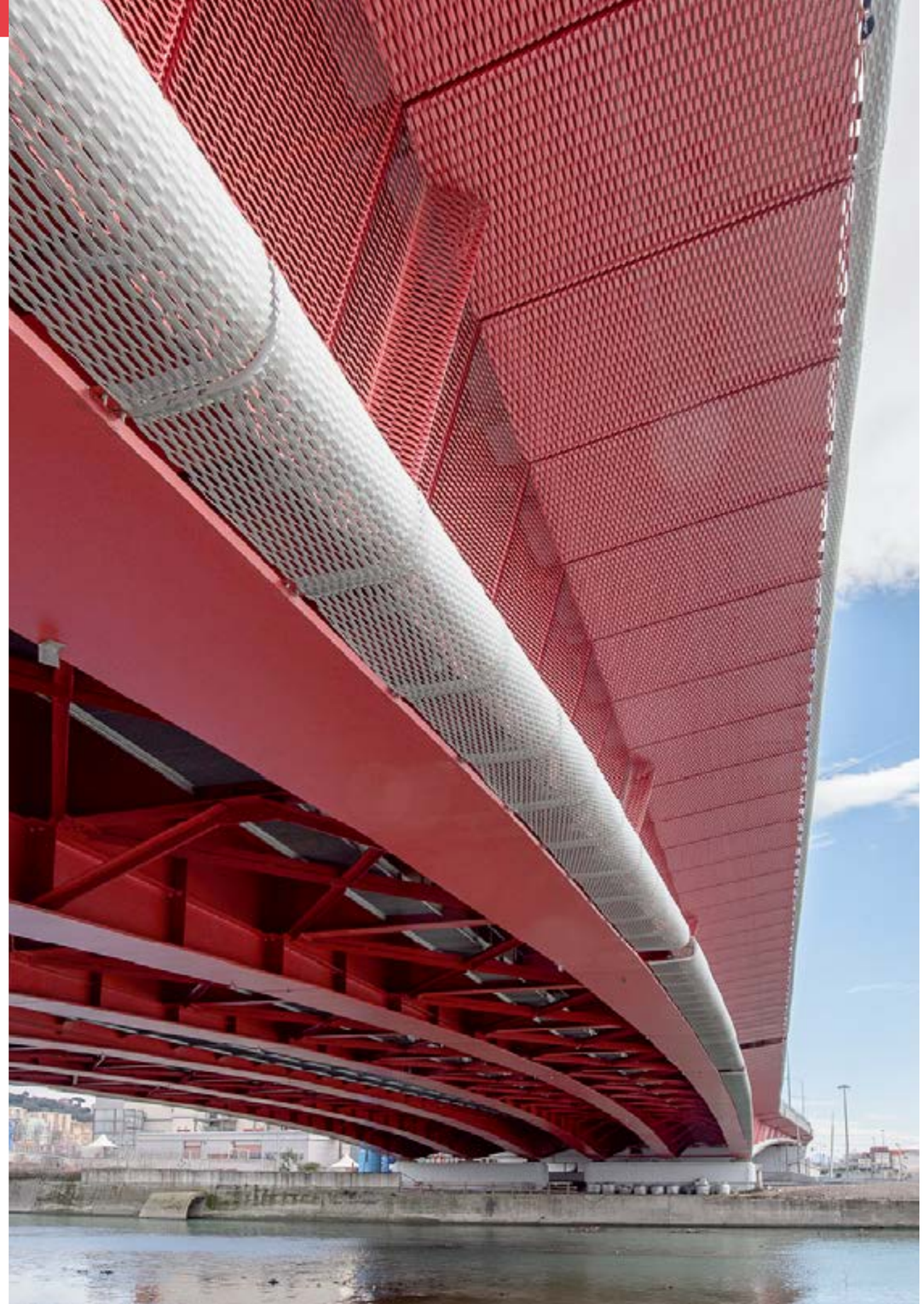
MESH VARIABLE

According to the design of the well-known architect Joe Coenen, the Netherlands Architecture Institute (NAI) building needed maximum transparency or shaded solar lights.
To ensure the required effect and after accurate analysis about the sun exposure, we created a single mesh with different transparencies. The building is classified to comply with zero energy regulations. The whole architectural structure represents one of the most important cultural institutions in the Netherlands. It houses one of the largest architectural collections in the world: 18 kms of shelves that store drawings, sketches, models, pictures, books, magazines and more.

Bridge over Polcevera River
Genoa (I)

MESH MTC E160

The project includes a silver anodised aluminium coating and red painted areas, characterised by very high resistance to corrosion. The considerable vibrations and structural movements due to the passage of vehicles have been the subject of careful analysis: for this reason, non-bonded panels were independently fixed to the structure by means of punctual brackets. The panels were produced with welded frames suitably shaped to follow the sinuosity of the bridge. Our company provided structural calculations, wind tunnel and fatigue tests for structural vibrations.



Firriato Winery
Marsala (I)

PROJECT BY ARCH. TERRANOVA

MESH MTC E 45

The project includes the renovation of a wine silo to create harmony between the old building and the surrounding environment. The architect wanted to use a game of shadows to recreate movements on the facade. The solution was deeply inspired by the Graz Fair building. A simple and cost-effective solution.

OUR LOCATION

Our company was born and developed in Val Seriana, in the heart of Bergamo province in Lombardy.

We are located in one of the most industrialised areas of Europe and we are easily reachable by car, plane or high-speed train.

Metalltech offices are less than 20 minutes away by car from:

// Milan Bergamo airport
// Bergamo railway station

metalltech

METALLTECH s.r.l.

Head office
Via Monte Rosa, 20
24068 Seriate (BG) - ITALY
Tel. +39 035 4236778
info@metalltech.it
www.metalltech.it

Manufacturing plant
Via Nazioni Unite, 32
24060 Costa di Mezzate (BG) - ITALY