



BANKER 

WHO WE ARE

Banker Wire is your quality driven manufacturing partner for woven and welded wire mesh used in architectural and industrial applications. Our manufacturing expertise has been refined for more than a century, bringing unmatched customization, quality, and service to our customers.

All of our products embody our commitment to providing the widest variety of wire cloth at an unbeatable value. Nowhere else will you find manufacturing flexibility, precision, and dedicated customer service like you receive when working with us.

Established in **1896**

16 Woven Wire Looms **6** CNC Grid Welders **2** CNC Jig Welders

8000+
Patterns & Configurations

150+
Employees



New state-of-the-art facility in Mukwonago, WI





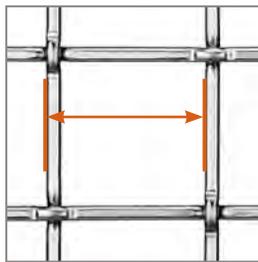
Banker Wire manufactures coarse, pre-crimped woven wire mesh. Our product spacing ranges from 8 mesh up to 6" clear opening. We manufacture over 8000 different spacing, diameter, and crimp combinations. Customization is readily available with tool making capabilities in house.

Pre-crimped woven wire mesh is constructed of wires that have been crimped prior to weaving them together in a loom. Crimping the wires before weaving provides stability and consistency in larger spaced wire mesh. Various crimping styles have been developed over the years to improve manufacturing efficiencies, function, and aesthetics.

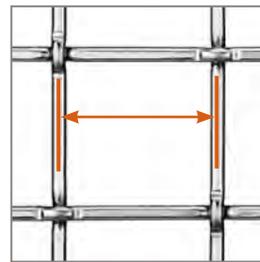
The information below covers the basics of woven wire mesh and topics to consider when choosing the right product for your application. Our knowledgeable staff is standing by to help you with your next requirement.

Woven Spacing/Opening/Diameter Relationship | The basic relationship between wire spacing, wire diameter, and clear opening can be expressed by a simple algebraic relationship:

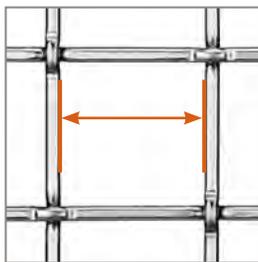
$$\begin{aligned} \text{Wire Spacing} &= \text{Wire Diameter} + \text{Opening Size} \\ \text{Opening Size} &= \text{Wire Spacing} - \text{Wire Diameter} \\ \text{Wire Diameter} &= \text{Wire Spacing} - \text{Opening Size} \end{aligned}$$



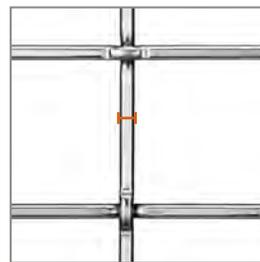
Edge to Edge
Wire Spacing



Center to Center
Wire Spacing



Clear Opening

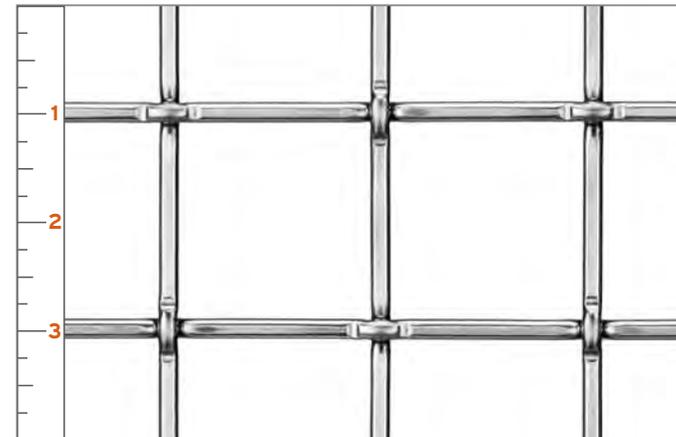


Wire Diameter*

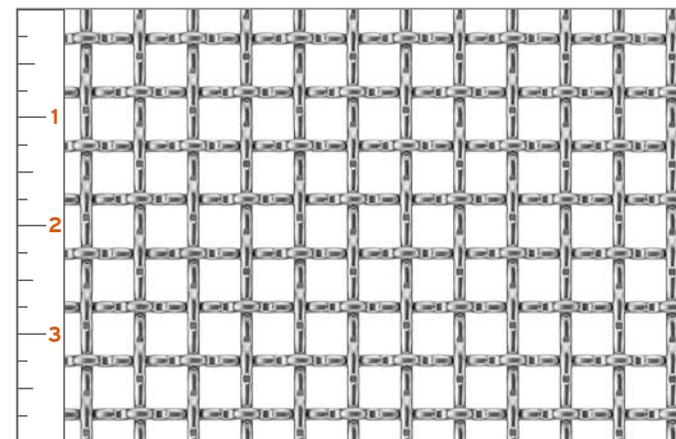
*The variety of crimping styles and methods used in achieving Banker Wire's unique aesthetic can alter the shape of the wire. For a true measurement of wire diameter, carefully consider where the measurement is taken.

Wire Spacing | Wire spacing (also called mesh spacing) can be defined either as a measured distance expressed in inches, or as the number of openings per lineal inch expressed as a count. Beware! Countless errors have occurred due to confusion between 2 mesh (1/2" on centers) and 2" mesh (2" on centers).

2" Mesh .192 (L-62)

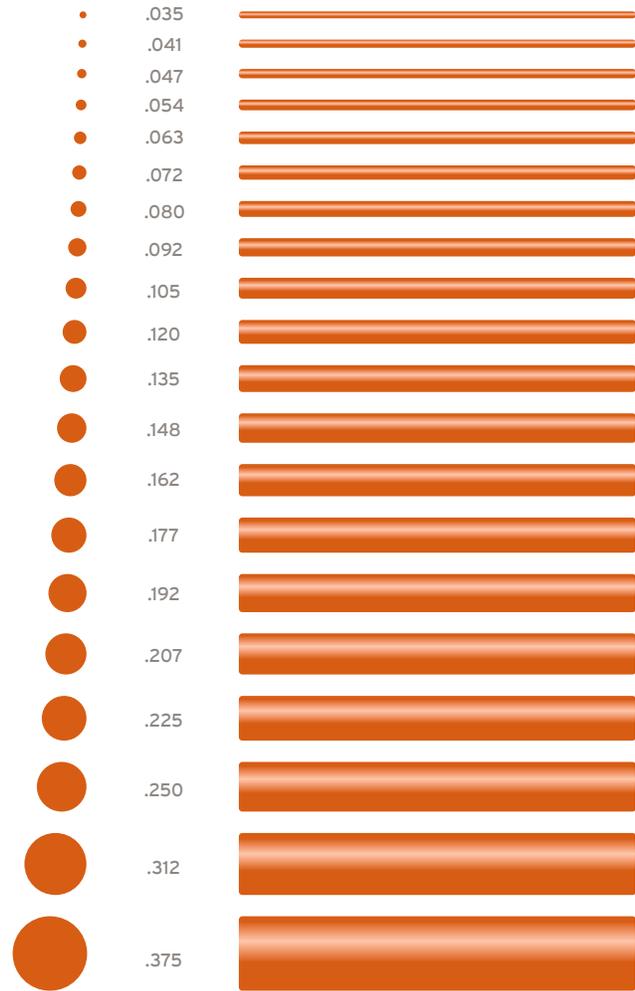


2 Mesh .120 (L-427)

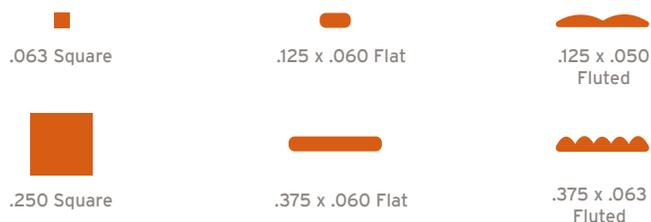


WOVEN WIRE BASICS

Wire Diameter | Most industrial specifications are produced with round cross section wire. Whenever possible, refer to the wire diameter in decimals of an inch, rather than gauge. Confusion between ferrous and non-ferrous gauge numbers and sheet steel numbers results in incorrect wire diameters being specified. Standard wire diameters used are as follows:



Shaped Wire | Banker Wire offers a variety of wire mesh made with shaped wire. Below are some examples of the square wire, flat wire, and fluted wire that we offer. For more information on our shaped wire offerings, please contact us.

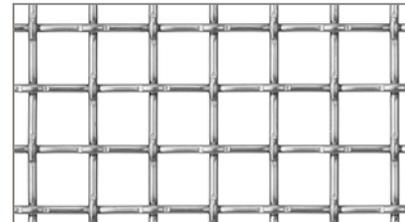


Weight and Conversions | In the left column of the chart below is a list of common generic metals we turn into wire mesh every day. All of our weights listed on spec sheets and in our product databases are based on the specific gravity of plain/mild steel. The percentages in the chart below should be used to convert the weight from plain steel to the desired alloy.

Wire Mesh Weight Conversion	
Plain steel	100.00%
Aluminum	34.70%
Stainless Steel	101.00%
Copper	114.10%
Bronze	112.10%
C230 Brass	110.50%
C270 Brass	108.80%
Monel	113.30%
Nickel	112.30%
Titanium	57.70%

Below are two examples of how we use the above chart to calculate weight of different alloys. In these examples we use L-441, which from the spec sheet we know has a plain steel weight of .830 pounds per square foot (lb/SF).

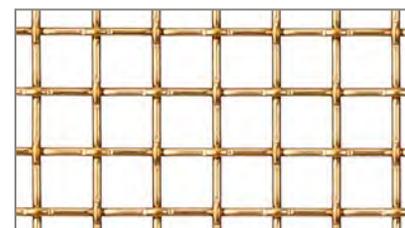
L-441 in Aluminum



To determine the weight of L-441 in aluminum, the plain steel weight (.830) should be multiplied by 34.7%. The equation is shown below.

$$.830 \times .347 = .28801 \text{ lb/SF in Aluminum}$$

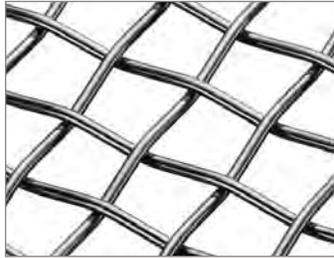
L-441 in Bronze



To determine the weight of L-441 in bronze, the plain steel weight (.830) should be multiplied by 112.1%. The equation is shown below.

$$.830 \times 1.121 = .93043 \text{ lb/SF in Bronze}$$

Crimp Styles | The wire crimping process is critical in producing consistent, top quality woven wire mesh. Banker Wire continues to be the innovative force in architectural wire mesh manufacturing by exploring new ways of crimping and weaving wire. The following will provide more detail about the eight fundamental crimp styles: plain, lock, intercrimp, flat top, triple shoot, rigid cable, helix, and twill. These styles are building blocks and can be combined and modified to produce endless compositions of texture and reflectivity.



Plain - PL | Plain crimp is a simple zigzag style of crimping where warp and fill wires intersect at every available pocket. With Pre-Crimped material, the Plain Crimp is most common when Mesh to Diameter (MD) Ratios are 4:1 or less. This un-tooled look produces a smooth and subtle pattern. Our designation for this crimp style is PL.



Flat Top - FT | Flat top is really a modified version of Lock Crimp, except that all the crimping is offset to one side of the material. The result is a smooth plane in which all of the wire surfaces are flush with one another to give a flat appearance to the front of a Flat Top piece. The back side shows crimps approximately twice the height of a Lock Crimp. Originally developed to present a smooth surface to material flow, or as a backer screen for finer mesh, Flat Top is also used extensively in architectural applications. Our designation for this crimp style is FT.



Lock Crimp - LC | Lock Crimp is a more modern and very versatile crimp style that has been largely overlooked for architectural applications. Unlike Plain Crimp, Lock Crimp is characterized by straight sections of wire connected by a well-defined 'bump' at the wire intersections. Lock Crimp yields material with superb dimensional stability and has a clean look that many designers find visually appealing. Lock Crimp works well at practically any MD ratio of 4:1 and greater. Our designation for this crimp style is LC.



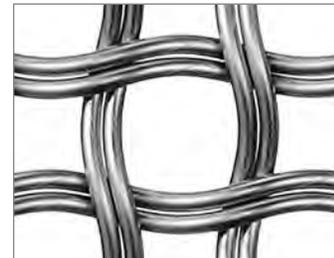
Intercrimp - I3, I5, I7, etc | While not really a fundamental crimp style, we choose to list it with the other crimp styles because of its widespread use. Intercrimp is simply Plain Crimp except that wire intersections occur only at every 3rd, 5th, 7th intersection, etc. This type of weave is practical only at MD ratios of 6:1 or more, and is best suited for ratios of 8:1 or more. We designate this style of weave as I3, I5, I7, etc. Our designation for this crimp style is I#.



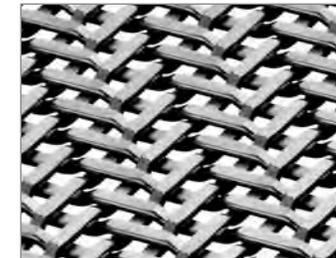
Triple Shute - TS | Triple Shute is a specialty crimp style that is generally used in conjunction with another crimp style. It consists of relatively long sections of straight wire connected by groupings of three Plain Crimp pockets. The resulting material has rectangular openings of very high aspect ratio. Developed originally as a non-blinding sizing product, it also has interesting architectural properties. Our designation for this crimp style is TS.



Rigid Cable - PS | Rigid Cable is a variant of the triple shoot crimp style, but instead of having the clusters of three closely spaced wires separated by a small space, Rigid Cable has its clusters of wires (generally 2, 3, or 4) spaced tightly together with no gaps between adjacent wires. While some manufacturers produce this style of material by simply pressing groups of wires together, Banker Wire places special crimps in the surface of the wire. This technique assures absolute repeatability in the mesh spacing and eliminates any problems associated with cumulative pitch variation. Cumulative pitch variation can result in aesthetic problems when attempting to align multiple panels. Our designation for this crimp style is PS.



HELIX - HX | The helix is a new crimp style with enormous design potential. For years, the wire mesh industry has been limited to making squares, rectangles, and diamonds. Banker Wire introduces a design that represents a whole new category of wire mesh construction. Naturally flowing circular shaped openings are created when intersecting the helical wires. The smooth lines created by the spiral shaped wires give this mesh a soft and tranquil look and feel. The helix can also be combined with any other fundamental crimp style, creating a truly unique woven wire mesh pattern. Our designation for this crimp style is HX.

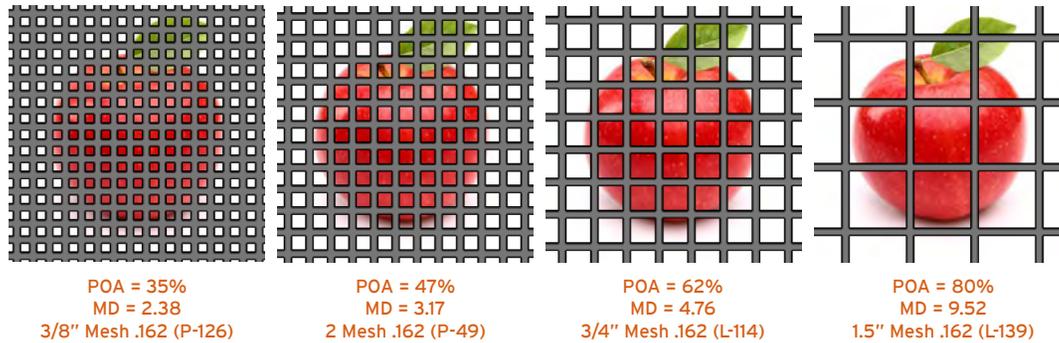


TWILL - TW | Exploring further into traditional weave styles, Banker Wire refines the classic twill style weave for architectural purposes. Traditionally, the twill style weave allows for a tighter mesh to diameter ratio which reduces the need to form the wire beyond its physical limitations. Four independent heddle frames on the loom allow for complex wire positioning that create a number of parallel diagonal pattern configurations. Pre-crimping a twill style mesh allows complete control of the unique visual detail, emphasizing the herringbone pattern in a large scale woven wire mesh. Our designation for this crimp style is TW.

WOVEN WIRE BASICS

Percent Open Area (POA) and Mesh to Diameter Ratio (MD) | Percent open area is the ratio of hole area to total screen area at a 90° angle of incidence to the plane of the material, expressed as a percentage. Material with 40% open area will have 40 square inches of opening for every 100 square inches of material. Percent open area helps in comparing various materials as to how easily a product, air, or light, will pass through the screen. In the visual below, we placed an apple behind the example mesh to demonstrate how the POA affects what can be seen.

Mesh to Diameter ratio MD is the mesh spacing (center to center) divided by the wire diameter. As a manufacturer, this is very useful to us as MD is used to help determine the optimal crimp style to use in the various mesh to diameter relationship scenarios. By selecting the most favorable crimp style, we are able to provide a higher quality mesh more efficiently. Aesthetically, the lower the MD ratio, the more hefty the wire mesh will appear to have; the higher the MD ratio, the less hefty a mesh will appear to have.



ASTMs for Woven Wire Mesh

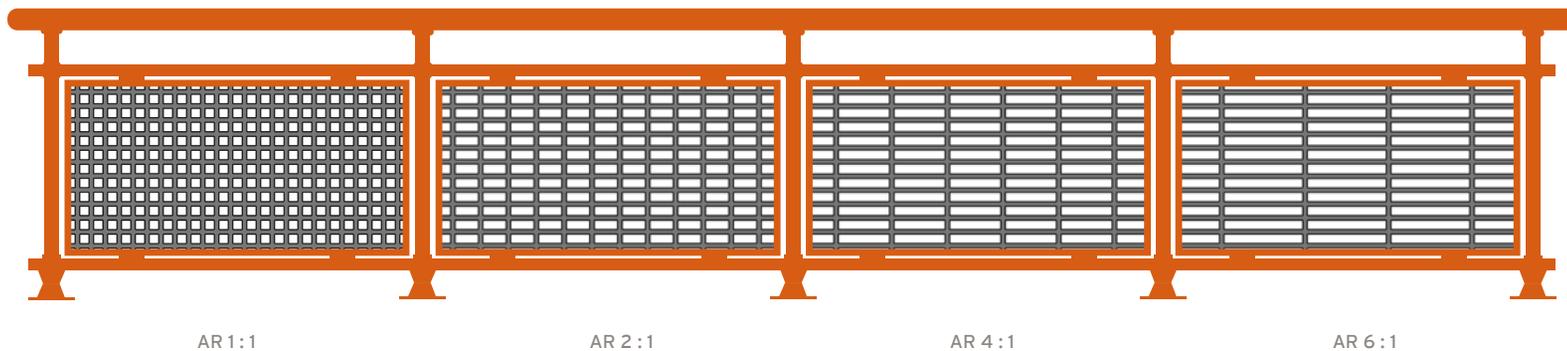
Standard Specification for Industrial Woven Wire Cloth (ASTM E2016 - 11)
<http://www.astm.org/Standards/E2016.htm>

Banker Wire manufactures industrial woven wire mesh per ASTM 2016. The woven wire mesh ASTM provides tolerances to apertures, wire diameters, permissible blemishes associated with a specific wire mesh range of specifications.

Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves (ASTM E11 - 15)
<http://www.astm.org/Standards/E11.htm>

Banker Wire produces sieve cloth that is manufactured for the purpose of particle size analysis in manufacturing and laboratory settings. Our sieve cloth is manufactured per ASTM E11 which holds the mesh apertures at a higher degree of tolerances.

Aspect Ratio (AR) | Aspect Ratio is a useful way to characterize materials that have slotted openings or rectangular repeat patterns. It is the ratio of the larger pattern repeat distance to the smaller pattern repeat distance. Banker Wire woven wire mesh can be customized to achieve a variety of aesthetics. Shown in the railing mock-up below we have inserted four different aspect ratios to show you the difference in appearance.





What is welded wire mesh? | Welded wire mesh is constructed with two orthogonal wires that are joined together at their intersections using a resistance welding process to form a grid. The line wires of the grid are guided through the welder using a pattern board. The machine drops cross wires into place and fuses them together to create the two distinctive planes that form welded wire mesh.

At Banker Wire we currently utilize six fully automated CNC grid welding machines and two CNC jig welders that allow us to produce to your exact specifications. Sheet sizes can be up to 78" wide and 240" long (dependent on mesh spacing). Wire spacing and diameter configurations are nearly endless, allowing us to be the top manufacturing partner for custom welded wire mesh.

Below in the next several sections of this page, you will find more detailed information on the basics of welded wire mesh and topics to take into consideration when ordering your specifications. Our knowledgeable staff is available to assist you with any questions you may have.

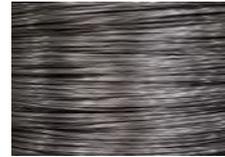
Materials for Welded Wire Mesh | Welded wire mesh is utilized in a variety of settings that may require a high degree of performance in strength or corrosion resistance. Because of that, Banker Wire offers welded wire mesh in plain steel, pre-galvanized, stainless steel, weathering steel, and Galvan. More information on these materials is available in the materials section of this book.



Plain Steel



Pre-Galvanized



Stainless Steel



Weathering Steel



Galvan

Welded Wire Spacing | Welded wire mesh spacing can be expressed by measuring from the left edges of two wires, also called Center to Center, or by measuring the opening between two wires, called Clear Opening. We can manufacture standard and custom welded wire mesh in both square and rectangular orientations. For square, the spacing range must be a minimum of 1" or larger. For rectangular, the spacing range must be .5" or larger for the short way of opening.



Center to Center



Clear Opening

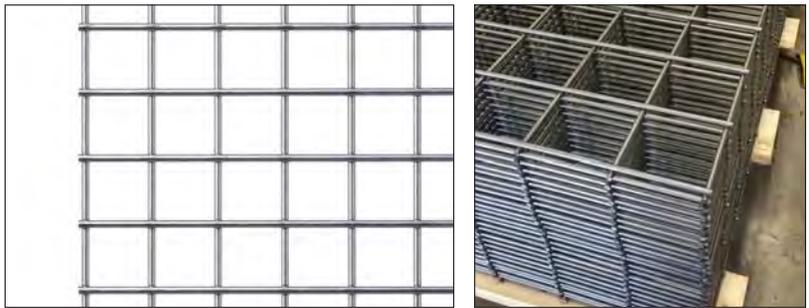
Welded Wire Diameter | Banker Wire manufactures welded wire mesh with a wide variety of wire diameters ranging from .080" to .375". For accuracy, the wire diameter should be expressed in decimal format and not expressed as a gauge.



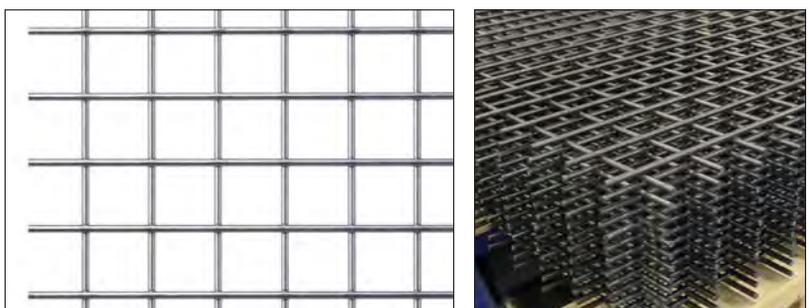
WELDED WIRE BASICS

Edge Conditions | Banker Wire Welded Wire Mesh has two standard edge conditions: trimmed and untrimmed.

Trimmed | When ordering welded wire mesh with **Trimmed Edges**, wire overhang will be 1/8" or less on three sides with Standard Back Growth* on the fourth side. The final spacing around the perimeter may be reduced and balanced when necessary to stay within the dimension ordered.

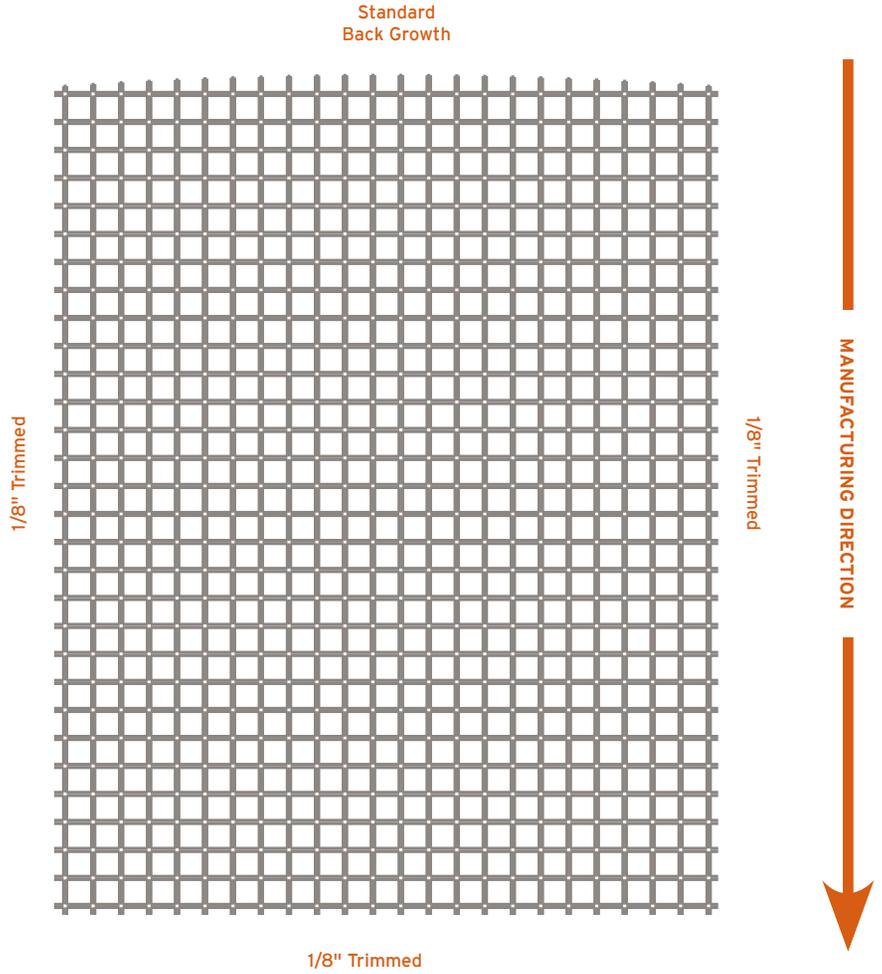


Untrimmed | When ordering standard **Untrimmed Edges**, the welded wire mesh will have approximately full tails. This means that the outer wire overhang will be approximately equal to that of the wire mesh spacing, with Standard Back Growth* on the back side. The tail length can also be customized to suit applications as needed.



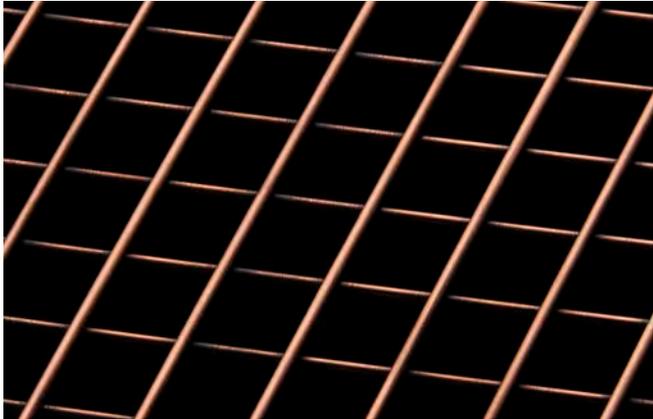
*Standard Back Growth often occurs when welded wire mesh is tightly spaced. Further explanation is provided in the next section.

Standard Back Growth | Standard Back Growth is a natural occurrence in the welded wire mesh process that is caused by the heating and cooling of the mesh as it is welded into place. It is more common in wire mesh that is tightly spaced. Standard Back Growth is demonstrated in the drawing below.



Secondary Finishes for Welded Wire Mesh | At Banker Wire, all of the products that we offer are manufactured in a bare, mill-finished condition. A secondary finish may be desired to protect the welded wire mesh, or to enhance a specific aesthetic. For welded wire mesh we can facilitate decorative plating, powder-coating, and hot-dipped galvanizing if desired.

**Decorative
Plating**



**Powder
Coating**



**Hot-Dip
Galvanizing**



Quality and Testing | Banker Wire manufactures to a strict set of internal standards that guarantee the welded wire mesh is produced to the highest possible quality and consistency. Throughout each production run, panels are checked for dimension, squareness, and strength to ensure that every panel meets our standards and is exactly the same as the one before it. The two tests shown below are used to check strength characteristics of our welded wire mesh.



Torque Test | To ensure that there is a strong weld at each intersection, the operator will attempt to break that weld using a torque tool. The torque tool is calibrated per a set of internal standards but can also be calibrated to any requested standard. This test is performed at set intervals to verify consistency throughout the production run.



Weld Set-Down Test | Weld-Set Down is a percent reduction in the overall thickness of the two wire diameters being fused together with an electric current. This test is performed to make certain that our welding machinery is functioning properly and consistently throughout the production run. A digital micrometer is used to record and store the height of the welded intersections across the width of the sheet.

RAW MATERIALS

Banker Wire manufactures woven and welded wire mesh for a wide range of industries from industrial to architectural. Our customers require wire mesh to be produced to exact specifications and they need it quickly. This is why Banker Wire maintains an inventory in a large variety of raw materials. If it is available in a wire, Banker Wire can source and manufacture it to the highest of industry standards. Banker Wire manufactures all of its products in a bare, mill finished condition. Our selected wire inventory comes from vendors that always meet Banker's high expectation for quality and consistency.

For more information on the materials described below, please visit our website: www.bankerwire.com

Stainless Steel | Stainless steel is often used for both architectural and industrial applications. The vast number of specific types and grades of stainless steels can be manufactured as wire mesh to improve performance in corrosion resistance, formability, and aesthetics. Stainless steel is steel with the addition of chromium. The chromium produces an oxide layer at the surface that is known as the "Passive layer". This passive layer protects and prevents further corrosion. Other metals such as nickel, molybdenum, titanium, manganese are added throughout the many types of stainless steels.

Plain Steel | Plain Steel - "Mild", low carbon steel - typically contains 6% to 12% carbon content and is directly cold drawn from hot rolled rod. This material represents very good value and is widely used in applications where its weld-ability, strength, and economy make it a popular option. Banker Wire manufactures plain steel wire in house for its woven and welded wire mesh products.

Pre-Galvanized | "Pre-Galv" wire is carbon steel which has been coated with a very thin layer of Zinc during the wire drawing process. Pre-galv wire is only slightly more expensive than plain steel wire, but offers improved corrosion resistance. Pre-galv wire is a great base material if considering a wire mesh with a powder coated finish in an exterior application.

Galfan® | Galfan is a carbon steel wire with a heavier coating that is 95% zinc and 5% aluminum. The thicker zinc coating makes this wire more corrosion resistant than "Regular Coating". The coating is allowed to be much heavier because of the added aluminum in the mixture. The aluminum allows the wire's ductility to remain high which prevents the coating from cracking off during wire mesh manufacturing.

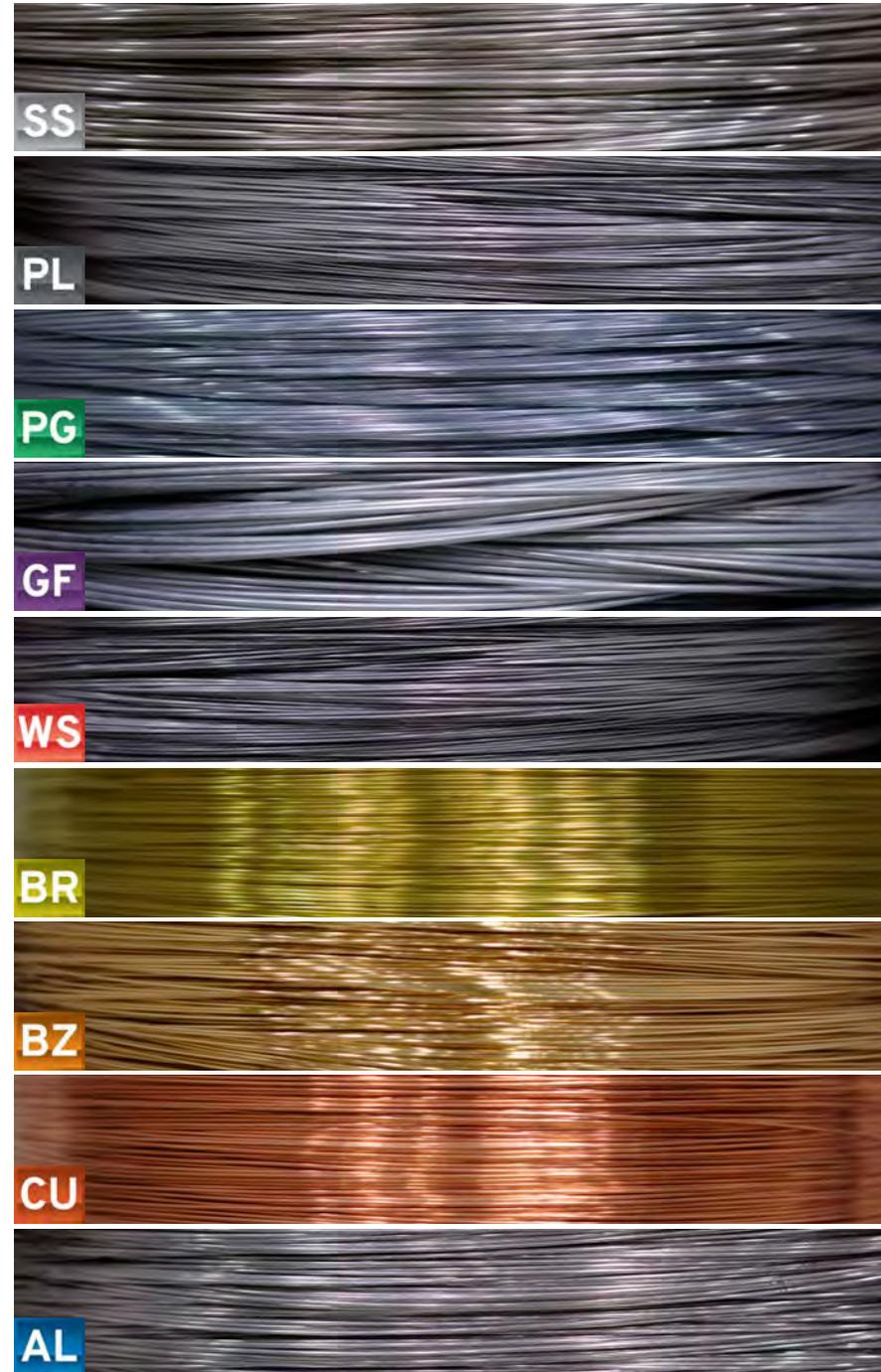
Weathering Steel | Compared to plain steel, weathering steel contains a chemical composition that increases its resistance to atmospheric corrosion. Made to rust under the influence of weather, weathering steel develops a patina that acts as a protective layer to prevent corrosion of the steel. This material is suited for many applications in its unpainted condition. With time and consistent exposure to the elements, the weathering steel will go from a yellow-orange, to a deep rust orange color, to a dark brown.

Brass | Brass wire is drawn bright and exhibits a gold like color. Considered a "Living Finish", the natural color change does occur quickly and depending on the environmental conditions, the end color will vary. In general, under exterior conditions in the presence of salt, moisture, and sunlight, Brass will transition from bright to shades of green, then brown patina. Because of the enormous range of Brass's natural colors experienced through weathering, there are a number of coatings or chemicals that can be used to either speed up or slow down the process.

Bronze | Bronze wire is drawn bright and exhibits a caramel like color. Considered a "Living Finish", the natural color change occurs quickly and depending on the environmental conditions, the end color will vary. In general, under exterior conditions in the presence of salt, moisture, and sunlight, Bronze will transition from bright to shades brown patina. Due to the enormous range of Bronze's natural colors experienced through weathering, there are a number of coatings or chemicals that can be used to either speed up or slow down the process.

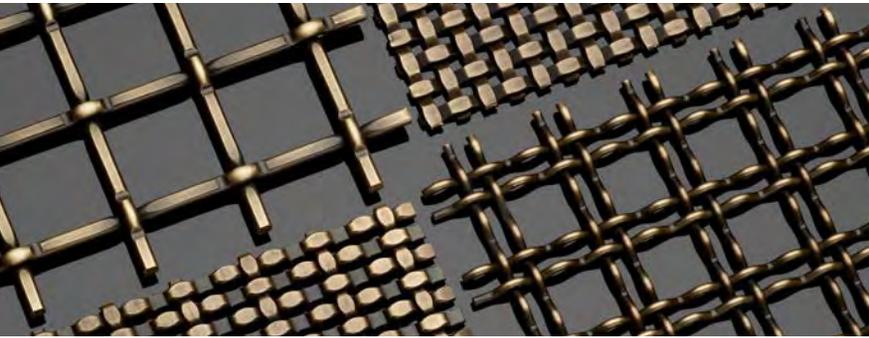
Copper | Pure E110 Copper wire is drawn bright and exhibits a shiny salmon red color. Considered a "Living Finish", the natural color change does occur quickly and depending on the environmental conditions, the end color will vary. In general, under exterior conditions in the presence of salt, moisture, and sunlight, Copper will transition from bright to shades of brown, then grays, then finally a blue-green or gray green patina. Because of the enormous range of Copper's natural colors experienced through weathering, there are a number of coatings or chemicals that can be used to either speed up or slow down the process.

Aluminum | At only 1/3 the weight of steel, Aluminum has very adaptable qualities as a woven wire product. Aluminum wire mesh is highly resistant to atmospheric corrosion, reasonably priced, and it has a variety of surface treatment options that make it a good candidate for many applications. Aluminum is an excellent option for wire mesh when weight and corrosion resistance are primary concerns.



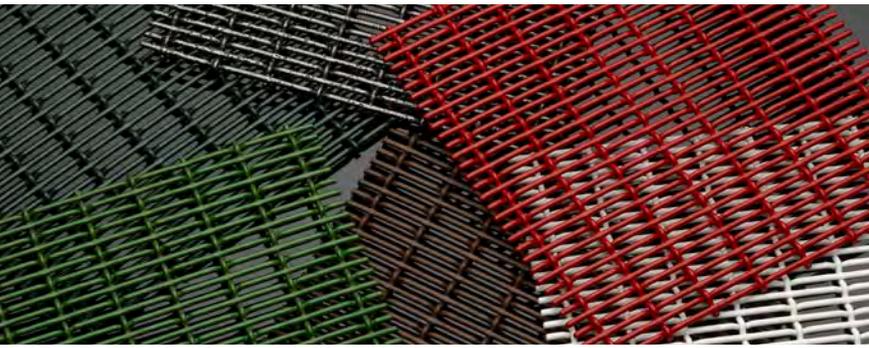
Secondary Finishes | To enhance the appearance of the final product, we offer a variety of secondary finishes through our outside vendors. Banker Wire is happy to assist in the early design stages. We can identify the appropriate raw materials and a secondary finish to establish a specification needed to satisfy the desired final performance and aesthetic. Typical secondary finishes applied to the wire mesh include black oxide, powder coating, decorative plating, passivation, US10B and US10A, as well as hot-dip galvanizing. When appropriate, Banker Wire can facilitate the specified finish and deliver the fabricated materials ready to install using our outside vendors.

For more detailed information on Secondary Finishes, please visit www.bankerwire.com



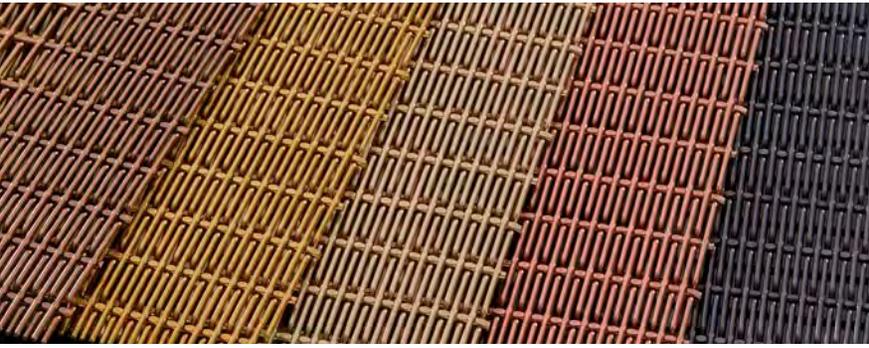
Decorative Plating | Decorative plating is an electrodeposition process where a thin layer of brass, nickel, chrome, or copper is deposited on the wire mesh surface in a tank-dipped procedure. A decorative antique plated finish can really bring out the texture of a woven wire mesh in ways that other coatings cannot. The thin layer of metal does not mask the detail of the wire mesh but rather highlights it. The antique plated finish process introduces a dark oxide layer over top of the bright plated alloy. Then, visual depth is created by physically relieving the high points of the wire mesh allowing the bright plated alloy to show through. A thin layer of lacquer is applied after plating to help preserve the finish from further tarnishing.

Appropriate Base Material: **PL**



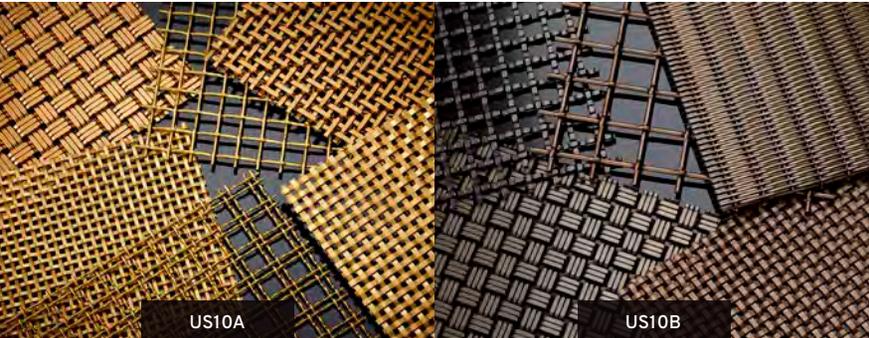
Powder Coating | Powder coating is a cost effective way to add an unlimited range of colors to wire mesh. Powder coating uses an electrostatic charge to attract a fluidized powder evenly across all surfaces of the wire mesh. The electrostatic charge holds the pigmented powder until it passes through an oven where it melts and adheres permanently to the wire mesh. After curing, the wire mesh has a colorful and durable coating that adds to the desired aesthetic of the project.

Appropriate Base Material: **PL PG AL**



PVD, Physical Vapor Deposition | Physical Vapor Deposition (PVD) is a highly controlled process that utilizes a vacuum chamber to create and deposit metallic vapor onto a target surface. Using various titanium nitride, carbide and dioxide compounds, a vast range of brilliant metallic color can be created and applied to stainless steel wire mesh. Banker Wire mesh can be enhanced with a true, lasting architectural finish in colors like Champagne, Gunmetal, Rose Gold, Royal Gold and many more.

Appropriate Base Material: **SS**



US10B and US10A | The richness of wire mesh woven in bronze, brass, and copper brings unmatched color and warmth to your project. Banker Wire weaves all copper based alloys in a natural "mill finish", "bare" condition. A secondary process must be introduced if the desired final finish is to be preserved in either a darkened (US10B) or satin (US10A) appearance.

US10B: The US10B finish darkens the bronze, brass, or copper followed by a clear lacquer top coat (for interior applications). Our standard offering targets visually enhancing the texture of the wire mesh pattern by darkening the wire and then physically relieving the highpoints.

US10A: The US10A finish physically removes the tarnish from the top layer of the bronze, brass, or, copper and seals it with a clear lacquer topcoat (For interior applications).

Appropriate Base Material: **BR BZ CU**

SECONDARY FINISHES

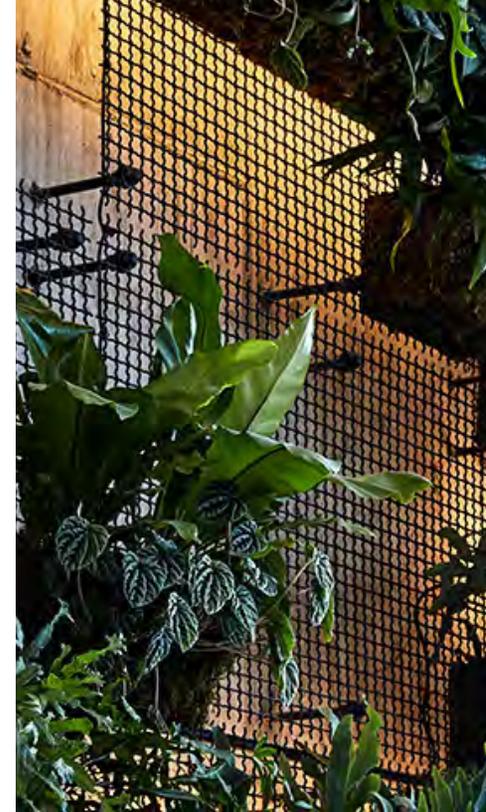
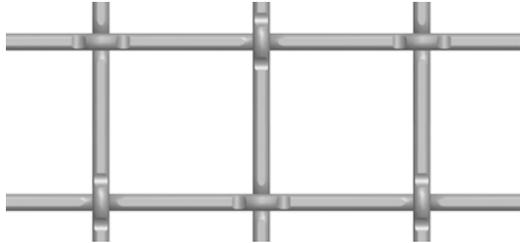
1 HOTEL BROOKLYN BRIDGE

Interior Room Dividers and Eco-Wall Cladding
Brooklyn, New York, USA

I-21



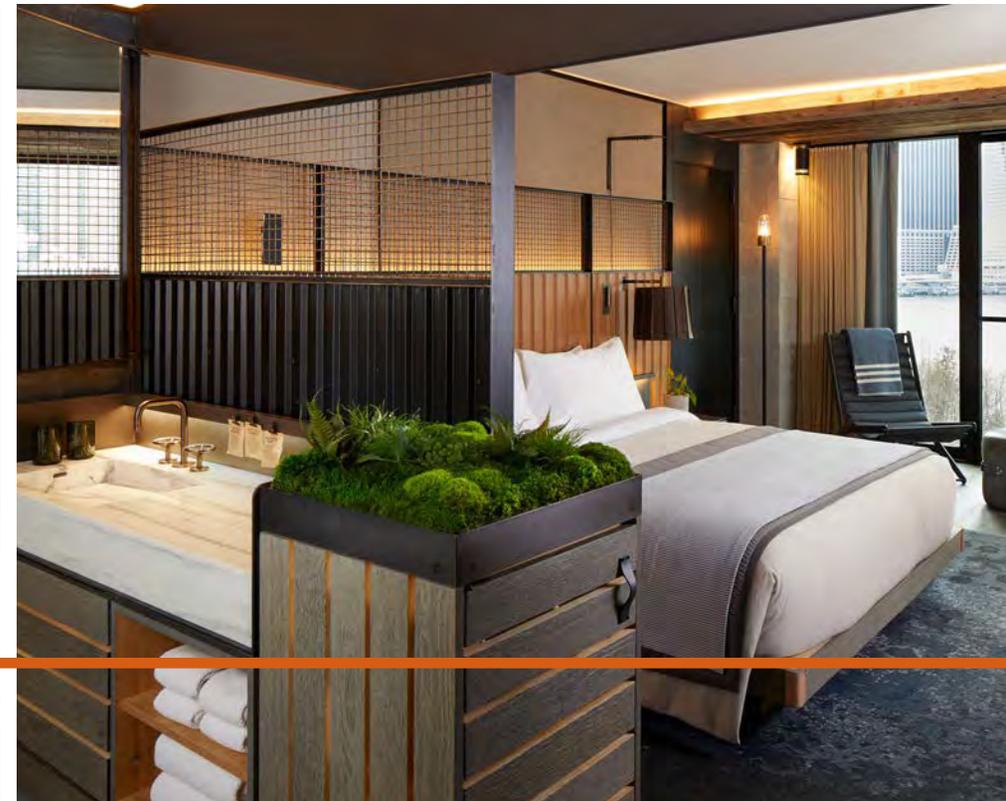
L-85



The newly opened 1 Hotel Brooklyn Bridge in Brooklyn's iconic Dumbo neighborhood features a touch of greenery in the guest rooms and public spaces, bringing the outdoors inside.

Banker Wire's I-21 woven wire mesh, which is powder-coated in black, helped transform the vertical green wall into a living work of art by providing a grid to affix the welded baskets to. AgroSci chose the intercrimp motif, commonly seen in urban-inspired window guards and fire escapes, to give the impression that plants were "reclaiming" the location using steel as a main element.

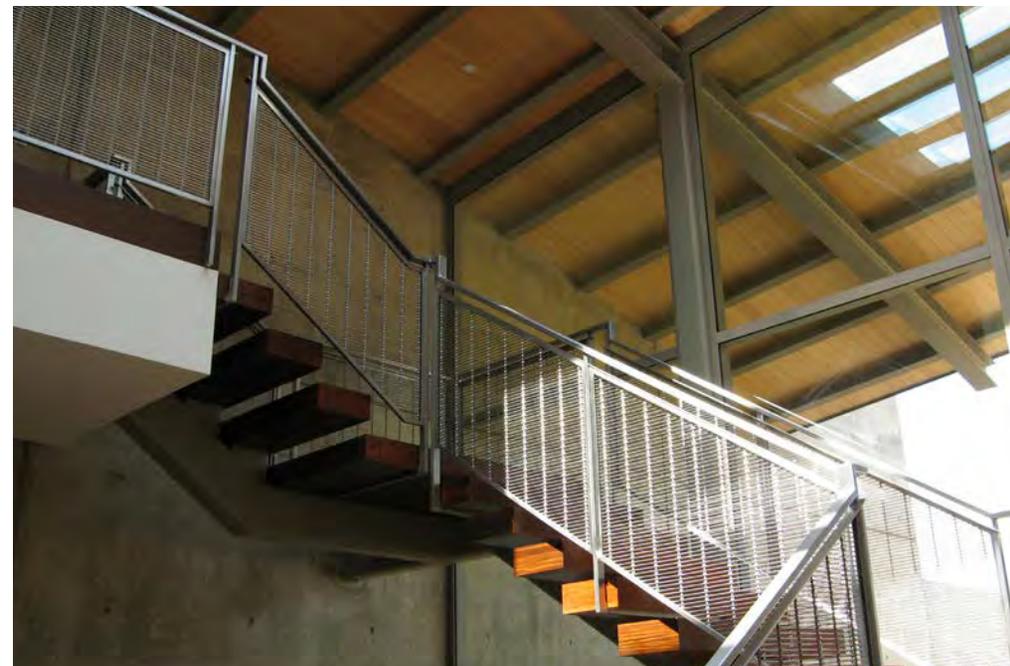
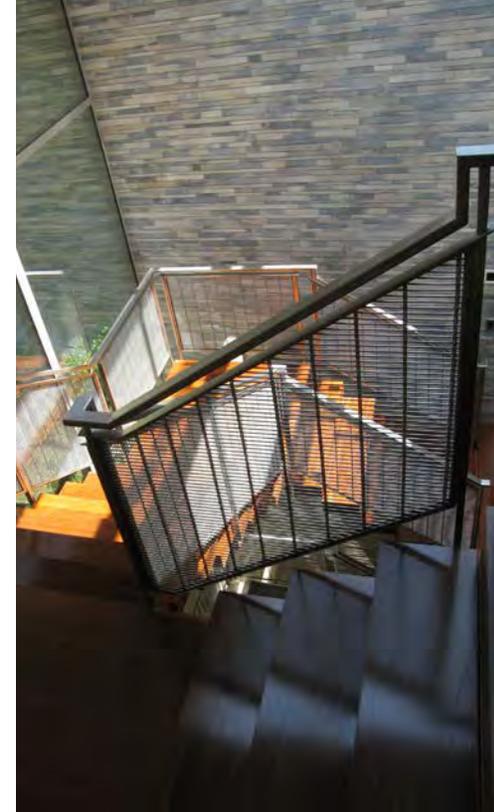
Inside the rooms, L-85 was used and interior space dividers and as decorative furniture accents above the beds. The structural and industrial nature of L-85 plays well with the natural elements of the rooms. With a large percent open area, the L-85 wire mesh pattern is well suited for this application, allowing for separation but still the ability to see the rest of the room and the walls behind it.



ALTAMIRA PRIVATE RESIDENCE

Interior Railing
Palos Verdes, California USA

M13Z-145



The Altamira Residence was built on the rugged coastline of the Palos Verdes Peninsula with the goal of leaving the land as undisturbed as possible. With a vision to use as many materials and designs that focused on the location and the beauty of the surrounding area, this Altamira residence is a stunning collaboration that honors the original intent of the client and Architect.

Marmol Radziner Associates incorporated stainless steel Banker Wire M13Z-145 Rigid Cable wire mesh into this grand staircase design with the Dorland Company fabricating the post and rail. The large percent open area of M13Z-145 allows for minimal interruption of sight-lines out of the floor to ceiling windows to let in the natural light and stunning views of the ocean.

BANKER 

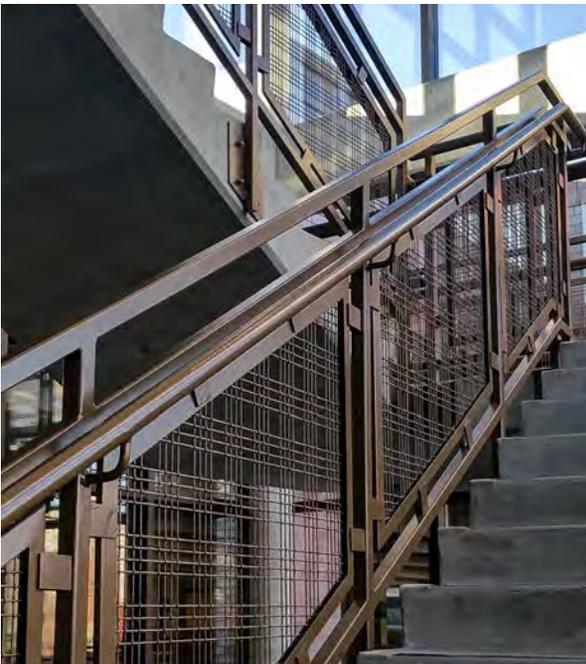
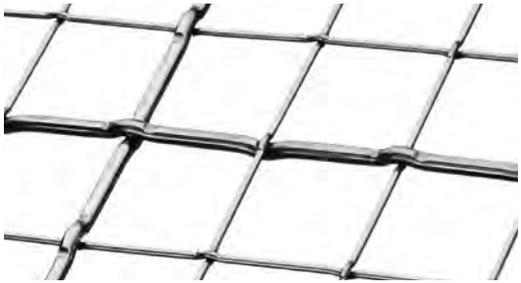
CEDAR GROVE PARKING GARAGE

Interior Railing
Egan, Minnesota USA

M44-2



SJD-3



The Cedar Grove Parking Garage, located in Eagan, MN, is a two-level parking structure designed to accommodate the parking needs of the nearby Paragon Outlet Center and other developments. The architect of the Parking garage was RSP Architects.

Banker Wire's M44-2 is utilized as the railing infill panels on the interior stairs of the parking garage. SJD-3 is utilized as the architectural grates that cover the lower level parking garage openings. Banker Wire also provided the raw sticks of U-edge to Standard Iron for fabrication.

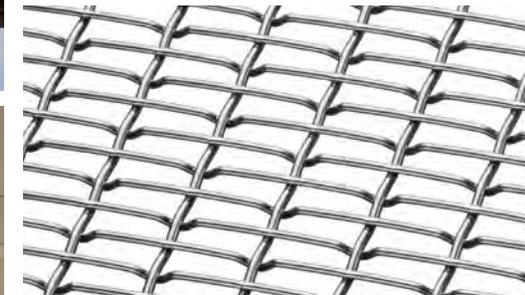
DULLES CORRIDOR METRORAIL WALKWAYS

Pedestrian Walkway
Washington D.C. and Northern Virginia USA

FPZ-16

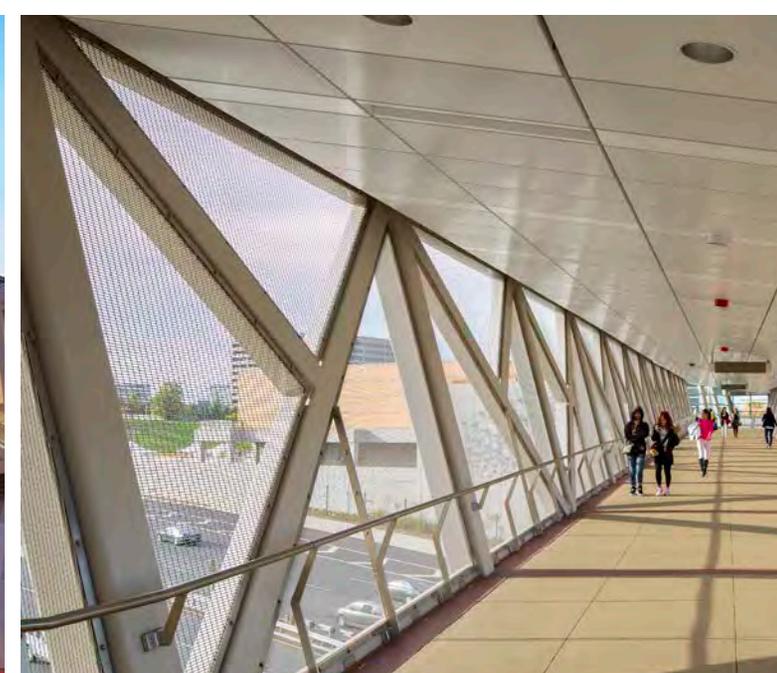
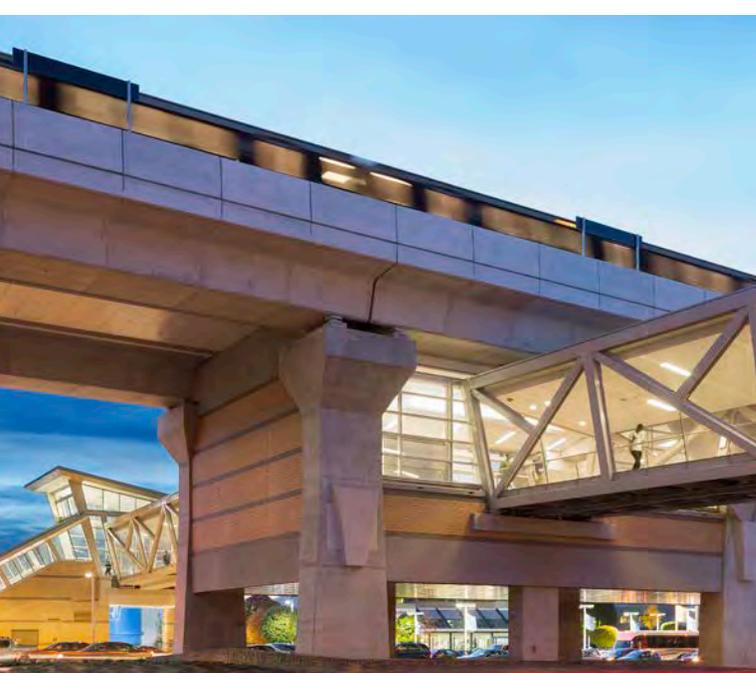


FPZ-44



Banker Wire provided more than 60,000 square feet of FPZ-16 and FPZ-44 woven wire mesh for the project. Combining two different mesh pattern spacings, these weaves provide the transparency and uninterrupted sight lines characteristic of glass, but with increased durability and lower maintenance. The wire mesh was used to fill the triangular openings in the pedestrian bridges

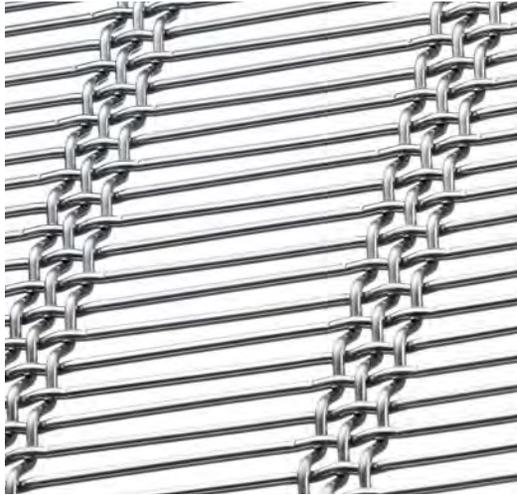
The combination of strength and beauty provided by woven wire mesh makes it perfect for large-scale architectural applications where fall protection is essential, like the Dulles Metrorail.



FRED ROGERS CENTER AT ST. VINCENT COLLEGE

Exterior Railing and Sunscreen
Latrobe, Pennsylvania USA

M13Z-345



The Fred Rogers Center at Saint Vincent College in Latrobe, Pennsylvania, was designed by FortyEighty Architecture and constructed by the Massaro Corporation. Acting as a gateway to the campus, this building was awarded LEED GOLD Certification from the USGBC (U.S. Green Building Council Global).

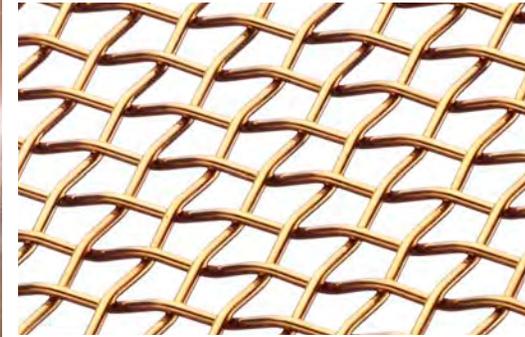
The Architects at FortyEighty Architecture wanted an architectural mesh that would function both as a railing and as a sunscreen for offices below an exterior mezzanine. Banker M13Z-345 Architectural wire mesh was chosen due to its strength and apparent percent open area when the sun is at high angles of incidence. The triple shute weave also offers a unique pattern and texture of long aspect ratio and the heavy "bands" of the triple wire weave.



FRYE BOOTS NEW YORK CITY STORE

Retail Store Display
Manhattan, New York USA

P-286



The 148 year old Frye Company, manufacturer of leather footwear and accessories, opened its first Frye Store last year in a century-old cast iron factory in New York. Banker Wire's P-286 brass-finish wire mesh was chosen for the project by New York based architectural firm, AvroKO.

"We wanted the project to reflect the high craftsmanship of Frye boots and its legacy," said Greg Bradshaw, partner at AvroKO. The firm used wire mesh because it has a nice industrial quality while maintaining a bright luster and glow from the brass. It also allows merchandise to be seen through the mesh and keeps sight lines open throughout the room.

"We chose Banker Wire because the quality of the mesh is quite good, and we like the selection of mesh sizes. The client was very happy with the final product and the mesh looks lovely in the space."

- Greg Bradshaw, AvroKO Partner

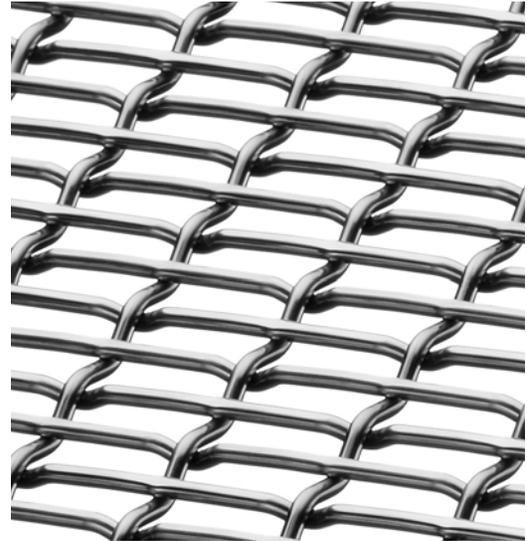
The use of wire mesh also helped AvroKO acquire enough LEED points to earn Platinum certification for the project.



HAZEL WOLF K-8 STEM SCHOOL

Interior/Exterior Railing Infill
Seattle, Washington USA

FPZ-10



Hazel Wolf K-8 STEM School is a "Choice School" in the Seattle area. The school puts an emphasis on environmental science and the design of the building underscores the core education goals of the program. The innovative curriculum uses the environment around the students as a lens to focus their studies on E-STEM (Environmental, Science, Technology, Engineering, and Mathematics) subjects. The new 78,000 square foot school is built on a 3.2 acre site that functions as indoor and outdoor learning labs.

Throughout the school and grounds, Banker Wire's FPZ-10 mid-fill wire mesh pattern is used as railing infill. As a strong and simple pattern, FPZ-10 is as functional as it is beautiful. The simplicity of the pattern blends in with its surrounding environment, further enhanced by the mesh's perceived transparency allowing nearly uninterrupted sight lines and light. FPZ-10 offers safety and security to the students of Hazel Wolf while limiting distraction from the learning environment.

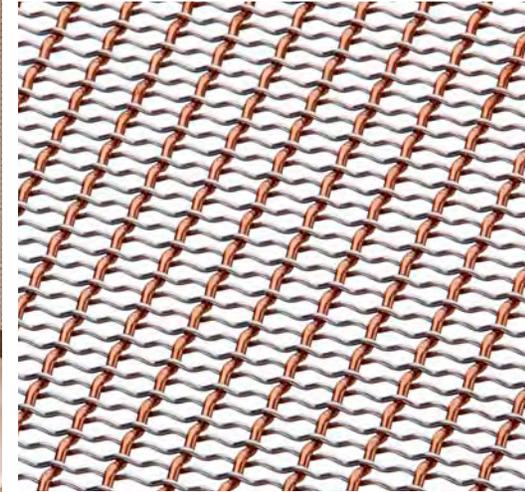


ILOT FONTENOY SÉGUR

Wire Mesh Chandelier
Paris, France

IPZ-25

*Shown below in stainless steel and
copper mixed alloy configuration*



The recently renovated Fontenoy building in Paris, originally designed by Chief Architect André Ventre in the 1930s, now showcases a refreshed lobby with a stunning chandelier as the crown jewel for the office building that houses the services of the Prime Minister and various independent administrations.

Under the direction of B. Architecture, the custom chandelier was designed and fabricated by Secante in partnership with Dargaisse, a sheet metal specialist based in Paris. The duo sourced approximately 615 square feet of Banker Wire's IPZ-25 pattern woven in stainless steel and bronze to complement the Art-Deco-inspired interior architecture.

The woven mesh used is a simple, lightweight intercrimp design that utilizes different wire diameters to achieve balanced stiffness and a high degree of reflective properties. The color contrast created from mixing stainless steel and bronze results in a beautiful wire mesh that was used as the primary material for the chandelier. The layers of mesh create an intriguing pattern for the custom chandelier.

MCDONALD'S HEADQUARTERS

Interior Space Dividers, Ceilings
Chicago, Illinois, USA

L-81



The new headquarters for McDonald's Corporation in the West Loop neighborhood of Chicago provides a state-of-the-art facility that fosters collaboration among 2,000 employees. Designed to maximize workforce collaboration, the 490,000-square-foot building features inviting spaces made from aesthetically pleasing, yet highly durable, materials.

The design of the new headquarters for McDonald's is modern, sleek, and bright. Banker Wire's L-81 woven wire mesh pattern can be found throughout the building as a functional and decorative accent. In the lobby and lounge, L-81's large percent open area lends itself well as space dividers. The ability to see through the brightly finished wire mesh allows for uninterrupted sightlines and natural light to filter into the space while creating distinct separations. The simple and rigid form of L-81 juxtaposed against the natural warmth of the wood creates an airy and open feeling within the area. Elsewhere in the facility, the same woven wire mesh is used as decorative ceiling elements above pendant lights to add additional texture and interest.

The McDonald's headquarters was developed by Sterling Bay; Gensler served as the architect of record; interiors were designed by IA Interior Architects and Studio O+A; the general contractors were McHugh & ECI Executive Construction Inc.



MOCKINGBIRD PEDESTRIAN BRIDGE

Exterior Railing and Bridge Enclosure
Dallas, Texas, USA

M13Z-146



In Dallas, Texas Mockingbird Pedestrian Bridge connects the White Rock and Katy Trails, running from Mockingbird Station to The Highland Dallas Hotel. The bridge spans Mockingbird Lane, a dangerous street for pedestrians, to give a safe way to cross the road as well as connect the trails.

Banker Wire's M13Z-146 in stainless steel is used as railing and guards along the entire expanse of the bridge. M13Z-146 is an all purpose medium duty triple shute pattern available in all wire alloy types. The large percent open area of M13Z-146 allows for continuous sightlines, providing safety as a physical barrier where pedestrians can see around them.

BANKER 

PNC BANK LOBBY RAILING

Interior Railing Panels
Mequon, Wisconsin USA



S-15



Versatile Spine

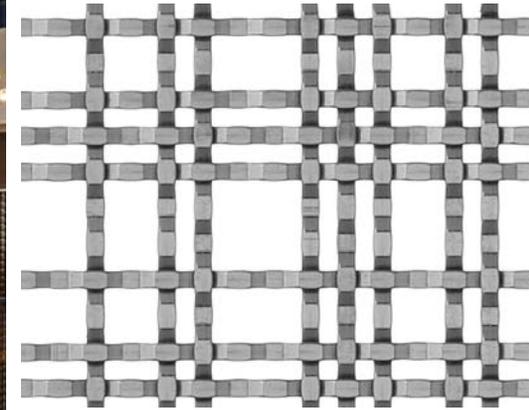


A 10,700 square foot, two-story retail building in Mequon, Wisconsin, housing a PNC Bank, was outfitted with Banker Wire's S-15 flat wire woven mesh and Versatile Spine frame. The panels were designed with the Versatile Spine to be similar to 1/2" glass, this allowed the use of standard glass clips to be used in the mounting.

RENAISSANCE NASHVILLE HOTEL & CONFERENCE CENTER

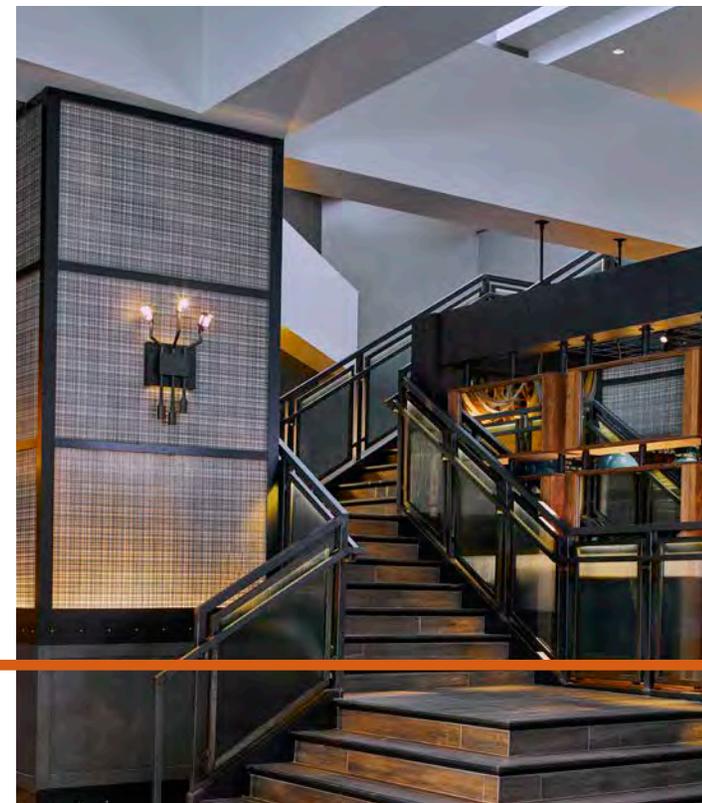
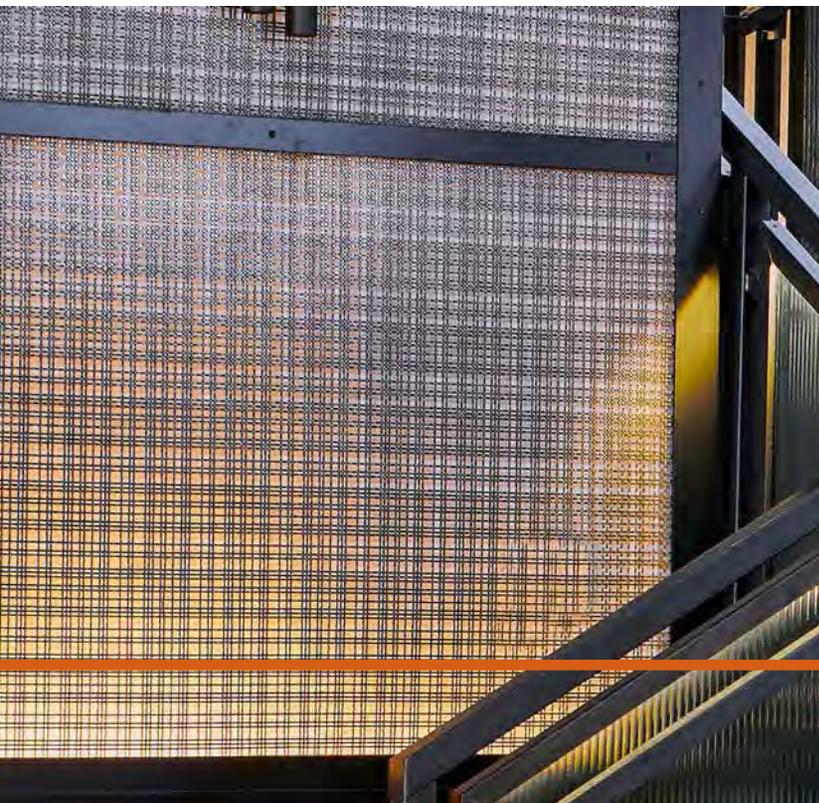
Cladding and Millwork
Nashville, Tennessee, USA

SJD-21



Renaissance Nashville Hotel and Conference Center has been transformed into a contemporary hotel reflecting the spirit of Nashville, TN. The interior design, conceived by Nashville-based architecture and design firm Gresham Smith, embraces the refined visual language of the Renaissance brand while nodding to the city's renowned music scene. Banker Wire's architectural wire mesh was utilized by Allegheny Millwork to elevate the design of the hotel's public spaces such as the lobby, bar, and private dining buffet. Specifically, the versatility of Banker Wire's SJD-21 was chosen in an antique brass plated metal finish for the lobby to support the design firm's vision. The lobby of Renaissance Hotel Nashville makes practical use of the SJD-21 wire mesh as a decorative screen, offering unique backlighting patterns.

"As always, Banker Wire delivered a substantially made, intricate and detailed product that performed functionally and decoratively to allow indirect backlighting patterns, screen chases, and vented cabinets in a decorative manner," said Valli Wiggins, IIDA, LEED AP ID+C, senior interior designer at Gresham Smith, who oversaw the Renaissance project. "The Banker Wire mesh panels spoke to the sweet spot of our raw yet refined, concept that met the sophistication of a Renaissance Hotel."



BANKER 

RE-STACK

Art Installation - Woven Wire Mesh Sculpture
Seattle, Washington USA

Various Lock Crimp Patterns



The Banker Wire mesh patterns used in Re-Stack provide the strength and durability required by the ambitious outdoor installation and the vast array of aesthetic options needed to realize Lead Pencil Studio's creative approach. Nine different lock crimp patterns were used, giving a clean and crisp look to the futuristic sculpture. The unique appearance of woven wire mesh suggests both strength and lightness, adding to Re-Stack's progressive aesthetic.

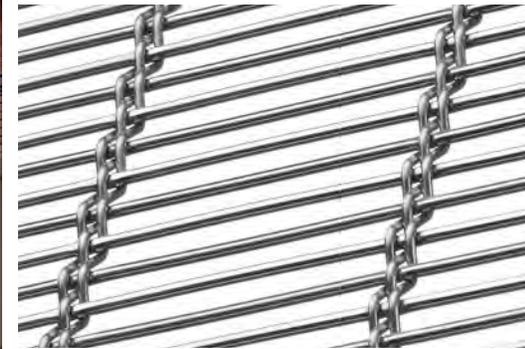
Half of the wire mesh used in the sculpture was coated in Millennium Tiles' LIC coating for a multi-faceted color appearance. The remaining half was sent to Cleveland Black Oxide for conversion coating.



SAN ANTONIO RIVERWALK

Art Installation
San Antonio, Texas USA

M13Z-179



Stuart Allen was one of eleven artists selected by the San Antonio River Foundation to enhance the beauty of the city's iconic River Walk. His minimalist suspended panel installations entitled 29° 25' 57" N / 98° 29' 13" W and 29° 26' 00" N / 98° 29' 07" W under the twin underpasses at McCullough and Brooklyn Avenues create a flickering, vibrant illusion and appear to shift and morph with changing patterns of texture and blocks of natural color for the passing visitors as their perspectives shift. The permanent art displays are 40' x 10' installations consisting of 300 24" x 48" individual, suspended, stainless steel panels - each enclosing five layers of woven, architectural mesh. The three inner layers of mesh are treated with powder coated color finishes offering the illusion. A total of 2,400 square feet of stainless steel wire mesh was used.

"Banker Wire stainless steel wire mesh had a perfect balance of wire spacing and diameter for my efforts challenging the boundaries between art and architecture," said Allen.

"The material required for the project needed to be storm and weather resistant," added Allen. "Banker Wire provided excellent product in a very timely and cost effective manner. They even rushed samples to me to test my applications beforehand.

BANKER 



STADE DE SOCCER DE MONTRÉAL

Enclosure and Railing
Montréal, Quebec, Canada

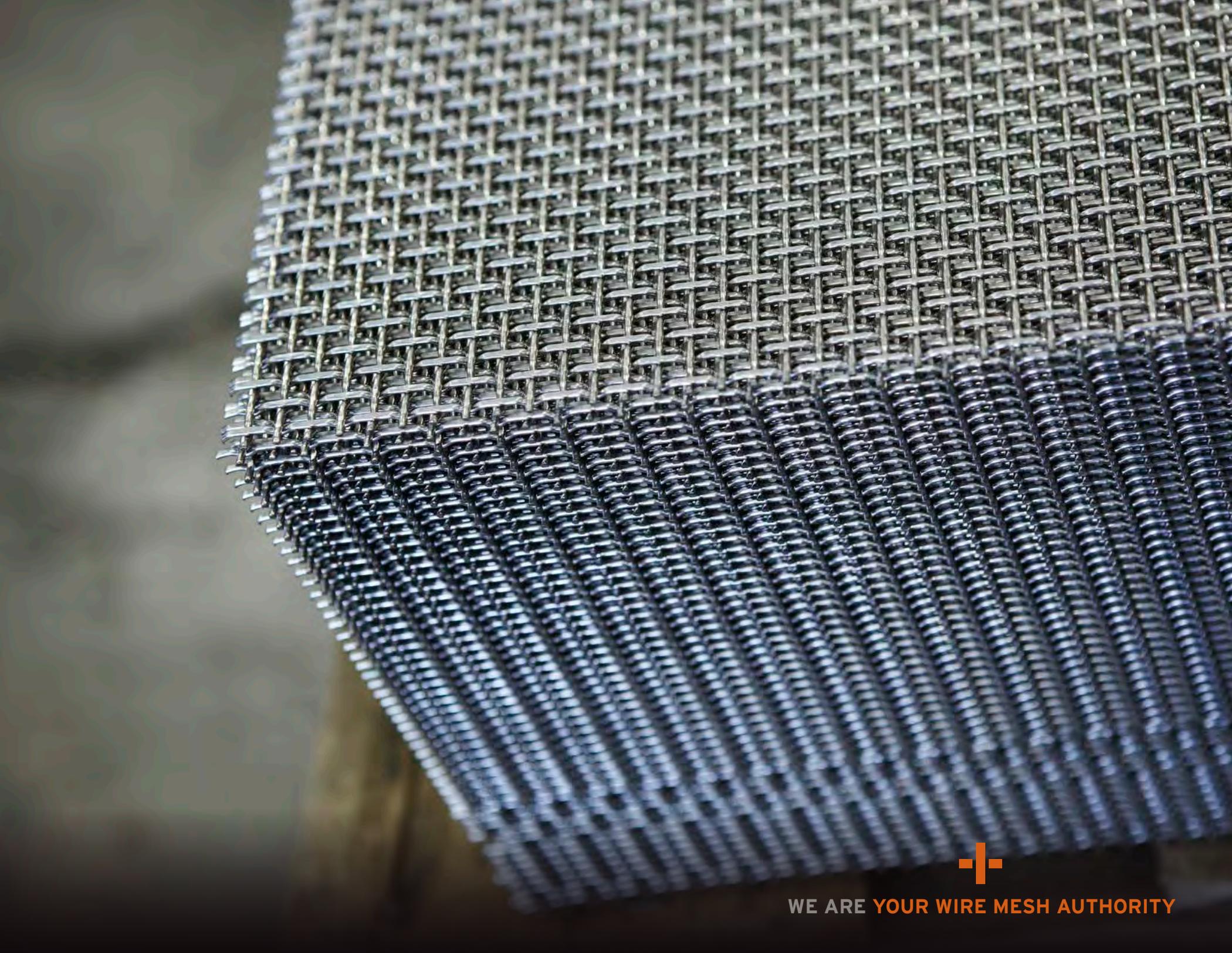
M12Z-17



Completed in 2015, the Stade de Soccer de Montreal is an award-winning addition to Montreal's sports culture. The facility is situated along the edge of a former quarry that is currently in the process of being transformed into a nearly 500 -acre ecological park. Soucier+Perrotte Architectes designed the extraordinary building to celebrate the landscape it sits on and the multiculturalism of the area.

The indoor soccer field is flanked on one side by two stories, accommodating spectating benches, locker rooms, an event space, fitness room, and offices. Banker Wire's M12Z-17 was selected as the enclosure, which doubles as a balcony railing, to protect the spectators and other people that utilize the facilities. This twin wire rigid cable weave is strong and well-suited to stop the fast approach of soccer balls. While the mesh is strong, it has higher percent open area to allow the natural light from the expansive windows to fill the entire facility.





WE ARE YOUR WIRE MESH AUTHORITY



BANKER

C.I. BANKER WIRE + IRON WORKS | 123 W BOXHORN DRIVE | MUKWONAGO, WI 53149 USA
TOLL FREE 800-523-6772 | T 262-363-6120 | F 262-363-9792 | WWW.BANKERWIRE.COM