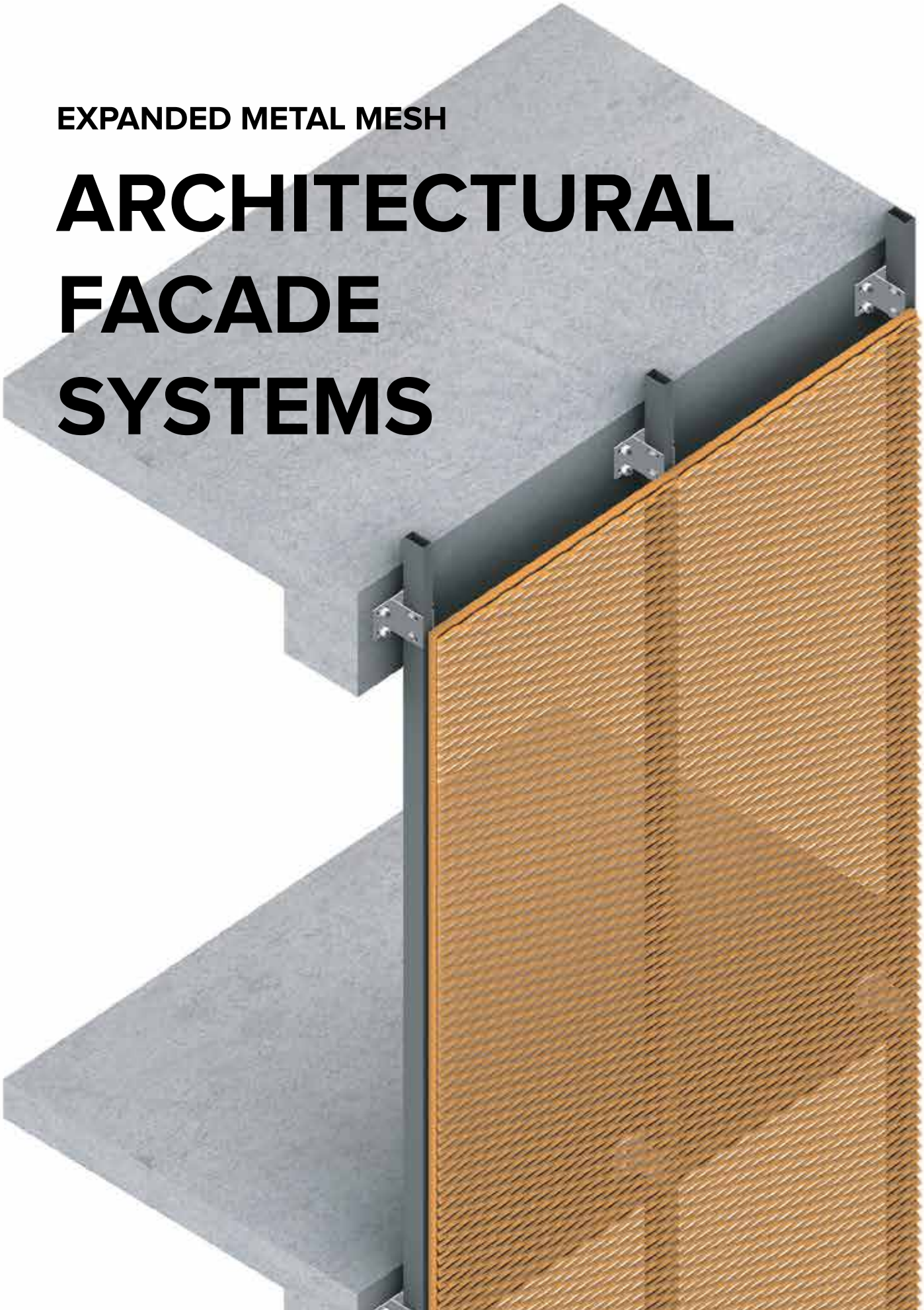
ANB

Adds Value to Metal

EXPANDED METAL MESH

ARCHITECTURAL FACADE SYSTEMS




NAMET HEADQUARTER BUILDING, Çorlu, Türkiye


UŞAK SPORT CENTER, Çorlu, Türkiye


ATATÜRK CULTURAL CENTER, Tekirdağ, Türkiye


HATAY STADIUM, Hatay, Türkiye


TED BANDIRMA COLLEGE, Bandırma, Türkiye

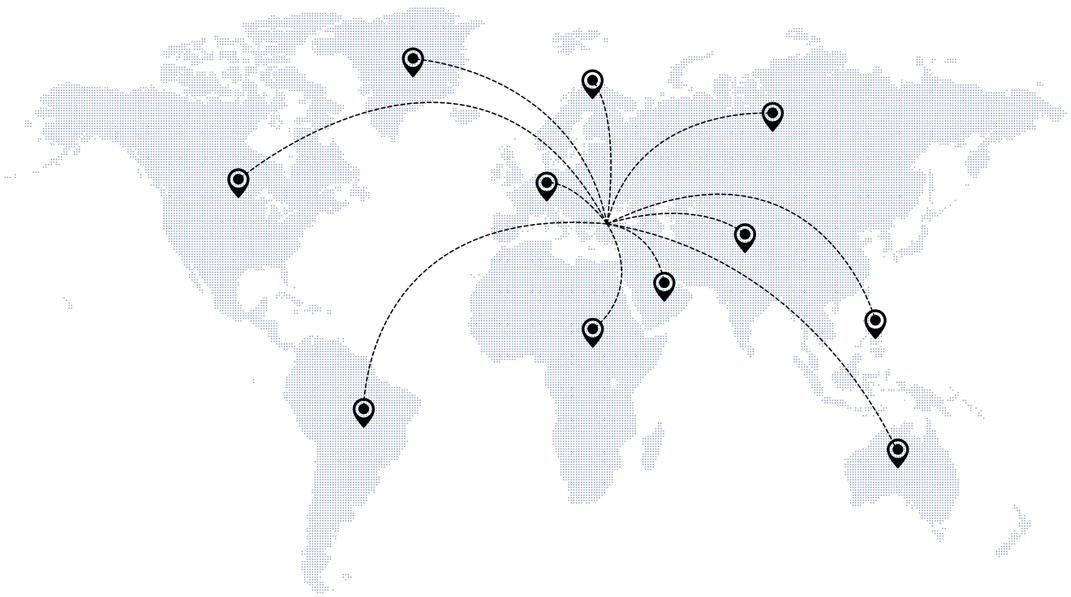

JNR TEXTILE PARKING, Adana, Türkiye


MİKRO TECHNICAL FACTORY, Bursa, Türkiye


IBB SEYMEN WASTE GAS ENERGY GENERATION FACILITY
İstanbul, Türkiye

+50 MORE THAN 50 COUNTRIES EXPORT

ANB is over the world



The world's leading expanded & perforated metariels business.
We manufacture and distribute a diverse range of superior Expanded & Perforeted Metarials products.
Which are used extensively in filter and construction, industrial projects of all sizes, all across the world.
Our Global Footprint Our operations span 50 countries, on four continents.

SHOWROOM

Tou can find our creations that we have designed from our product range in different colors that appeal to different sectors. If you have a project that you want to realize, you can visit our shoeroom and see our products more closely.

ABOUT US

As ANB Metal, we have started to offer services within the scope of expanded metal, perforated metal, laser cut, and façade products with our accumulated years of experience, superior work and quality production since 1992.

While our priority is always customer satisfaction, we achieve 'superior brand status' in processing metal products compatible with your project.

In addition to steel, galvanize and aluminum materials, we focus on the method of expanding to different types of metals such as stainless steel, titanium and copper. With the advancing technology, we are bringing new methods to metal in different and other dimensions.

We offer you metallic solutions with superior equipment with our expert team and our advanced technology devices and tools we use. With the metal products we have designed for use in exterior facades, suspended ceilings, walkways, fences, walls and lighting, industry and decoration areas. With the metal products we have designed for use in exterior facades, suspended ceilings, walkways, fences, walls, lighting, industry and decoration areas, we serve you with shaping metal with different methods and 'adding meaning and value' to metal.

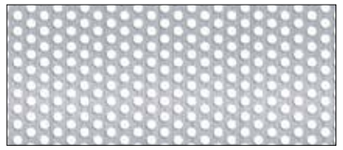
Our superior quality has been registered by Tüv-Saar with ISO9001-2015 certificate. In this context, the certificate we have, supports our reliability and high quality in a perfect way. With our EN ISO 14001-2015 Environmental Management System and Occupational Health and Safety Management System ISO 45001-2018 certificates, registered and patented machines, you can observe once again that we guide our work within the scope of sensitivity and meticulousness.

Our activities, which date back to about half a century, continue to gain different dimensions with our expanded and other metalworking arts.

PRODUSTS

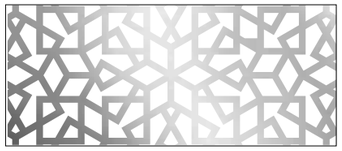
EXPANDED METAL MESH

Expanded metal mesh is a type of metal mesh that is made from a single piece of metal that has been cut and stretched to form a diamond-shaped pattern. It is commonly used in industrial and commercial applications, such as fencing, grilles, shelving, and guards. It is also used in architectural applications, such as decorative separator and wall cladding.



PERFORATED METAL

Perforated metal sheet is a type of metal sheet that has been punched with a pattern of holes. It is commonly used for a variety of applications, including facade, filters, and guards. It is also used in the construction of sound enclosures, ventilation systems, and other architectural elements.



LASER CUT

Laser cut metal is a process of cutting metal using a laser beam. The laser beam is focused on the metal, which is then melted, burned, or vaporized away, leaving a clean cut edge. Laser cut metal is used in a variety of industries, including automotive, aerospace, medical, and industrial manufacturing. It is often used to create intricate shapes and designs, as well as to cut large pieces of metal into smaller parts. Laser cut metal is also used to create custom parts.

APPLICATIONS

FACADE

Expanded and perforated metal is a great choice for facade. It is lightweight, durable, and can be used to create a variety of interesting patterns and designs. It is also easy to install and maintain, making it a great choice for both residential and commercial applications. Expanded metal mesh can be used to create a modern, industrial look, or it can be used to create a more traditional, rustic look. It is also available in a variety of colors and finishes.

SUSPENDED CEILING

Expanded metal ceilings are a popular type of ceiling that is made of a series of interconnected metal panels. The panels are created by expanding a sheet of metal, which creates a pattern of diamond-shaped openings that allow air and light to pass through. This type of ceiling is often used in commercial and industrial buildings due to its durability and low maintenance requirements. It can also be used in residential settings for its modern and industrial aesthetic. Expanded metal ceilings come in a variety of sizes, colors, and finishes, making them a versatile option for a range of projects.

WALKWAYS

Expanded and perforated metal walkways are strong and durable paths made from metal sheets with diamondshaped openings or holes. They're commonly used in outdoor settings such as industrial plants and pedestrian bridges due to their superior strength, slip resistance, and drainage properties. They can be customized to meet project needs and may feature handrails and non-slip surfaces for enhanced safety.

FENCING

Expanded and perforated metal fences are strong and durable fences made from metal sheets with diamondshaped openings or holes. They're commonly used in outdoor settings such as industrial plants and commercial properties due to their strength, visibility, and ventilation properties. They can be customized to meet project needs and may feature security toppings and gate for

BALCONY RAILLING

Metal balustrades are a type of railing system made from metals such as steel or aluminum. They provide safety and support while also adding aesthetic value to a building or space. They can be customized to fit specific design requirements and may feature decorative elements, handrails, and infill panels.

INTERIOR

Architectural interior design is th specialized field of designing functional and aesthetically pleasing interior spaces. It involves creating unique and innovative designs that meet the needs and goals of the client, while considering factors such as budget and building regulations. It can be applied to various settings such as residential, commercial, and hospitality spaces.

MATERIALS

ALUMINIUM

Aluminum is a lightweight and durable metal that is widely used in various industries due to its corrosion resistance, conductivity, and versatility. It can be shaped into different forms and is recyclable, making it an environmentally friendly option.

STAINLESS STEEL

Stainless steel is a popular material in architecture due to its strength, durability, and aesthetic appeal. It is commonly used in handrails, cladding, roofing, and other applications. It is versatile, easy to maintain, and can be customized to suit different styles and design requirements.

STEEL

Steel is a strong, durable, and versatile material commonly used in structural applications such as beams, columns, and frames, as well as in cladding and roofing systems. It is cost-effective, easy to maintain, and can be customized with a range of finishes to suit different architectural styles and designmaintain, and can be customized with a range of finishes to suit different architectural styles and design

COR-TEN STEEL

Corten is a weather-resistant steel with a higher level of resistance to atmospheric weathering than ordinary steel. Corten gets an adhesive and protective layer of rust when the panels are exposed to the outside air.

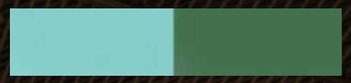
COPPER

Copper is a durable and versatile material commonly used in roofing, cladding, and decorative elements. It is valued for its unique appearance and corrosion resistance, and can be customized with a range of finishes to suit different architectural styles and design requirements.

BRASS

Brass is a durable and versatile material commonly used in architecture and interior design. It has a unique golden appearance and is commonly used in decorative elements and architectural details. Brass is corrosion-resistant and easy to maintain, making it a popular choice for high-traffic areas. It can be customized with a range of finishes to suit different design aesthetics and requirements.

SURFACE TREATMENT

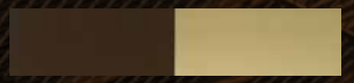


POWDER COATING

Powder coating allows us to apply any desired RAL color to our panels. It is attracted to the surface of the metal because of its static charge, then the material is heated in an oven so that the powder melts and undergoes a chemical reaction. The result is a highly durable outer layer. The layer thicknesses range from a minimum of 60 microns for indoor applications up to 120 microns for outdoor applications.

Powder coatings contribute to the desired aesthetic result and can result in a matte, satin or shiny finish.

Powder coated products excel in color fastness and have an extremely resistant top layer. The electrostatic lacquer process produces an optimum adhesive and corrosion-free surface. This ensures a long life and allows for a high degree of processing - even with sawing, drilling, and milling, the finish remains intact. We also offer an anti-graffiti coating as an extra option. This top layer prevents graffiti and stickers from attaching to the material.



ANODIZING

Anodizing protects aluminum against corrosion, resulting in a wear-resistant product with an almost unlimited lifespan and minimal maintenance. It won't turn black and is resistant to most chemicals and solvents, yet the appearance of the aluminum is retained.

Anodizing accelerates the aluminum oxidation process, converting the top layer of aluminum to alumina. The thickness of the top layer depends on whether it is to be used inside or outside.

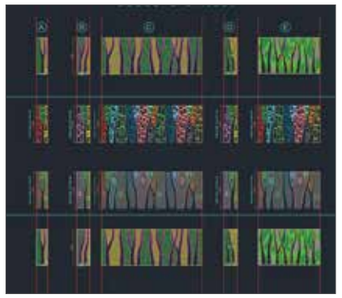
Anodized aluminum can be manufactured naturally in a matte or shine finish, and colours, such as bronze, silver or gold can be added.

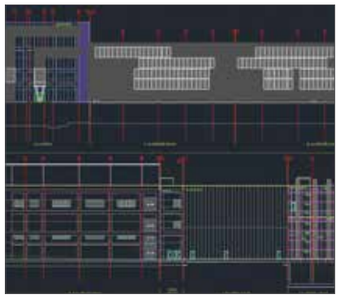
GALVANIZING

Galvanized steel is protected against erosion and has a very wear - and shock - resistant protective layer. Thermal galvanization provides a thick, even layer all over the panels. Small damage to a depth of about 3 millimetres will not affect the life of galvanized panels.

Thermal galvanizing involves immersing steel in a low-grade liquid zinc at 450 °C. This protects all exterior and inner areas of the structure equally. The steel and zinc bond together to form a galvanized alloy sealed by a layer of pure zinc. Galvanized products are very durable, almost maintenance-free and offer maximum protection at a minimal cost. Galvanized steel can be used outside and can be coated in any colour.

SERVICES





DESIGN

ANB Metal provides unique design services to architects, contractors and project owners in architectural projects that can ensure a successful progress in the projects.

Projects can be completed smoothly with rational designs, taking into account efficiency and cost-effectiveness, which saves costs for your project.

Our well-organized development processes, in addition to providing ease of communication and cooperation, enable the parties involved in the project to anticipate potential risks and defects therefore provide immediate solutions.

ENGINEERING

The engineering team of ANB Metal is one of our powerful departments that provides unique system solutions for complex architectural projects.

This helps to optimize the production stages to provide users with premium metal products and helps them complete safe installations with trouble-free development.

Our customers are diverse, including contractors, architects, designers, engineers and project owners.

ANB Metal, has a wide knowledge of design, engineering, manufacturing and assembly, as well as experience in all aspects of a project. Our engineering team can provide projects with cost-effective solutions to minimize the cost of building keeping high quality standards.

INSTALLATION

Conduct a site assessment and work with the design team to develop detailed plans and specifications. Fabricate the panels to the required dimensions and specifications, then prepare the installation site by ensuring it is clean, level, and free of debris. Install the panels according to the plans using appropriate attachment methods, ensuring that each panel is securely attached and aligned correctly.

Periodically inspect and maintain the panels to ensure they function as intended and remain free of defects. It is important to note that the specific steps for panel installation may vary depending on the project requirements and materials being used, so consult with a professional installer or contractor for guidance and assistance.

MANUFACTURING

CNC BENDING

Bending sheet metal makes it possible to create a wide variety of part geometries. The angle and location of the bend can be precisely controlled, multiple bends can be placed closely in relation to each other and in different directions to create multi-bend shapes, enclosures, brackets and a variety of parts, and normally without any investment in custom tooling. This results in a high level of flexibility to create almost any shape required quickly, especially when paired with ANB Metal laser cutting service.

MEASURING AND CUTTING

The required mesh sizes in both directions are obtained directly in the cutting sections. Angled cutting makes it possible to produce the shapes envisioned in the project drawings. Even in the case of mesh with a module larger than 100 mm, we are able to ensure image integrity. We highly recommend working on half or full mesh to keep this integrity.

MATERIALS & FINISHES

We are able to manufacture expanded metal and perforated metal from aluminum, mild steel, galvanized or stainless steel, titanium, nickel, copper, corten.

We help you determine the best surfaces and colors for indoor or outdoor use. You can choose any surface coatings such as eloxal or powder coating. We manage the finishing of your parts, ensuring an exact match with the color you have chosen.

LASER CUT

As we have invested in high-tech laser cutting methods for fast and precise melting and burning of metals. Using the latest software and engineering technology, our professional team can arrange the tailoring and delivery of your order exactly according to your specifications.

CURVING

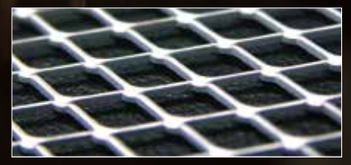
Sheets of expanded mesh can be curved to specification, bearing in mind the stiffness of the mesh module. Some of the thinner types of mesh can even.

TRIMS

Panels can be created from expended mesh by adding special borders, which can also be used to fix the panels to the underlying structure.

ROLLS & PANELS

Rolls and panels being available in stock, we are able to produce expanded metal and perforated metal according to customer requirements.



FLATTENING

Certain types of mesh can be “flattened”, i.e. completely rolled flat after expansion, thus returning to the original thickness of the raw material.

WELDING

We have the ability to efficiently and consistently produce high-quality welding.

ARCHITECTURAL EXPANDED METAL MESH FACADE CLADDING PANELS

Expanded metal mesh is highly versatile and ideal for creating a contemporary facade, offering a striking transformation in renovations and new constructions alike.

The cladding is typically made from metal sheets ranging from 1.5 to 3.0 mm in thickness, and the individual design of the panel is shaped according to the chosen material. The 'eyes' of the expanded mesh are a critical factor to consider in the design process.

These flexible metal patterns can be used to enhance the shape of a building and can be modified to achieve unique and stunning visual effects. Transparency and the light captured in the perforations can create extraordinary enhancements on the facade.

The production process of expanded metal mesh provides a material with three-dimensional quality. It can be fully opaque from one angle and transparent from another.

In addition to its aesthetic qualities, expanded metal mesh is very durable and flexible enough to be used in metal manufacturing and structures. However, additional support may be needed to act as a solution to prevent falls.

Options

Design
The design of the mesh pattern ultimately depends on the shape of the tool used in the expansion process. The shape can be square, diamond, or hexagonal, and each hole has its own visual characteristics for design and architectural use. Depending on the desired aesthetic, framing and fixing systems are also available to support expanded meshes.

Transparency
Translucency or transparency is the fundamental function of expanded mesh. A mesh pattern with larger openings can create visual effects that allow a view of the underlying surface. Mesh patterns with smaller openings are often used as brise soleil to protect buildings from the sun.

Shading and Ventilation
Expanded metal panels can provide "smart" sunshades to reduce the heat and glare generated by the sun. Adjustable screens allow for flexibility, enabling you to adjust the shading according to the building's needs at different times of the day. Different models also provide various open ventilation areas, which can be critical for plant screening or ventilation requirements.

Finish
Aluminum continues to be widely used in numerous architectural applications. The selection of the appropriate thickness will depend on the intended use and the loads expected to be supported. Powder-coated and anodized surfaces are available; contact us to discuss your requirements.

Benefits

Option
There is a wide variety of mesh patterns available. These can be edged in various different surfaces including powder-coated or anodized, and can be curved and folded. Send us a drawing or picture of what you're trying to achieve; let's work together to design the most suitable solution.

Economic
During the production of expanded metal mesh, very little waste product is generated, making it a more cost-effective solution compared to perforated sheet metal. The unique structure of the mesh (being a single piece) makes it lightweight but also stronger than other materials of the same weight.

Recyclable and Sustainable
At the end of its long lifespan, expanded metal mesh can be easily disposed of and is 100% recyclable. Additionally, it can be dismantled and recoated, thus extending its usability.

Versatile
Expanded metal mesh, offering easy workability and a wide range of shape options, can be adapted to fit most applications and easily combined with other materials such as glass, natural metals, and natural stone.

WHY YOU SHOUL PREFERE EXPANDED METAL MESH FOR CLADDING?

Protection against excessive heat during the summer months, ensuring a healthy indoor climate.

Scattered sound reflection helps to redirect urban noise emissions.

Glare protection.

Optimal utilization of daylight.

Smart shading solutions that match your overall architectural style, with a wide range of textures, finishes, and colors.

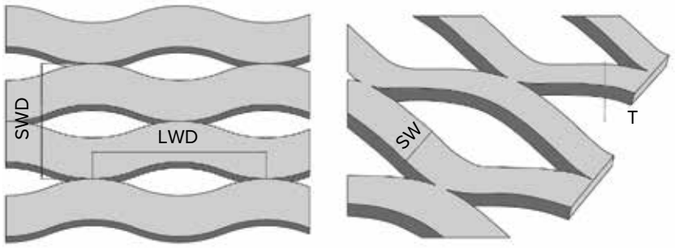
Smart shading solutions

Provides privacy and light to building occupants. Has a noise-reducing effect on road traffic.

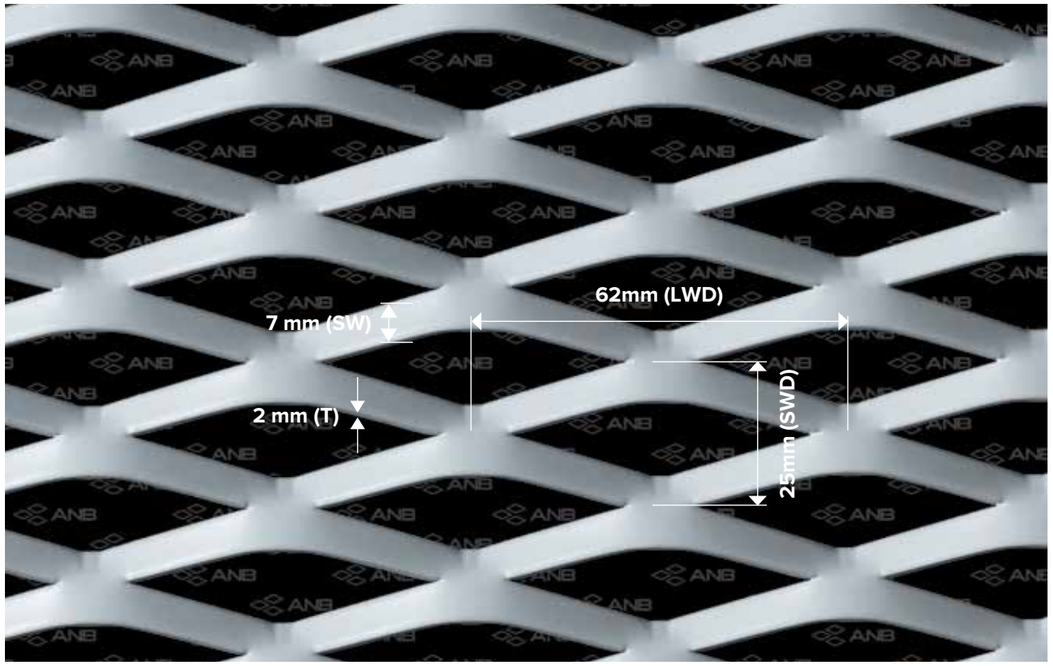
It is an environmentally friendly, low-cost building material.

They easily meet all energy-related building standards.

MESH DEFINITION



LWD : Longway dimensions
SWD : Shortway dimensions
SW : Strand width
T : Thickness



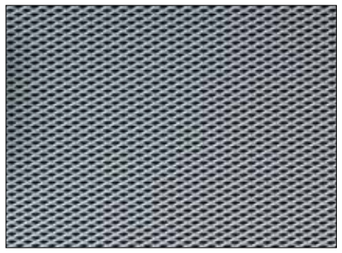
25 x 62 x 2 x 7

↓ ↓ ↓ ↓

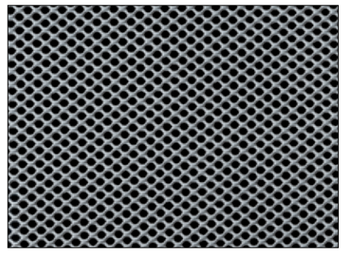
SWD x LWD x T x SW

MESH DIMENSIONS

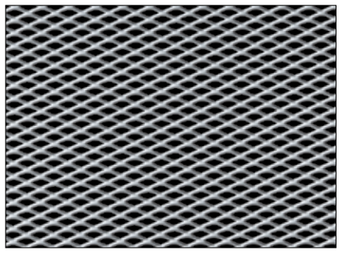
We have parametric 3D files for all pattern types of Expanded Metal Mesh, allowing you to visualize it before actually having it. Additionally, we provide all the basic details of each system in 2D format.



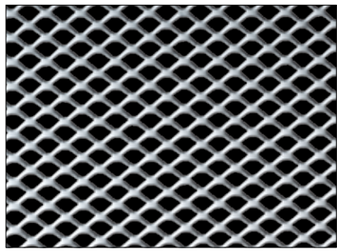
Hawana
5.00 x 10.00 x 1.50 x 1.50 mm



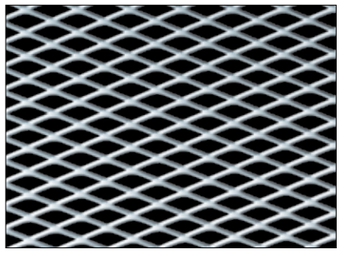
Viena
7.00 x 10.00 x 2.00 x 2.00 mm



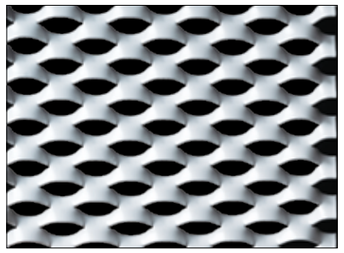
Lisbon
8.00 x 16.00 x 1.50 x 2.00 mm



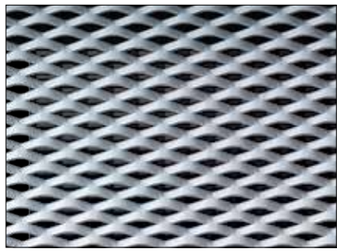
Oslo 20
15.00 x 20.00 x 2.00 x 3.00 mm



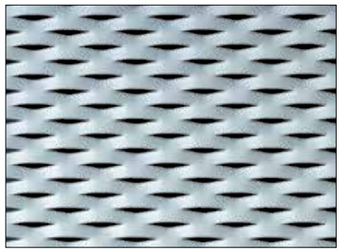
Moscow 30
12.00 x 30.00 x 2.00 x 3.00 mm



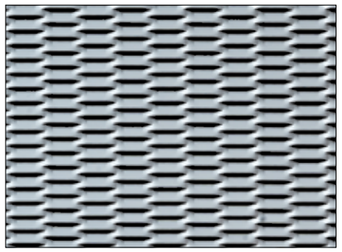
Milan
24.00 x 40.00 x 2.00 x 8.00 mm



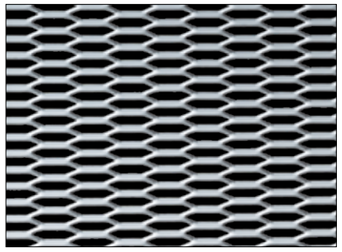
Bern
14.00 x 28.00 x 2.00 x 5.00 mm



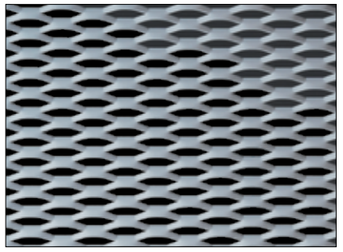
Kopenhag
18.00 x 42.00 x 2.00 x 8.00 mm



Baku
8.40 x 45.00 x 1.50 x 3.50 mm

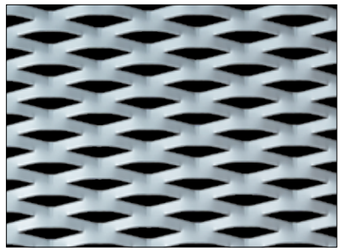


Berlin 45
9.64 x 45.00 x 2.00 x 2.60 mm



Sofia
13.40 x 45.00 x 2.00 x 5.00 mm

Ibiza
13.00 x 62.00 x 2.00 x 4.00 mm



Dubai
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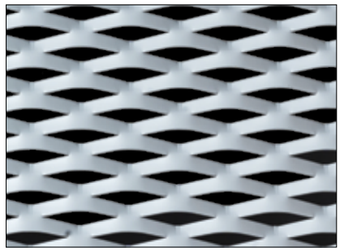
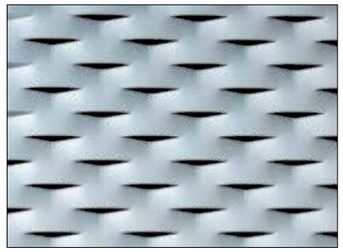


Warsaw
25.50 x 62.00 x 2.00 x 9.00 mm



Amsterdam 62-14
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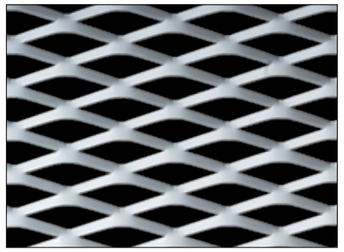
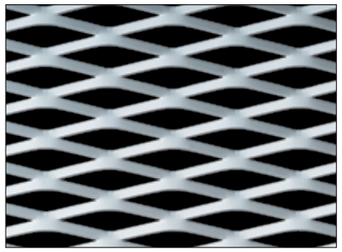
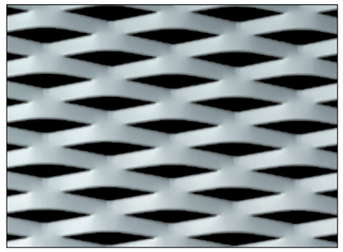


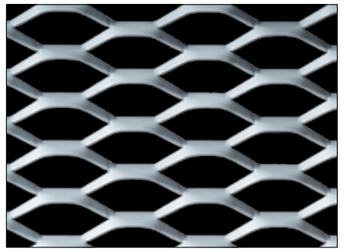
Amsterdam 62-7
25.00 x 62.00 x 2.00 x 7.00 mm



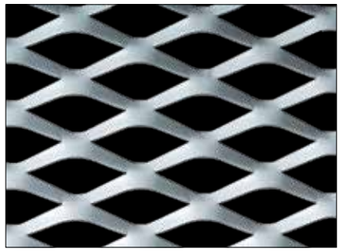
Tokyo 75-10
25.00 x 75.00 x 2.00 x 10.00 mm



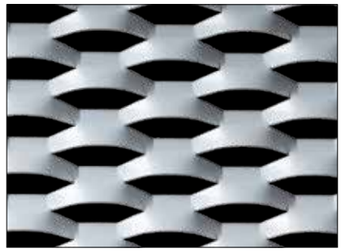
Tokyo 75-10
25.00 x 75.00 x 2.00 x 10.00 mm



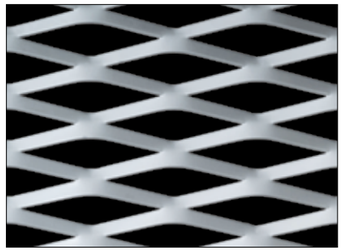
Beijing 85-7
28.00 x 85.00 x 2.00 x 7.00 mm



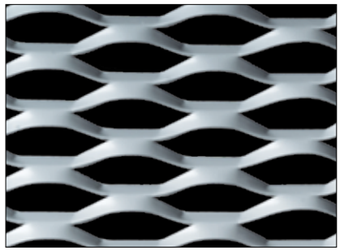
Sydney 75-10
35.00 x 75.00 x 2.00 x 10.00 mm



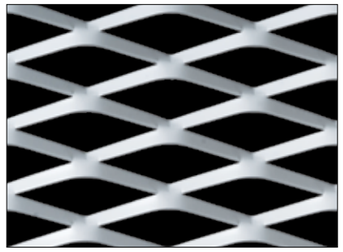
Beijing 85-12
32.00 x 85.00 x 2.00 x 12.00 mm



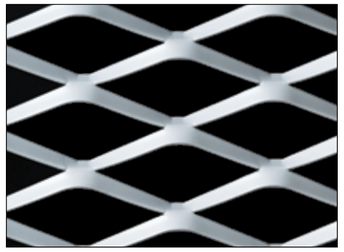
Rome 100-10
33.00 x 100.00 x 2.00 x 10.00 mm



Boston
34.00 x 100.00 x 2.00 x 10.00 mm

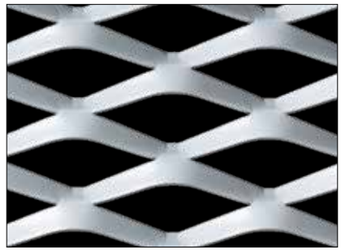


Miami
40.00 x 100.00 x 1.50 x 10.00 mm

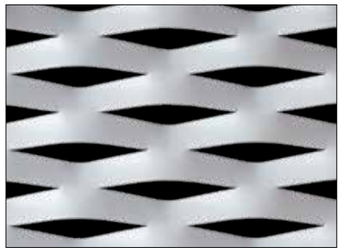


New York 115-10
50.00 x 115.00 x 2.00 x 10.00 mm

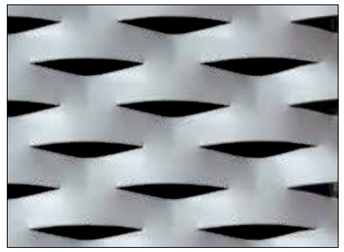
Paris 150
70.00 x 150.00 x 2.00 x 15.00 mm



New York 115-15
50.00 x 115.00 x 2.00 x 15.00 mm

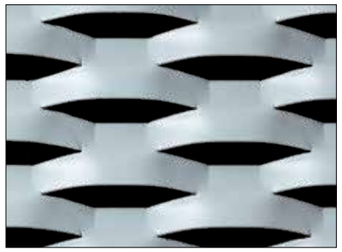


New York 115-20
50.00 x 115.00 x 2.00 x 20.00 mm

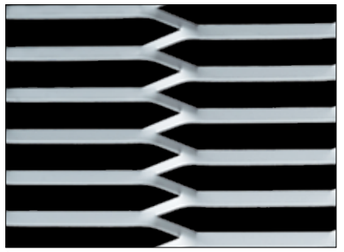


Cyprus
52.00 x 115.00 x 2.00 x 24.00 mm

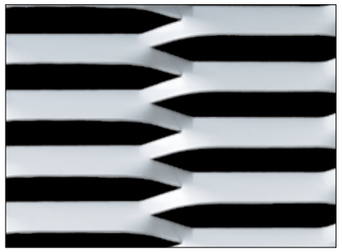
Montenegro
25.00 x 225.00 x 2.00 x 12.00 mm



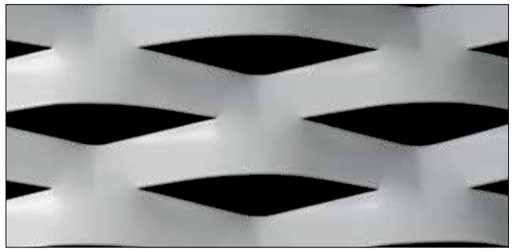
Montreal
54.00 x 160.00 x 1.50 x 21.00 mm



İstanbul 225-7
25.00 x 225.00 x 2.00 x 7.00 mm

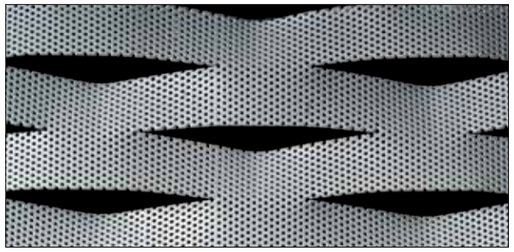


istanbul 225-12
32.00 x 225.00 x 2.00 x 7.00 mm



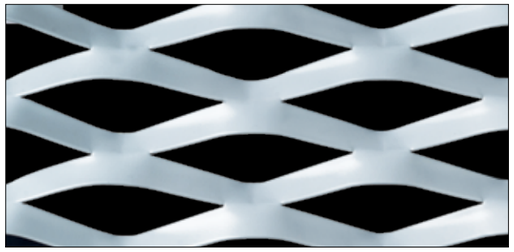
Kyiv 200-35
78.00 x 200.00 x 2.00 x 35.00 mm

Kyiv 200-25
78.00 x 200.00 x 2.00 x 25.00 mm

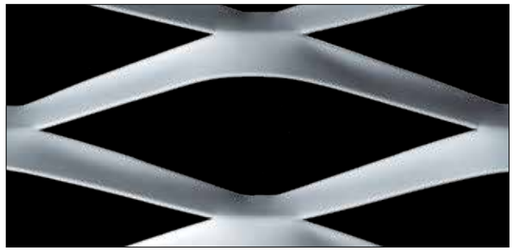


Prague 200
78.00 x 200.00 x 2.00 x 35.00 mm

Madrid
90.00 x 250.00 x 3.00 x 25.00 mm



London 160
60.00 x 160.00 x 2.00 x 20.00 mm



Rio 300
100.00 x 300.00 x 2.00 x 30.00 mm

Expanded Metal Mesh Panel and System Combinations

SYSTEM GMA
SPECIAL U EXTERNAL WELDING
PAGE 20

SYSTEM GMB
SPECIAL U PROFILE INTERNAL WELDING
PAGE 22

SYSTEM GMC
LAMA EXTERNAL WELDING
PAGE 24

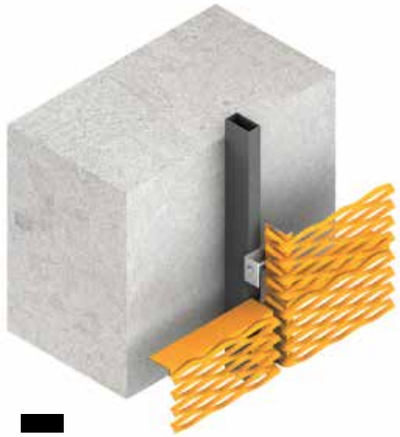
SYSTEM GMD
Z PROFILE INTERNAL WELDING
PAGE 26

SYSTEM GME
CROSS L PROFILE INTERNAL WELDING
PAGE 28

SYSTEM GMF
G PROFILE WELDING
PAGE 30

SYSTEM GMG
U PROFILE EXTERNAL WELDING
PAGE 32

SYSTEM GMH
U PROFILE INTERNAL WELDING
PAGE 34

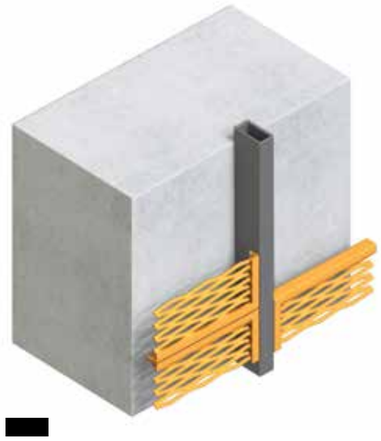


SYSTEM GMK
KEY DETAIL BENDED L PROFILE
EXTERNAL WELDING
PAGE 40

SYSTEM GML
FRAMELESS
PAGE 42

SYSTEM GMI
BOX PROFILE INTERNAL WELDING
PAGE 36

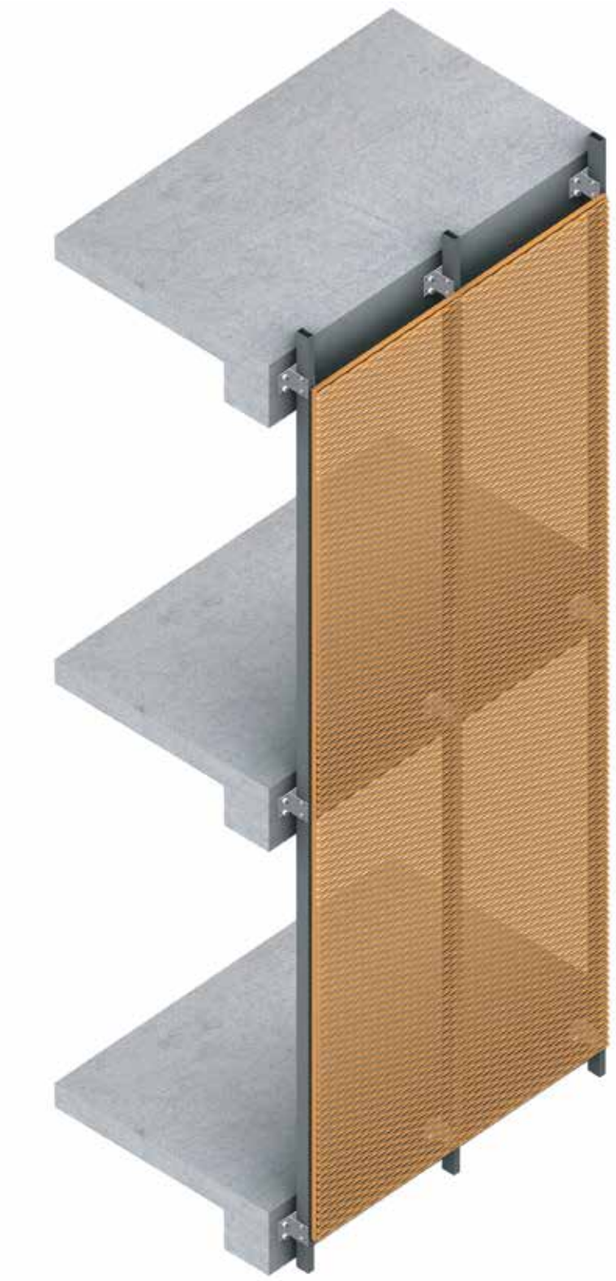
SYSTEM GMJ
KEY DETAIL L PROFILE EXTRNAL WELDING
PAGE 38



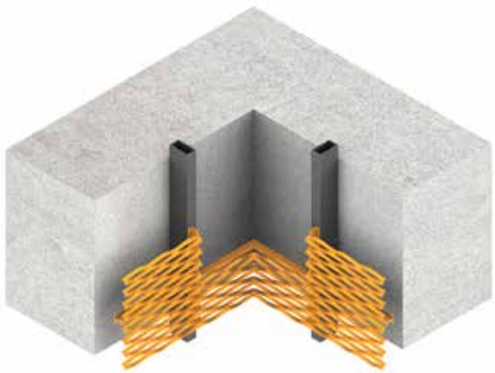
SYSTEM GMM
L PROFILE INTERNAL WELDING
PAGE 44

SYSTEM GMN
L PROFILE EXTERNAL WELDING
PAGE 46

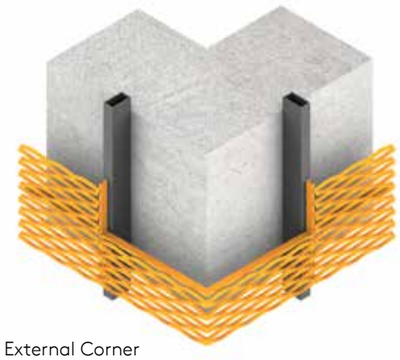
SYSTEM GMA
SPECIAL U EXTERNAL WELDING



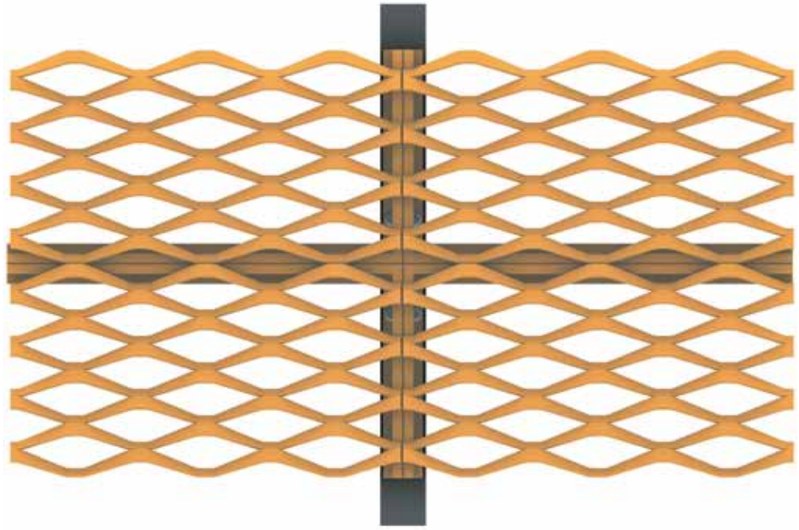
Cross-section



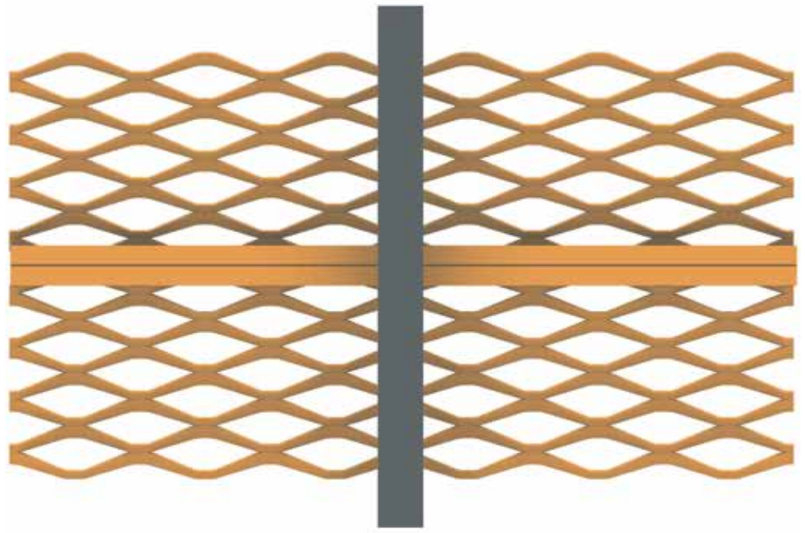
Internal corner



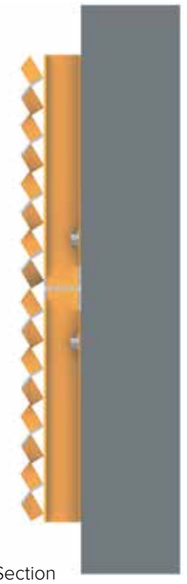
External Corner



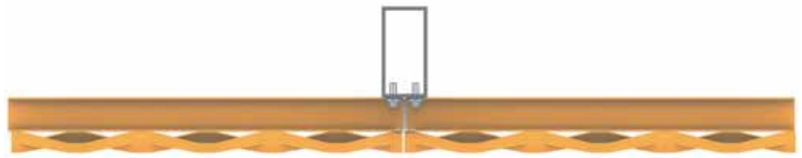
Front view



Rear view

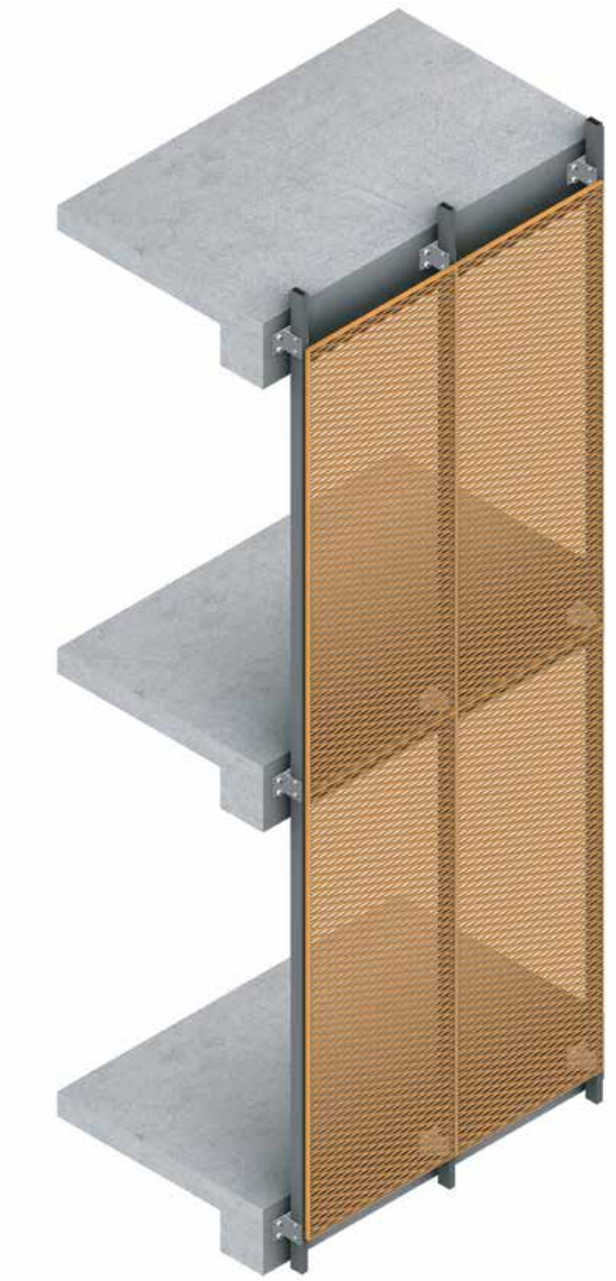


Section

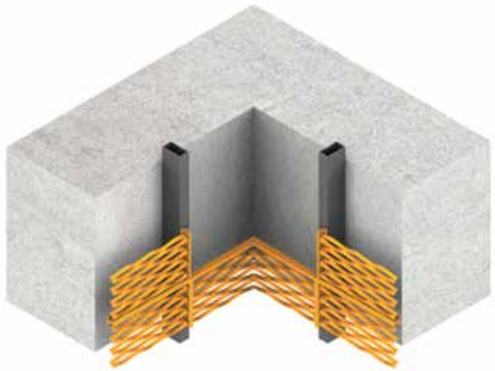


Top view

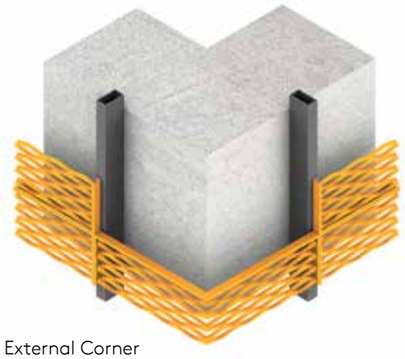
SYSTEM GMB
SPECIAL U PROFILE INTERNAL WELDING



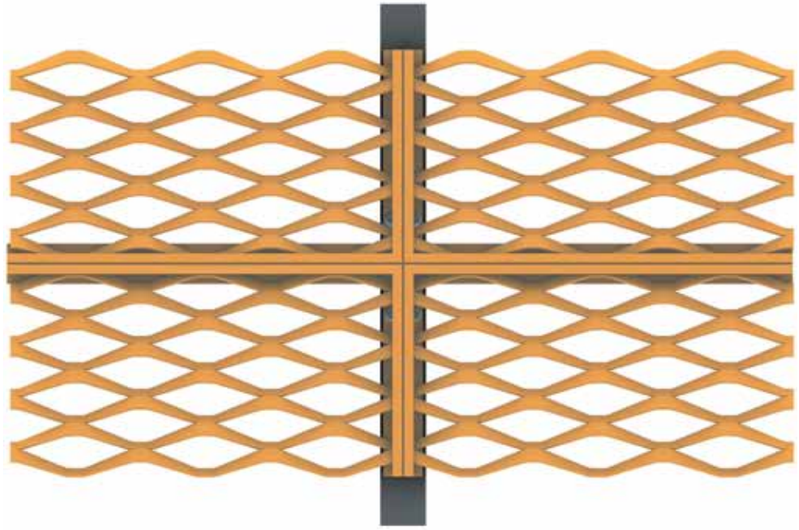
Cross-section



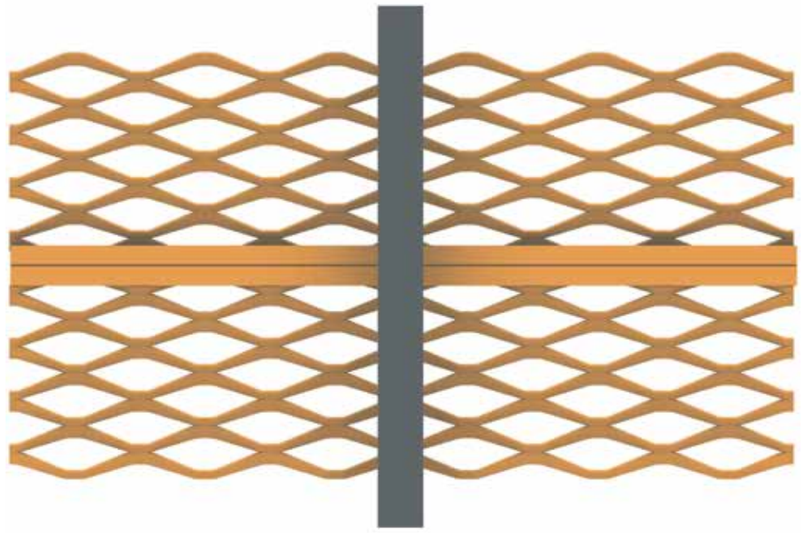
Internal corner



External Corner

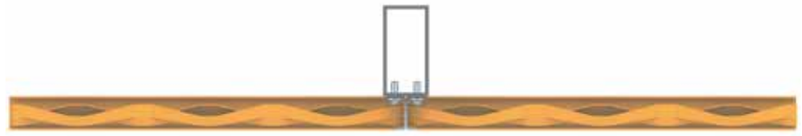


Front view



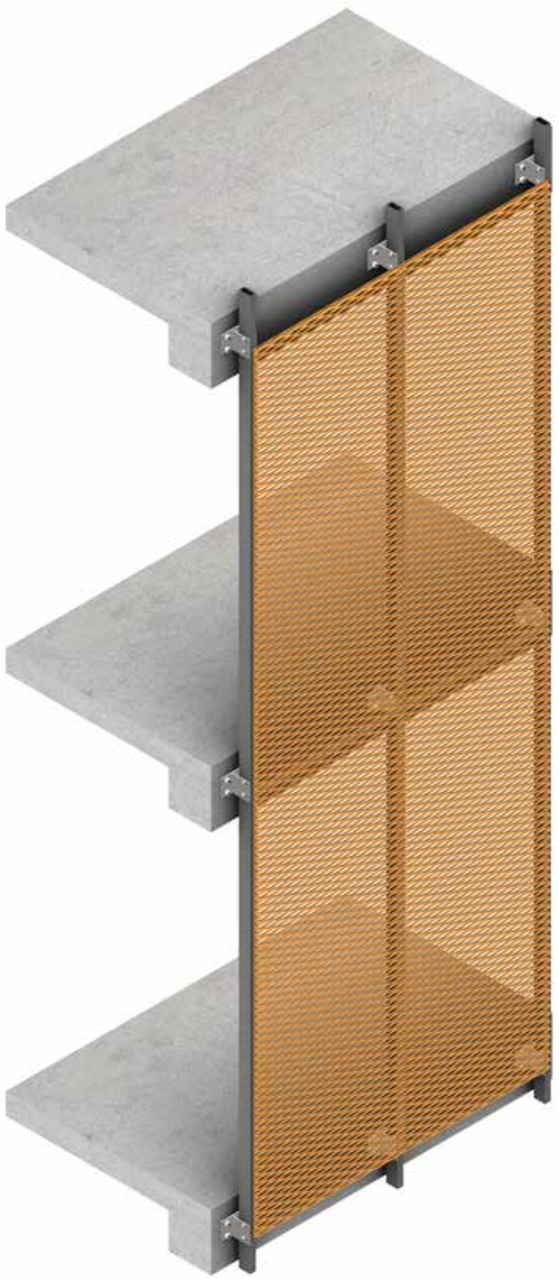
Rear view

Section

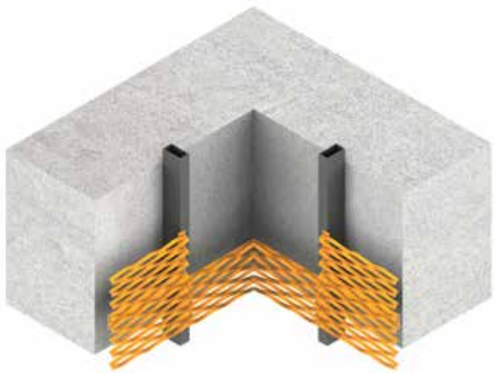


Top view

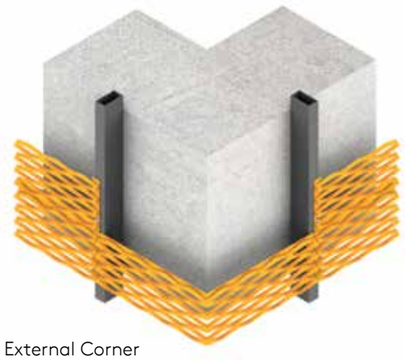
SYSTEM GMC
LAMA EXTERNAL WELDING



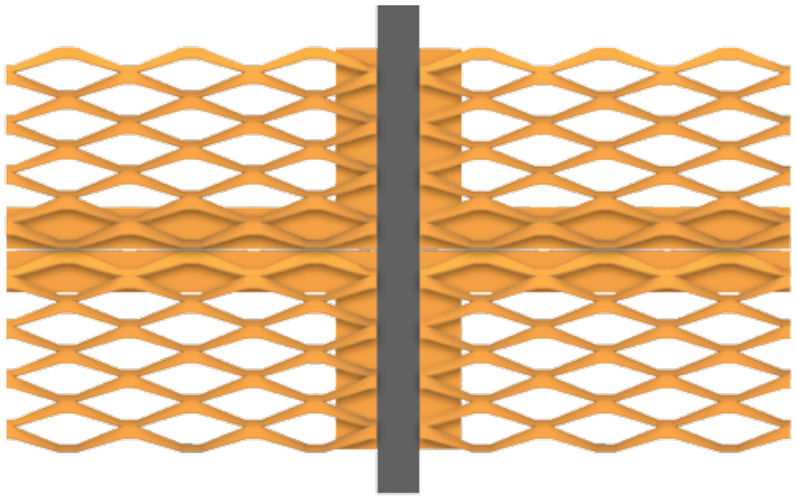
Cross-section



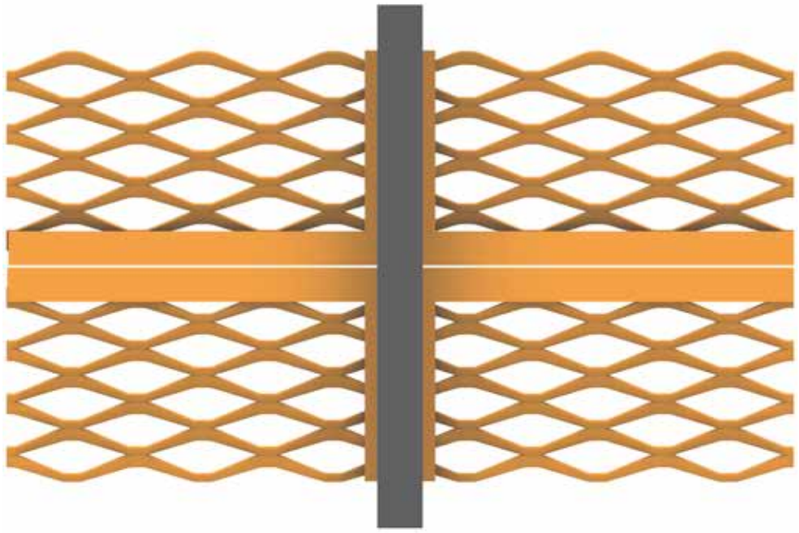
Internal corner



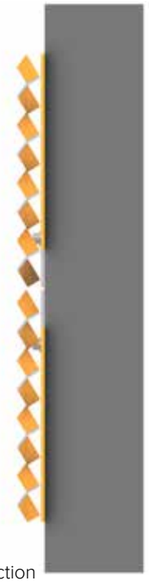
External Corner



Front view



Rear view

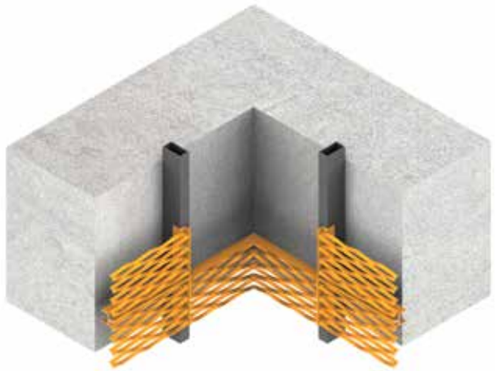


Section

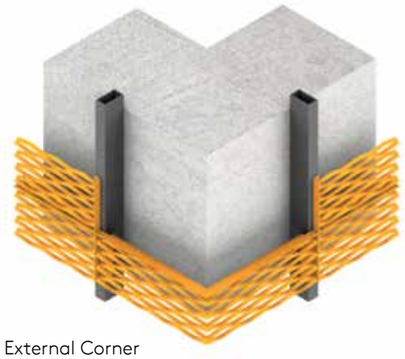
Top view

SYSTEM GMD
Z PROFILE INTERNAL WELDING

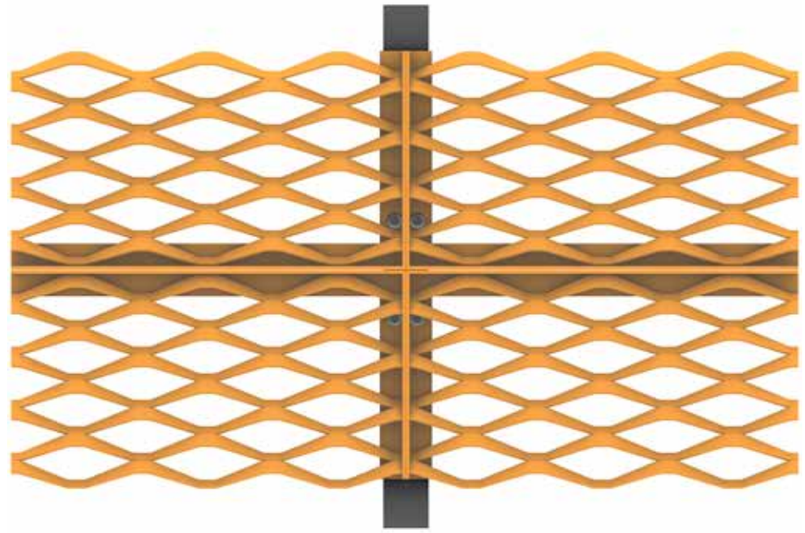
Cross-section



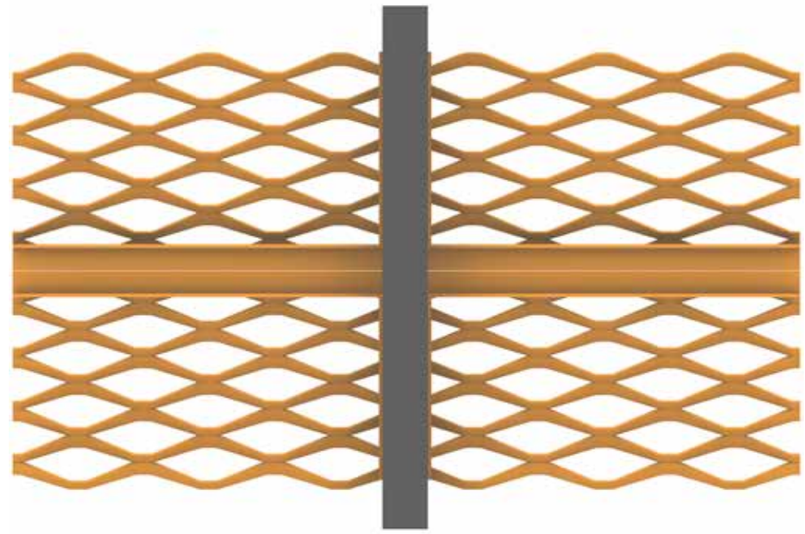
Internal corner



External Corner

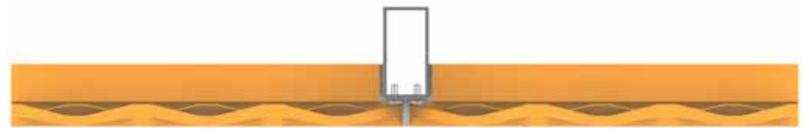


Front view



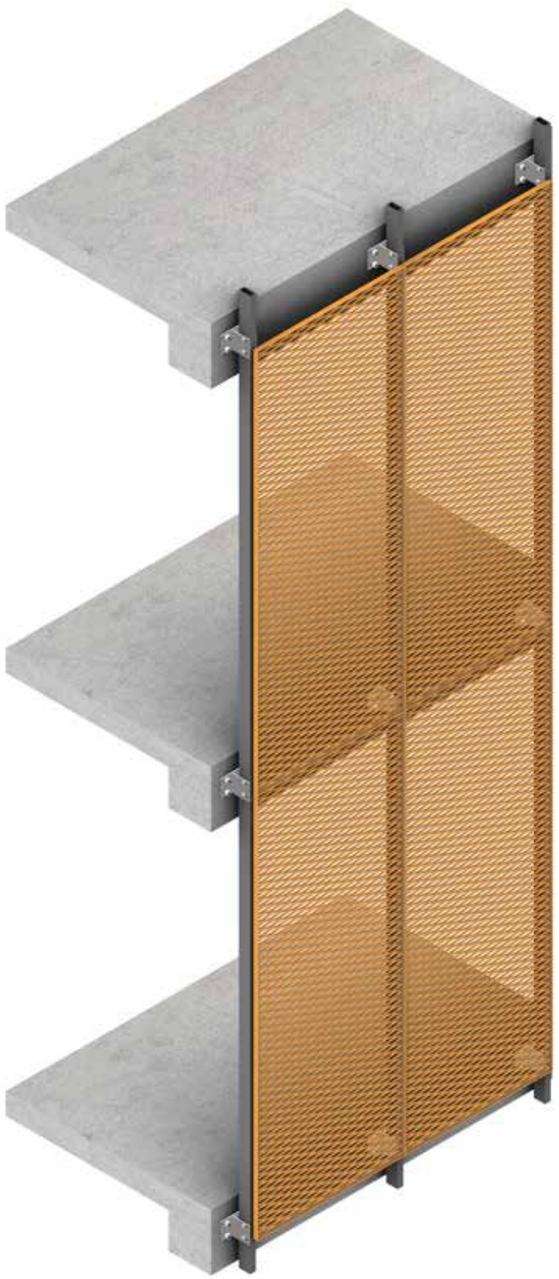
Rear view

Section

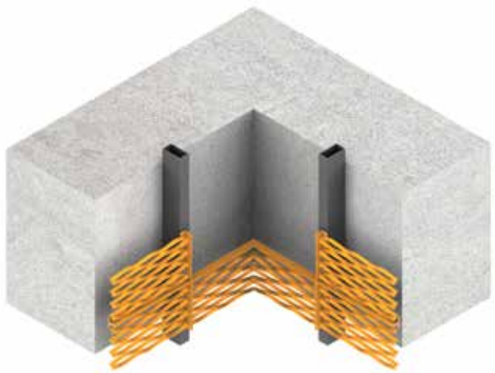


Top view

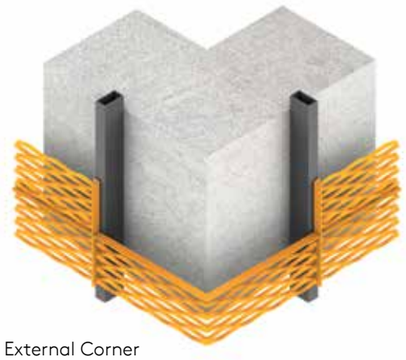
SYSTEM GME
CROSS L PROFILE INTERNAL WELDING



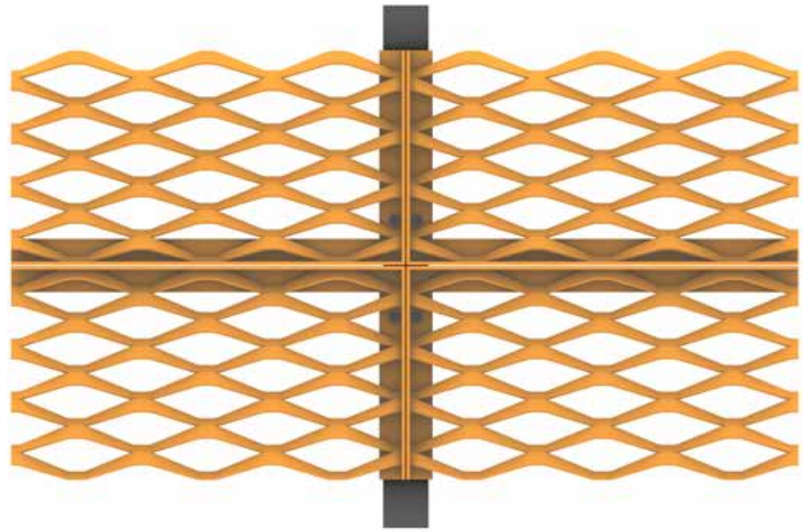
Cross-section



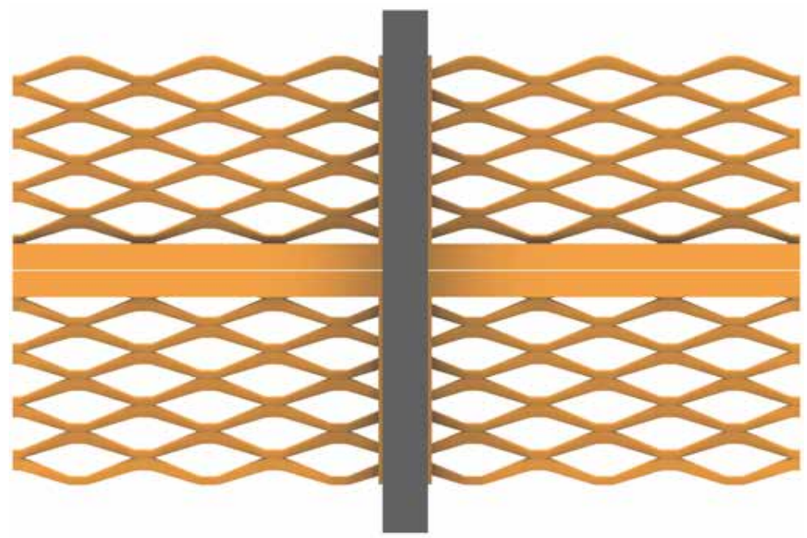
Internal corner



External Corner

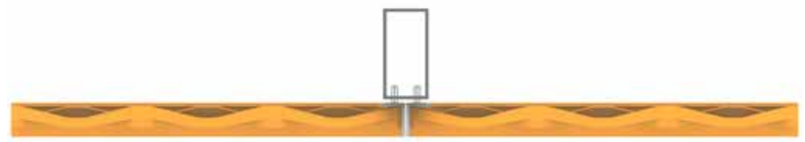


Front view



Rear view

Section

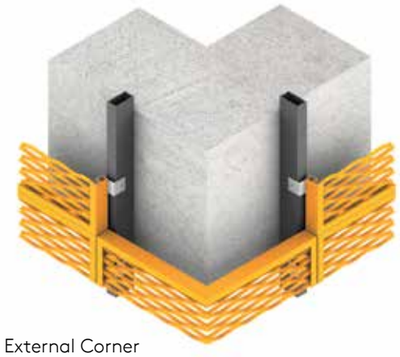


Top view

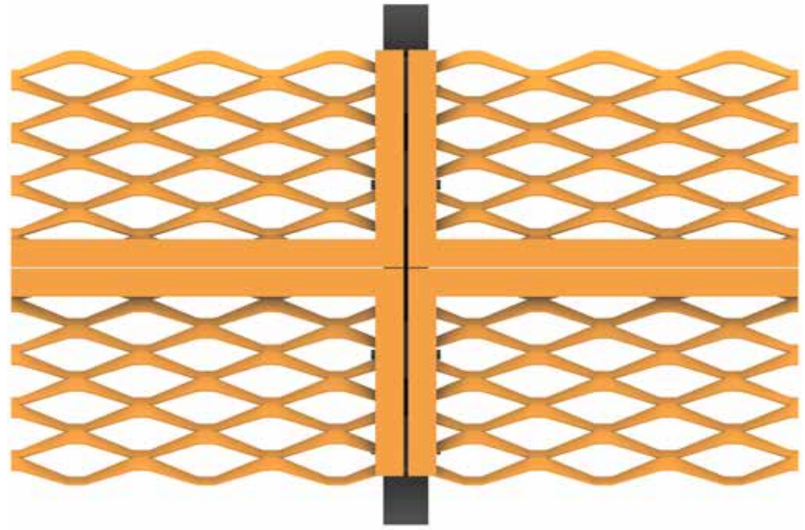
SYSTEM GMF
G PROFILE WELDING

Cross-section

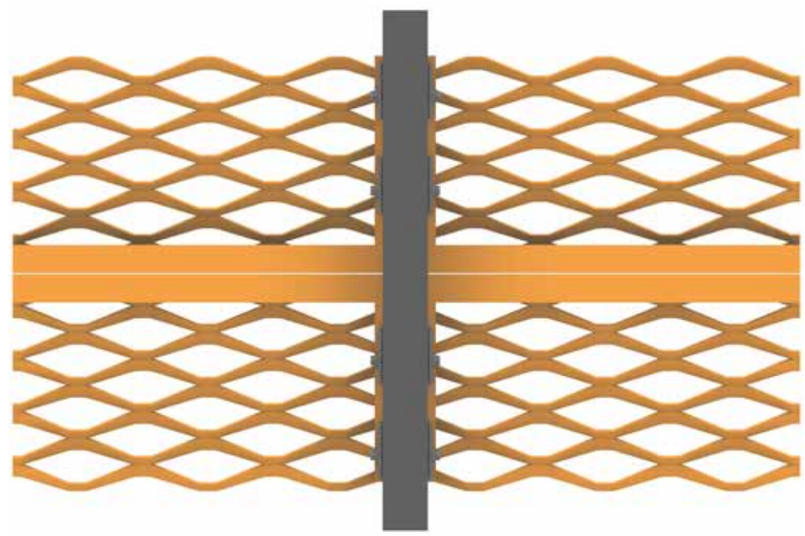
Internal corner



External Corner

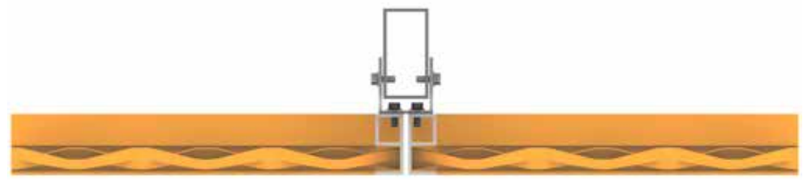


Front view



Rear view

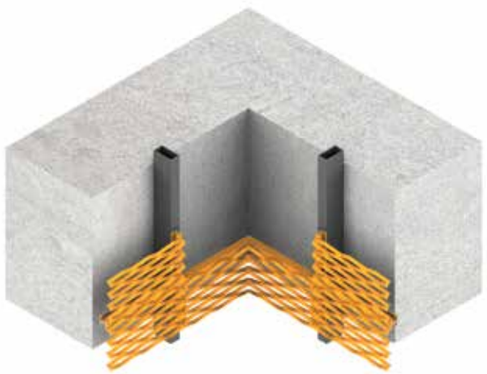
Section



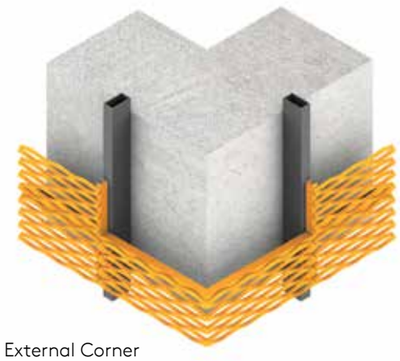
Top view

SYSTEM GMG
U PROFILE EXTERNAL WELDING

Cross-section



Internal corner



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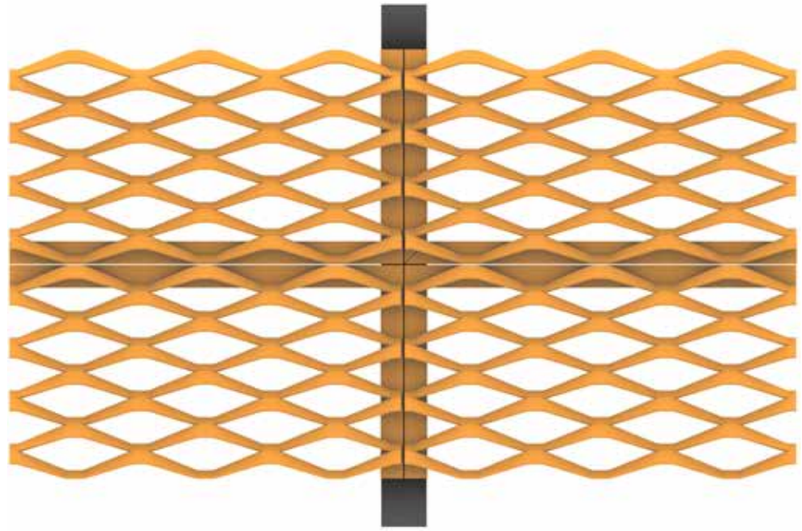
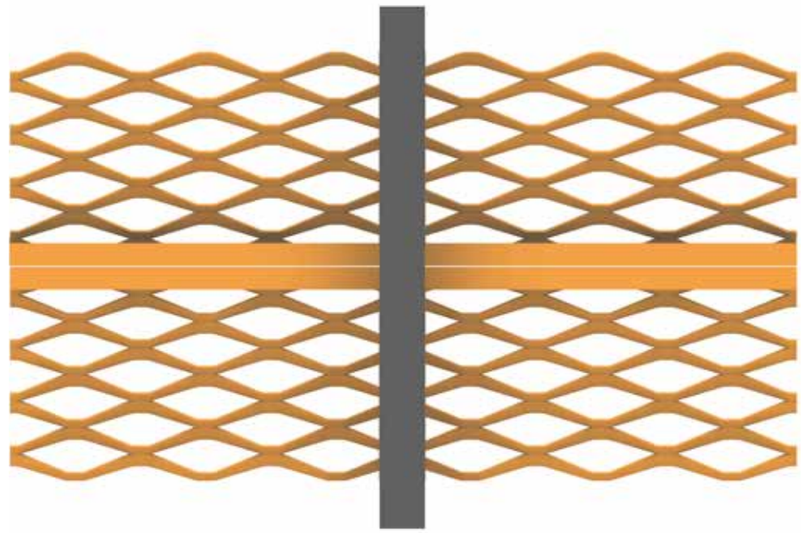
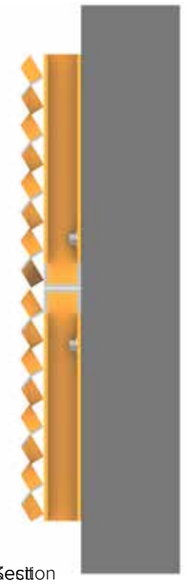


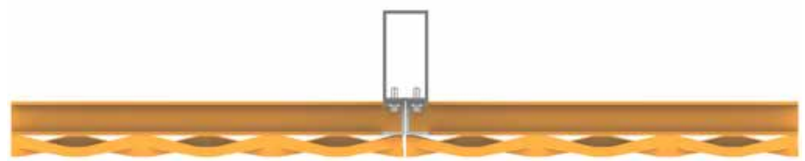
Front view



Rear view

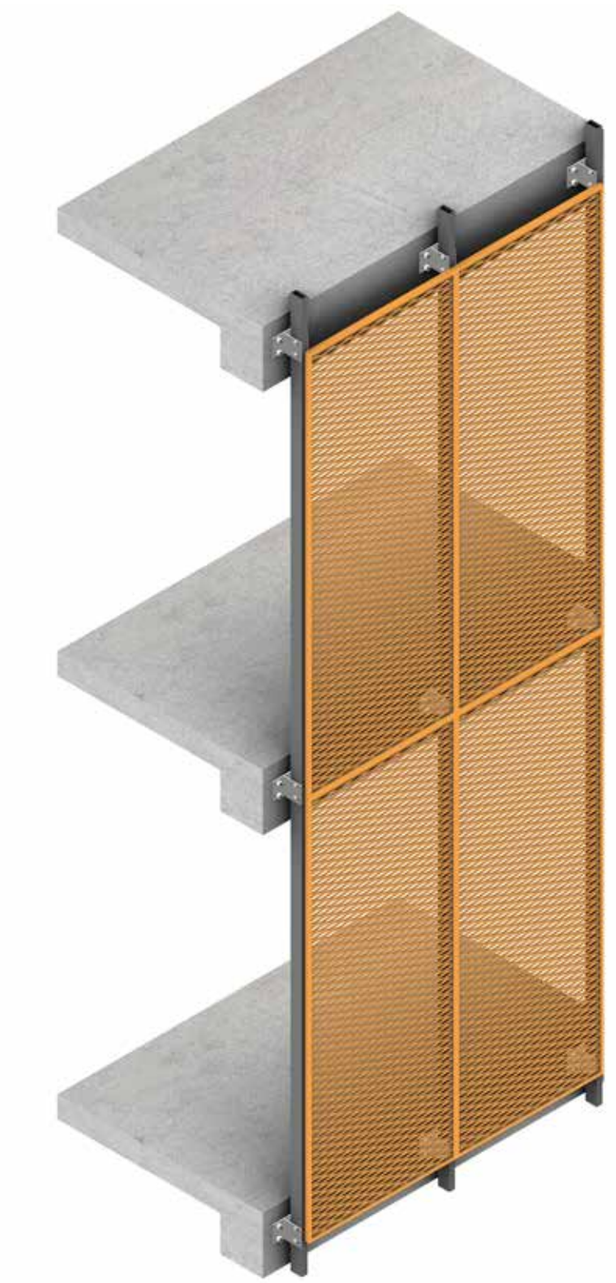


Section



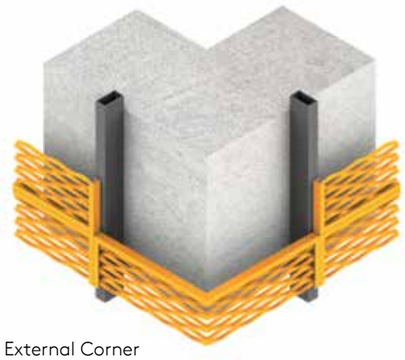
Top view

SYSTEM GMH
U PROFILE INTERNAL WELDING

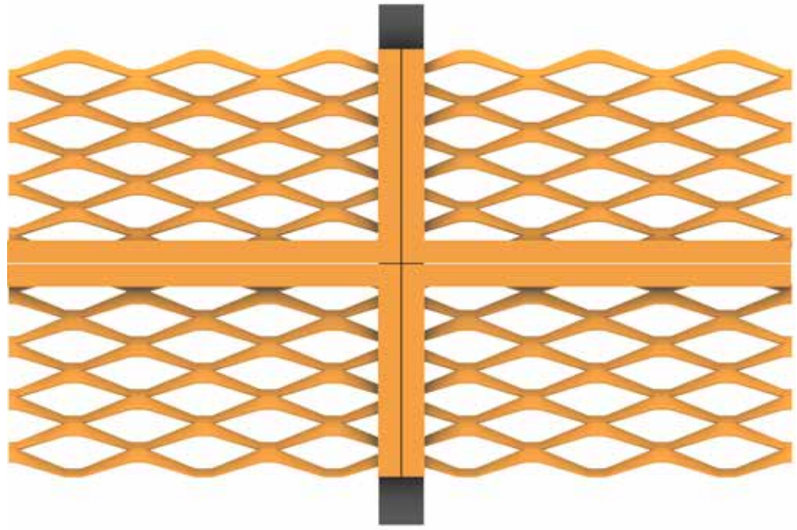


Cross-section

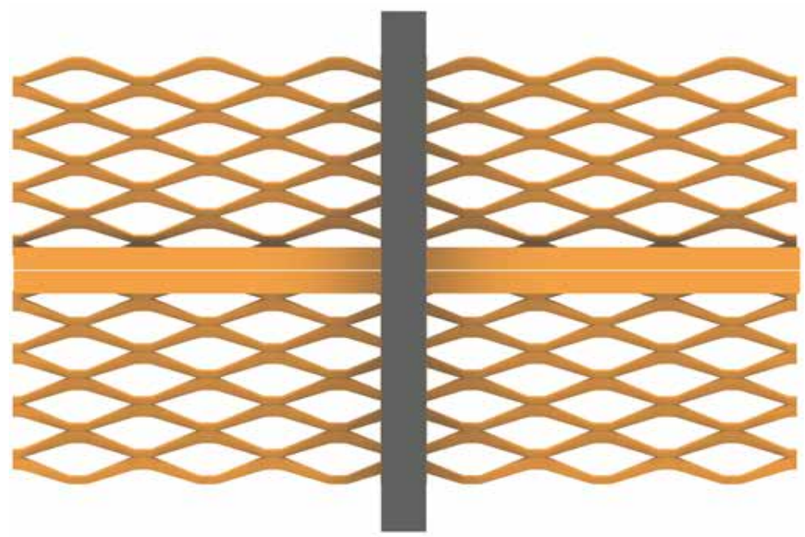
Internal corner



External Corner

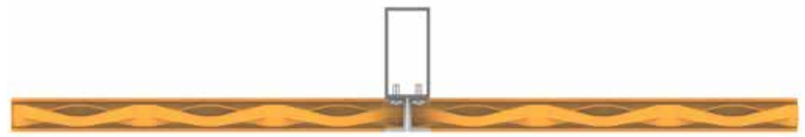


Front view



Rear view

Section

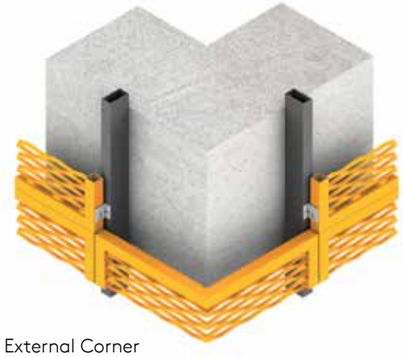


Top view

SYSTEM GMI
BOX PROFILE INTERNAL WELDING

Cross-section

Internal corner



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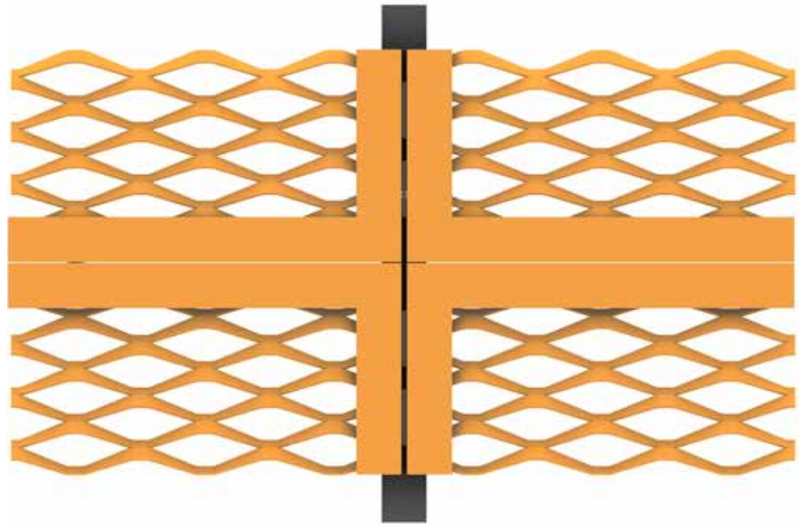
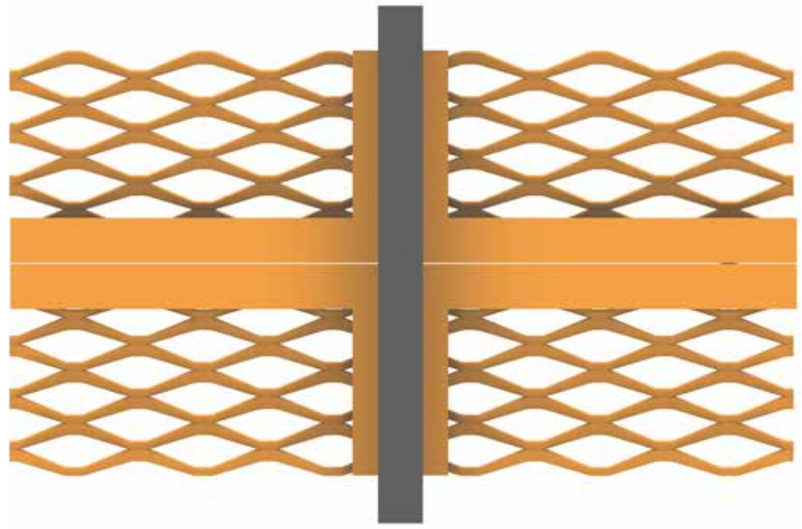
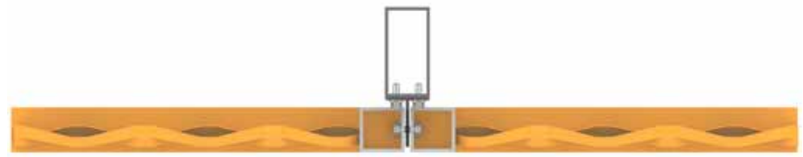


Front view



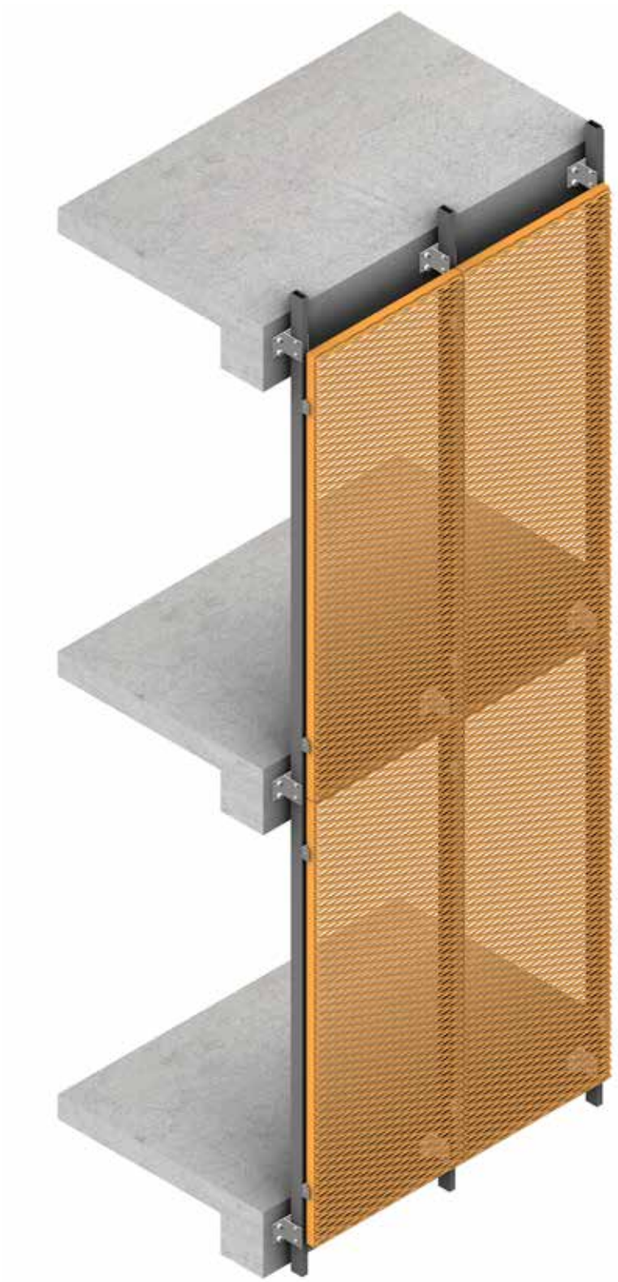
Rear view

Section

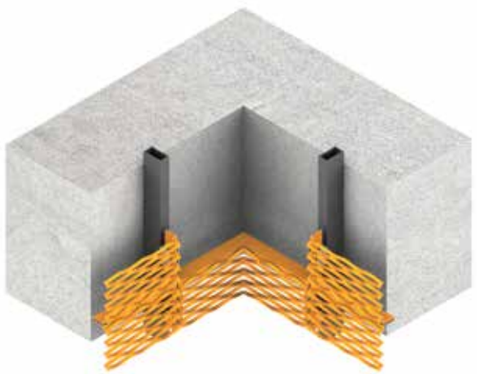


Top view

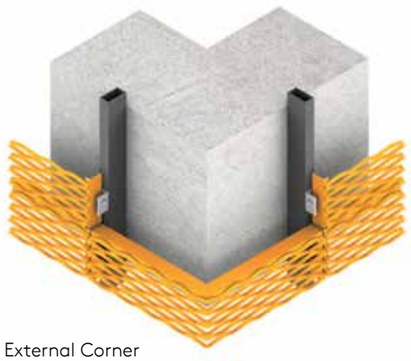
SYSTEM GMJ
KEY DETAIL L PROFILE EXTRNAL WELDING



Cross-section



Internal corner



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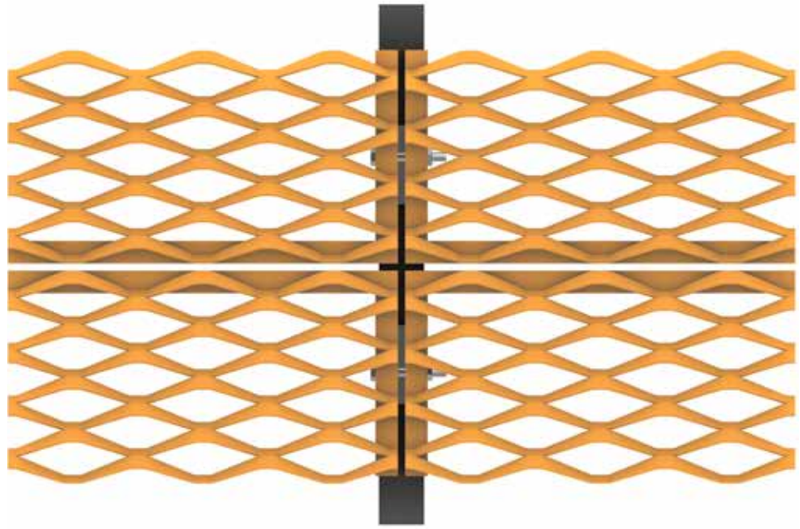
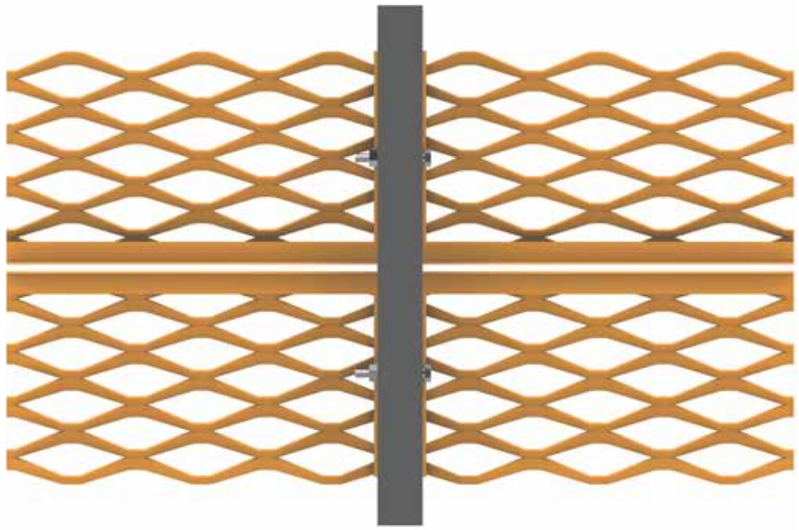
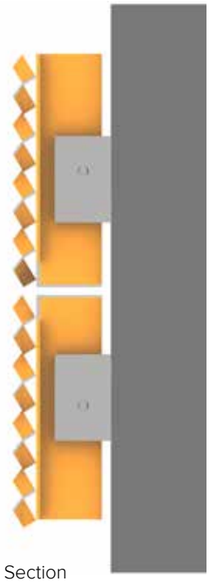


Front view



Rear view



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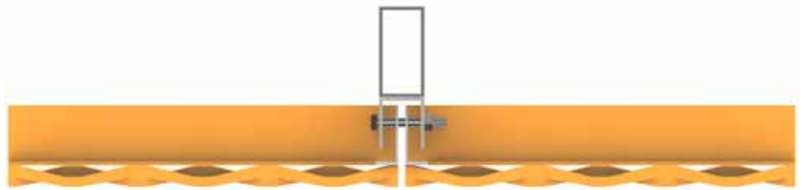
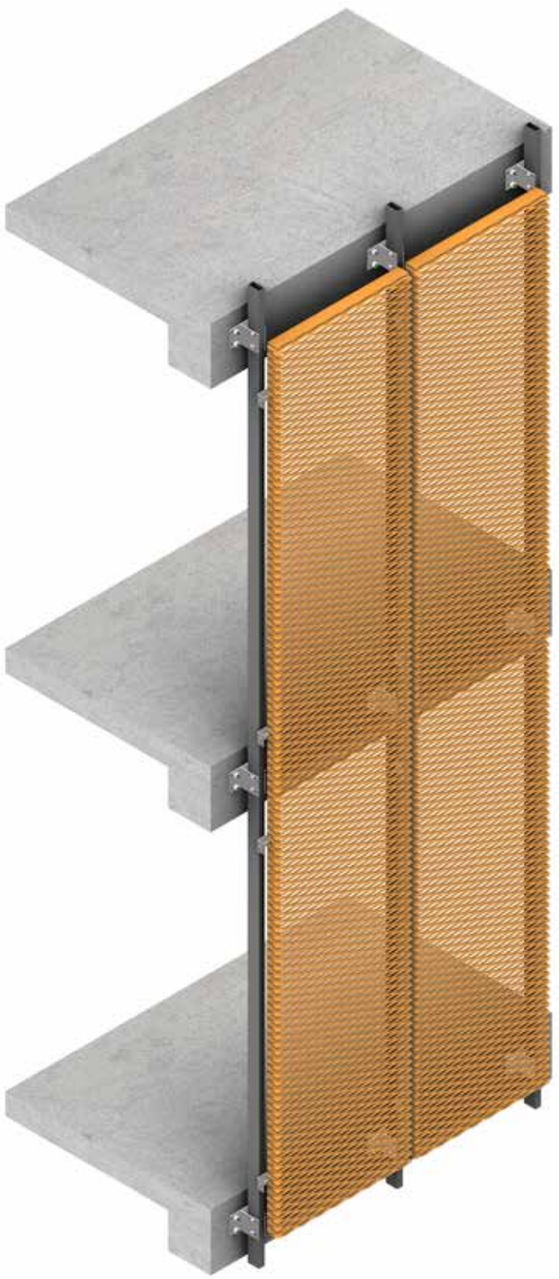
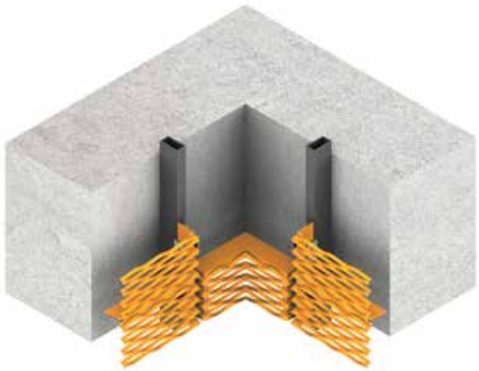


Top view

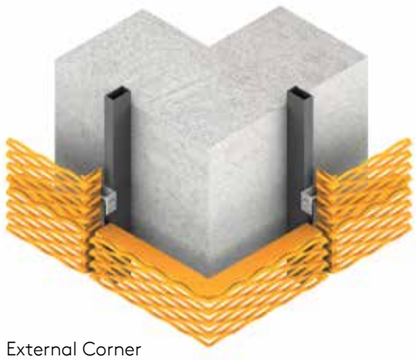
SYSTEM GMK
KEY DETAIL BENDED L PROFILE EXTERNAL WELDING



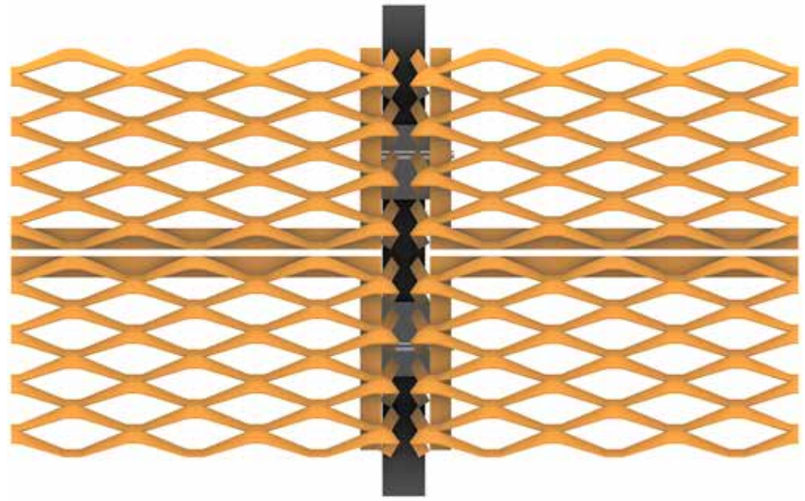
Cross-section



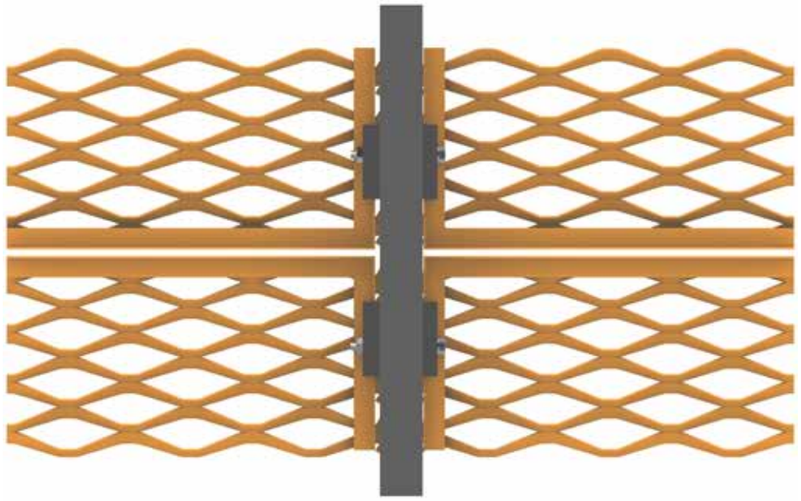
Internal corner



External Corner

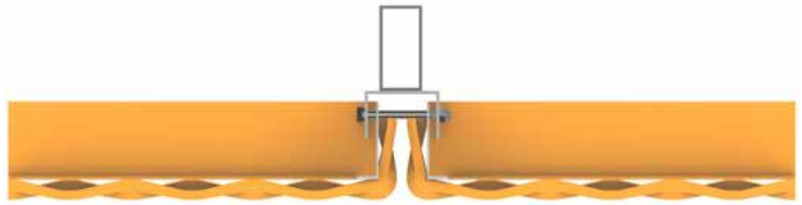


Front view



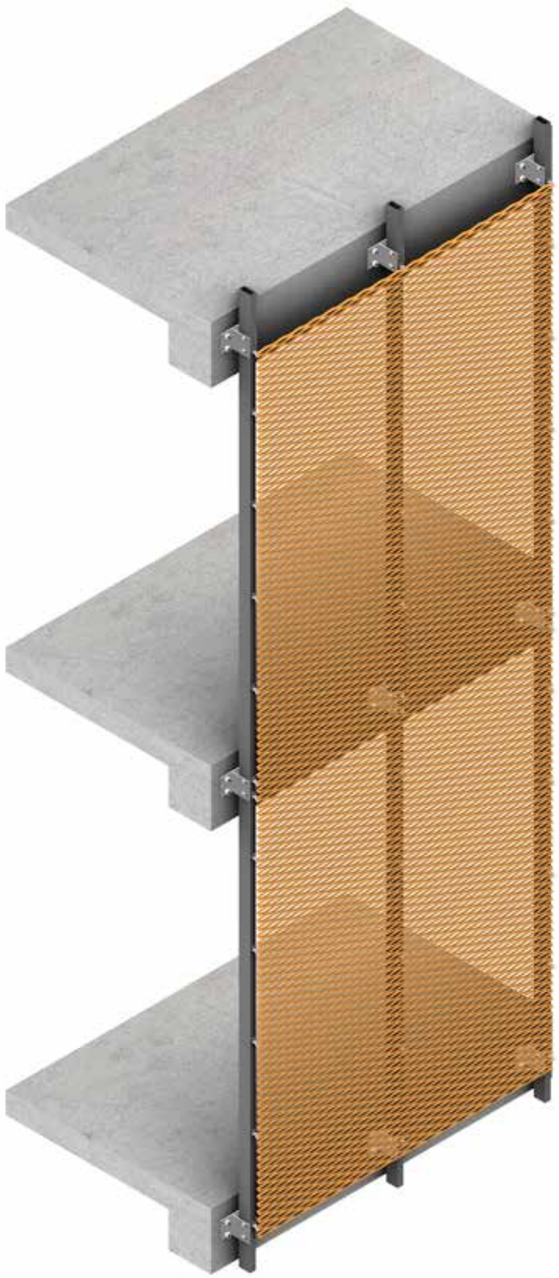
Rear view

Section

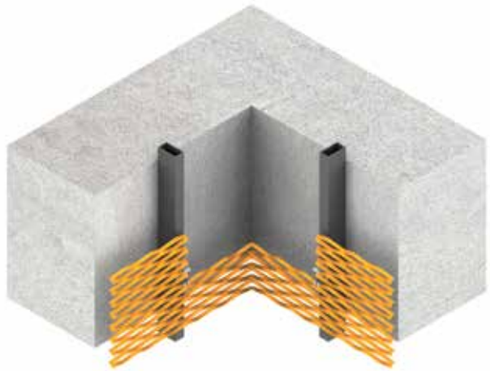


Top view

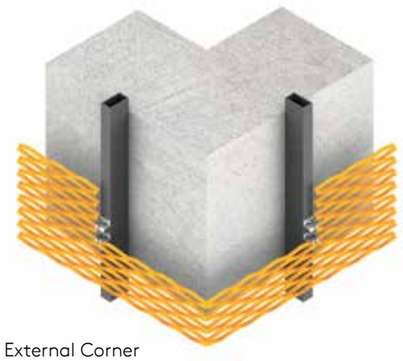
SYSTEM GML
FRAMELESS



Cross-section



Internal corner



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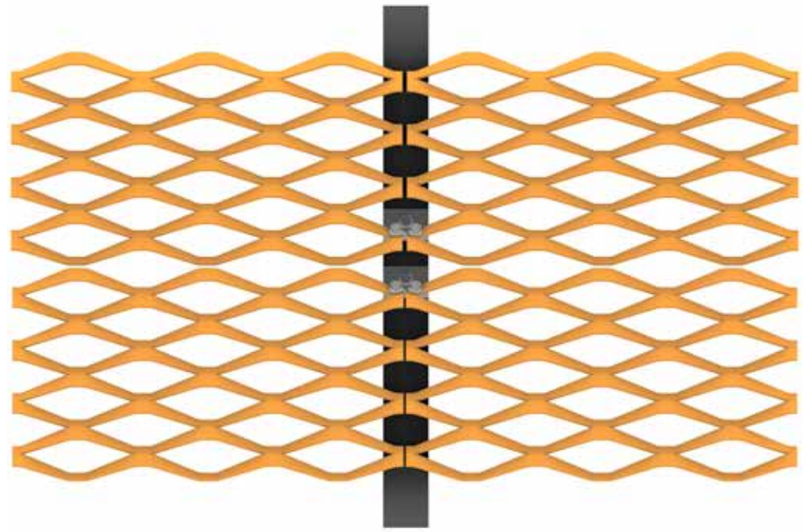
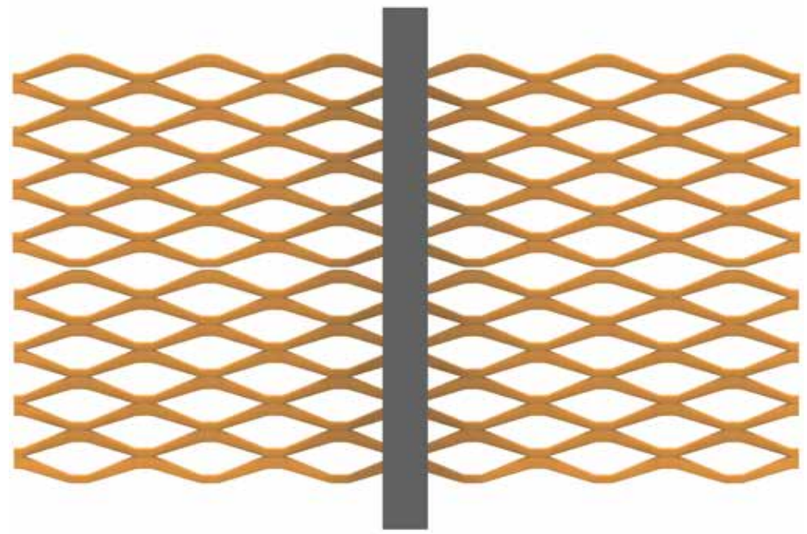
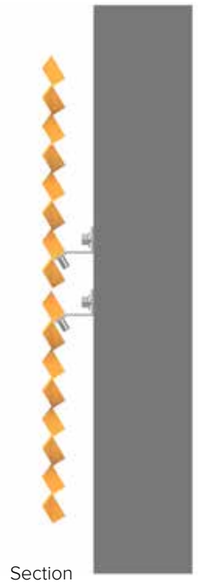


Front view



Rear view



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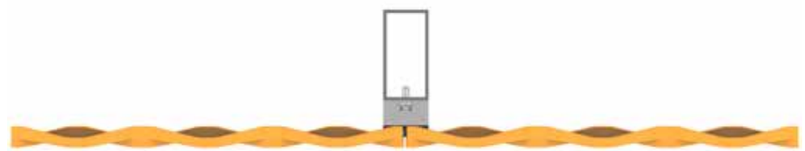
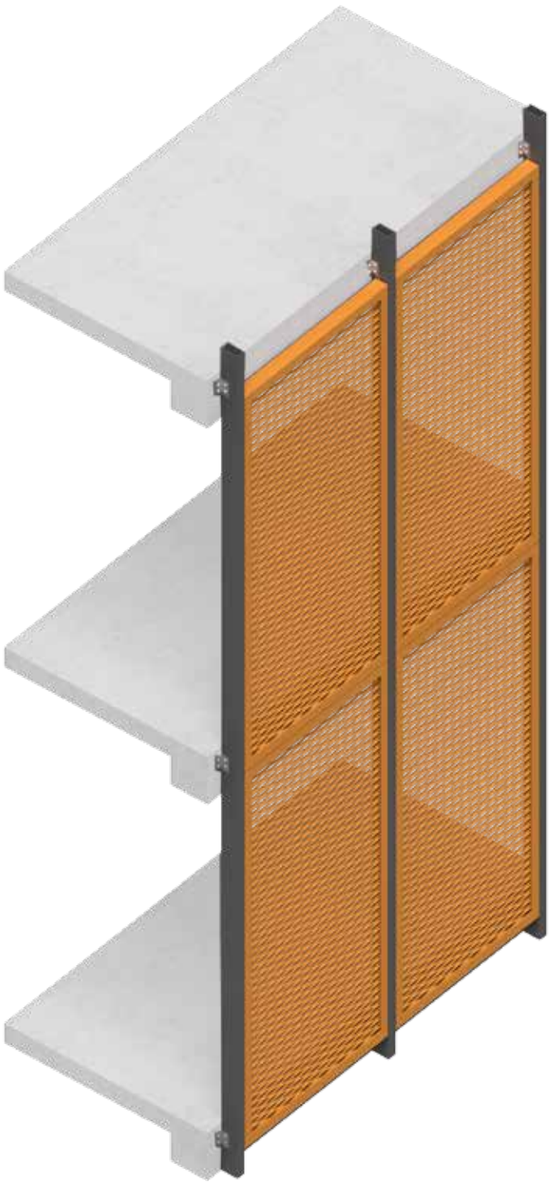
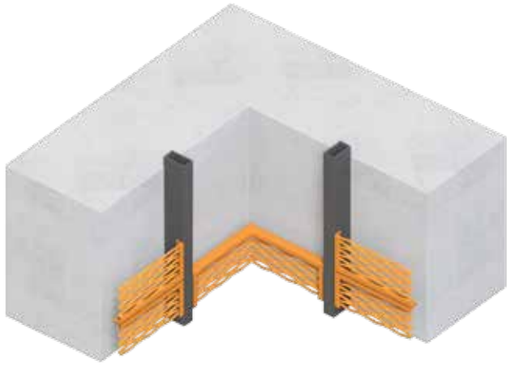


Top view

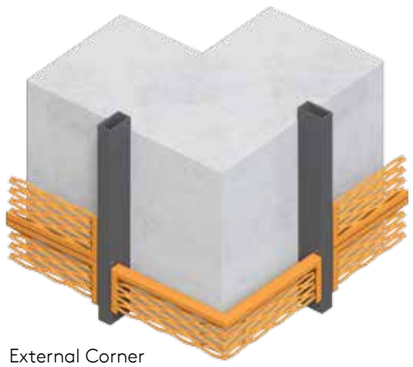
SYSTEM GMM
L PROFILE INTERNAL WELDING



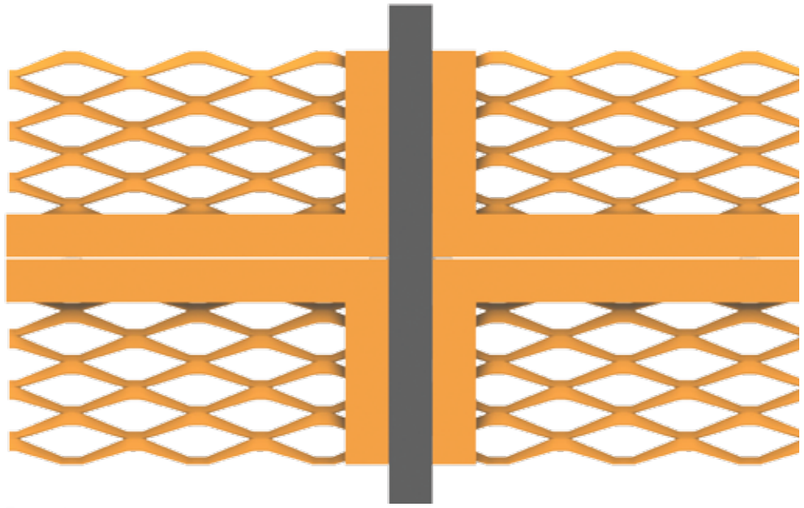
Cross-section



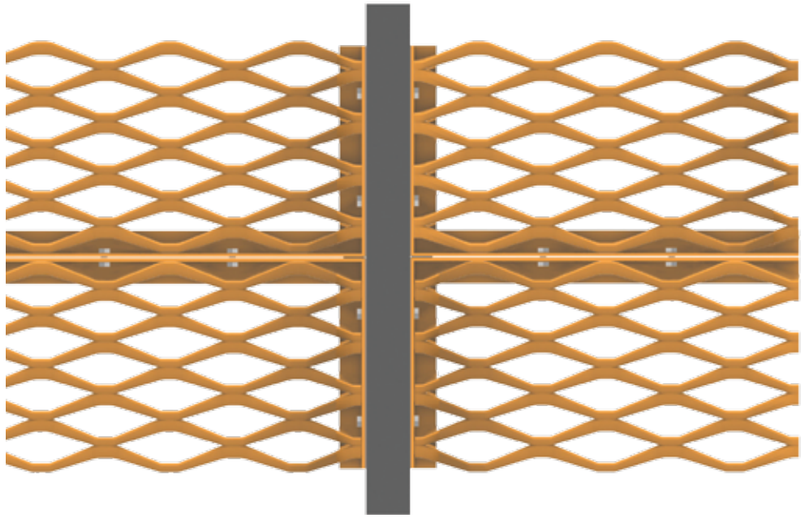
Internal corner



External Corner



Front view

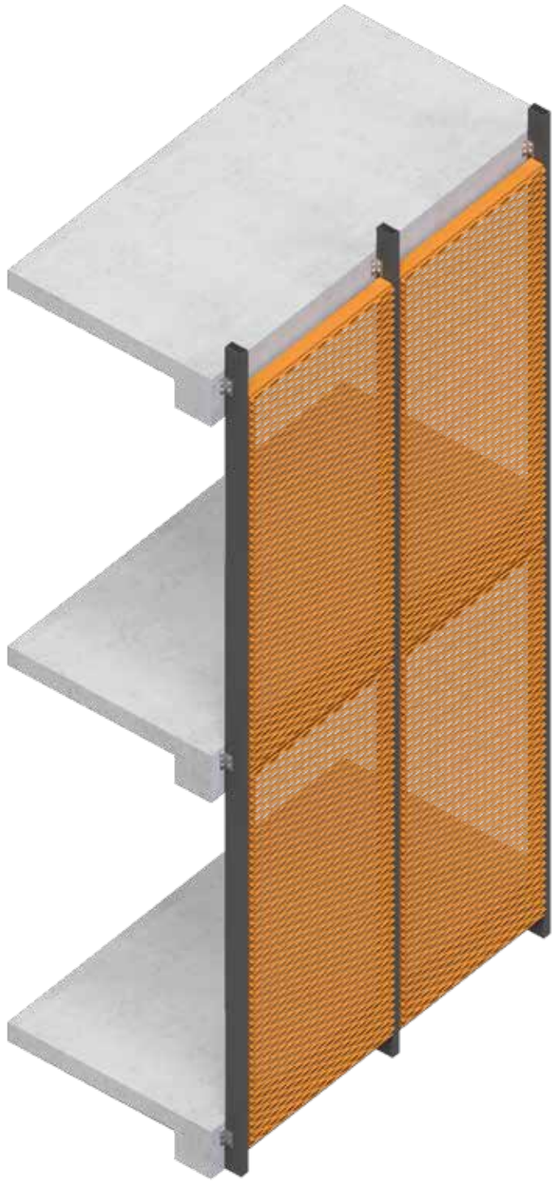


Rear view

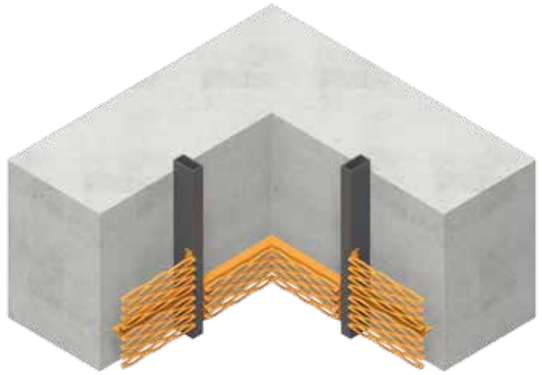
Section

Top view

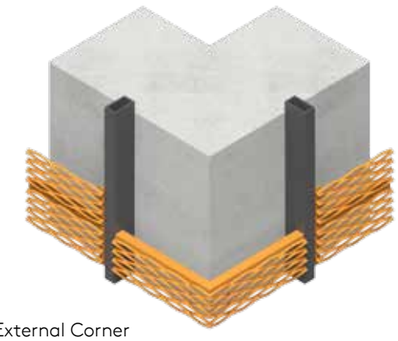
SYSTEM GMN
L PROFILE EXTERNAL WELDING



Cross-section



Internal corner



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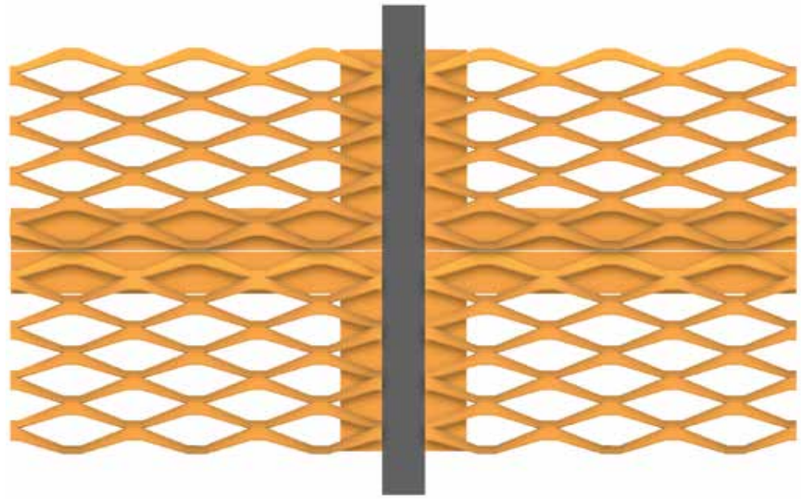
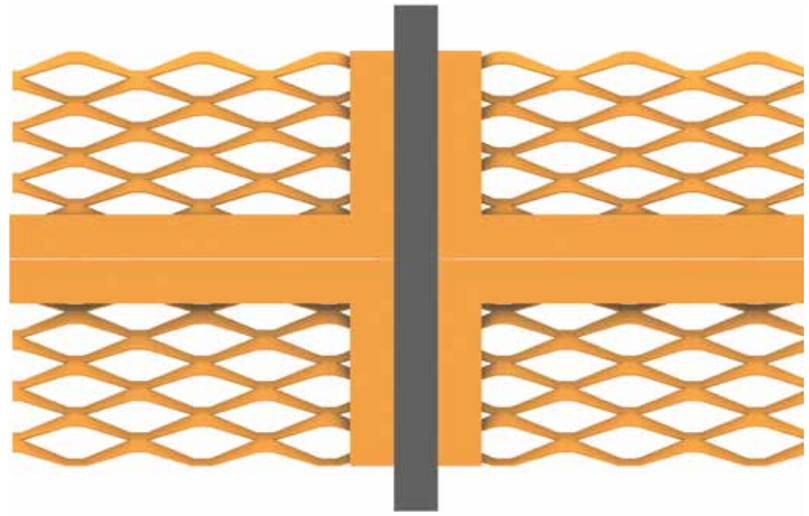
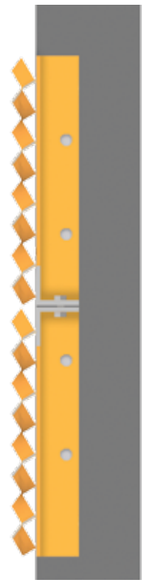


Front view



Rear view



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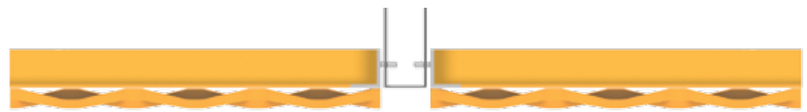

Top view

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