

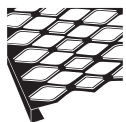
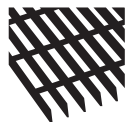
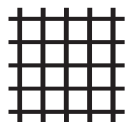
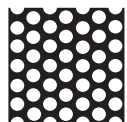
McNICHOLS®

ECO-MESH® & ECO-ROCK® CATALOG

DESIGN WITH THE ENVIRONMENT IN MIND.



Owen Richards Photography®



866.754.5144

mcnichols.com

The Hole Story®

The sole survivor of a Boeing B-17 Flying Fortress shot down during World War II, Robert L. "Bob" McNichols pledged to lead his life and business according to Christian principles. He believed in the highest level of service, a dedication to his employees, and an appreciation for the customers he had the privilege to serve.



*Bob McNichols, Founder
(1922 - 1981)*

Following discovery by a farmer, Bob was sent to prisoner-of-war camp Stalag Luft I, where he remained until his liberation on May 1, 1945. Seven years to the day after his release from Stalag Luft I, Bob and his wife Phyllis founded **McNICHOLS CO.**

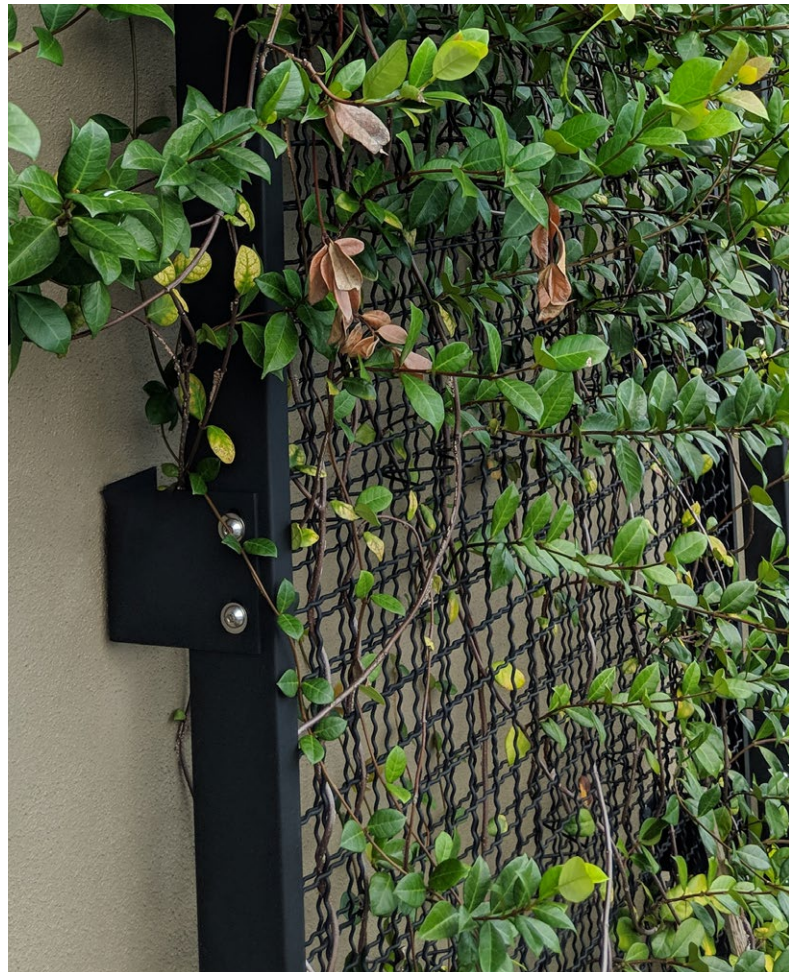
When Bob started the business in 1952, he focused on selling metal products with "holes" such as Perforated and Expanded Metal. This focus led to the motto "**The Hole Story®**," which symbolizes the Company's philosophy as well as its products. Bob trademarked **The Hole Story®** and advertised it in the 1975 **McNICHOLS®** Master Catalog. This began the tradition of "hole" references such as "Hole Products" and "The Hole Team."

After the unexpected loss of Bob in 1981, his son Gene took the reins. Gene carried on his father's legacy by growing the business. In 1990, Gene introduced the "**Service, Quality and Performance**" mission. The words embody the spirit of the organization — including its emphasis on customer service, high standards for quality (demonstrated by our ISO 9001:2015 certification), and dedication to performance.

Today, **McNICHOLS** remains a family business with 19 locations across the country. The essence and spirit of the founder remain ever-present. Bob's faith gave him the courage to build **McNICHOLS** on a Christian foundation. "To God Be The Glory" was one of his favorite sayings.

As **McNICHOLS** continues to grow beyond its 67th year in business, the third generation of the McNichols family — as well as every member of The Hole Team — act as stewards of Bob's legacy.

Providing Hole Products Through Superior
Service, Quality and Performance ...
That's **The Hole Story®!**



WHAT IS ECO-MESH®?

McNICHOLS ECO-MESH® is a modular, double-sided Wire Mesh framework grid that fosters organic environments to create lush green walls. To increase strength, this grid system is constructed with two layers of Wire Mesh that are framed by a corrosion-resistant steel channel. The Mesh layers are secured in place with a horizontal, zig-zag "bridge wire" that is alternately welded to both the front and back layers of the panel. These Mesh panels are made from heavy, woven, intercrimp wires that are strong, yet flexible enough to adjust to increasing vine loads over time. Made with LEED-friendly recycled materials, **ECO-MESH®** is commonly used for screen walls, canopies, arbors, partitions, column covers, and facades, and can be installed in both indoor and outdoor settings.



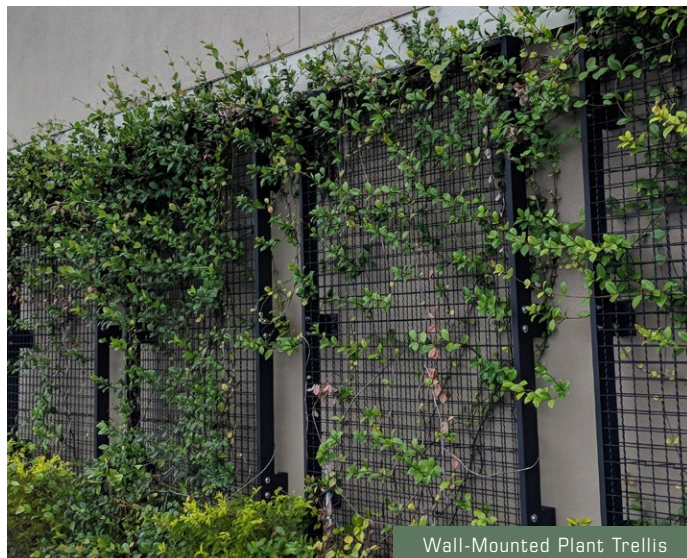
©1989-2019 **McNICHOLS CO.**, **The Hole Story**, **Inspired to Serve**, **ECO-MESH**, **ECO-ROCK**, and **McNICHOLS** are registered trademarks of **McNICHOLS CO.** All rights reserved. No part of this book may be reproduced in any form without permission. Printed in the U.S.A.

Please note that product photographs are not actual size. Application photos reflected are typical of Hole Products in use that can be supplied or have been supplied by **McNICHOLS CO.**

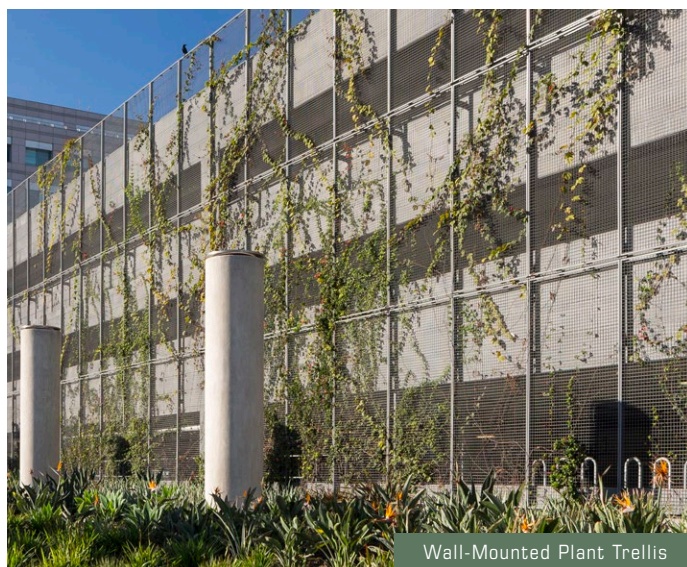
McNICHOLS CO. is ISO 9001:2015 Certified.

McNICHOLS ECO-MESH® WALL MOUNTED SYSTEMS

McNICHOLS ECO-MESH® is a custom modular framework grid typically wall mounted to exterior structures creating aesthetic living green facades. These high quality eco-panels are constructed to accommodate a growing space for various plants and vines. The Woven Wire Mesh flexes to allow for increasing vine load as plants grow, while providing years of beauty and low maintenance.



Wall-Mounted Plant Trellis



Wall-Mounted Plant Trellis



Wall-Mounted Plant Trellis

McNICHOLS ECO-MESH® QUALITY ADVANTAGES

- Woven Wire — Strong construction
- Galvannealed Steel Wire and Frame — Offers superior corrosion resistance compared to G90 coated metals
- 0.135" Thick (10 Gauge) Wire Diameter — Significantly stronger than 0.080" thick (14 gauge) wire found in other brands
- Custom Panel Sizes — Available up to 96" wide and 240" long
- Eco-Friendly Powder Coating — Available in 13 top-quality colors, super-durable with a 3,000 hour salt spray rating with high UV resistance (Please see page 6 for color choices); custom colors available
- Install Ready — Mounting brackets and hardware available
- LEED Opportunities — 95% recycled metal, no VOC concerns in field, SRI Index-rated coatings, and more





CHIHULY GARDEN AND GLASS SEATTLE, WASHINGTON

THE HOLE OBJECTIVE

Seattle planners and designers were asked to convert an amusement park under Seattle's Space Needle into the Chihuly Garden and Glass exhibition. Their challenge was to showcase the works of renowned artist Dale Chihuly in an environment that would transform the building into an exhibition hall and the asphalt surface into a garden for displaying Chihuly's most popular works and architectural installations. Blending the building's exterior with the outdoor garden was a critical part of the task. Because the east exterior wall would face the garden and glass house, which is the exhibition's centerpiece, it was clear that the building needed a significant element of green.



THE HOLE SOLUTION

With LEED certification in mind, the design and construction teams from the Seattle area — comprised of Owens Richards Architects, Seattle; AHBL, Seattle; Schuchart Corporation, Seattle; and Cobra Building Envelope Contractors, Spokane, WA — took a unique approach that, in addition to its aesthetic appeal, would reduce heat gain and lower the impact of carbon dioxide.

In concert with planning the green roof, a living wall was added on the east and west sides of the hall using **McNICHOLS ECO-MESH®**, with the largest installation on the east (garden) side. Incorporating ECO-MESH® with the green roof influenced the facility's energy efficiency and helped the project achieve a LEED Silver rating through the U.S. Green Building Council. The ECO-MESH® system specified in the Chihuly Garden and Glass exhibition project consists of 95 panels that average 48" by 144" in size. Each panel is constructed with two layers of 12 Gauge crimped Woven Wire Mesh in a 10 gauge frame.

Today, ECO-MESH® co-exists with the exhibition hall's green roof, achieving the type of living envelope envisioned by the design team.

McNICHOLS is honored to be part of this green Hole Solution!



Luxury Apartment Railing



Wall-Mounted Exterior Living Wall



Residential Fencing



Wall-Mounted Exterior Living Wall



Parking Garage Stairwell Covering



STREET-SCAPE RENOVATION

TAMPA, FLORIDA

THE HOLE OBJECTIVE

In many cities, the beautification of downtown pedestrian areas is an aesthetic decision and an economical solution. The City of Tampa, Florida saw **McNICHOLS ECO-MESH®** as an answer to both.

THE HOLE SOLUTION

In an attempt to create a pedestrian-friendly street with a focus on incorporating public art, roughly \$1.2 million was invested in a downtown Tampa corridor spanning three city blocks. Susan Gott, commissioned by the City of Tampa, working with Graham-Booth Landscape Architecture, designed and created glass art as part of the streetscape renovation. Her artwork consists of multiple panels of cast-glass tiles incorporated into vertical panels with a series of **ECO-MESH®** panels. The large-scale cast-glass panels stand 8-½ feet tall and line the street as part of the Promenade of the Arts, offering glimpses of the city's narrative embedded in glass.

McNICHOLS is grateful to be a part of this innovative Hole Solution!



McNICHOLS ECO-MESH® PRODUCT OPTIONS



IN STOCK & READY TO GO!

- Galvannealed Steel
- Powder coated textured black
- 2" x 2" Square Mesh
- 2" or 3" Channel Width with a 1" Return, 16 Gauge (.0635" Thick)
- 48" x 96" Panel
- Mounting Brackets and Hardware Available

ECO-MESH® PRODUCT OPTIONS

PRIMARY MATERIAL	Galvannealed Steel (Most Common), Aluminum, Carbon Steel, Stainless Steel
PRODUCT FINISH	Mill, Sandblasted, Eco-Friendly Powder Coatings with 13 Standard Colors (Shown Below)
WEAVE TYPE	Woven - Intercrip Weave, I5I5 Crimp Style In Stock (Other Weave Types Available)
MESH SIZE	2" x 2" Square Mesh In Stock (Other Mesh Sizes Available)
WIRE DIAMETER/WIRE GAUGE	0.135" Thick (10 Gauge); 0.120" Thick (11 Gauge), 0.148" Thick (9 Gauge) Available
BRIDGE WIRE DIA./WIRE GAUGE	0.105" Thick (12 Gauge), Spaced 18" on Center
CHANNEL SIZE	2" or 3" Channel Width with a 1" Return, 16 Gauge (.0635" Thick)
PANEL WIDTH	48" (24" to 96" Available)
PANEL HEIGHT	96" (24" to 240" Available)
ACCESSORIES	Mounting Brackets and Hardware Available

ECO-FRIENDLY POWDER COATED COLOR CHOICES



RED BRICK



RED ORANGE



MOSS GREEN



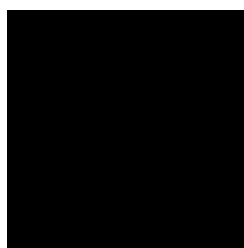
REED GREEN



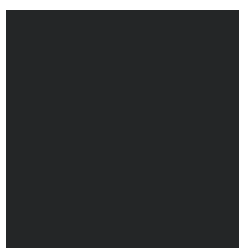
TEXTURED FOREST GREEN



AGED COPPER



JET BLACK



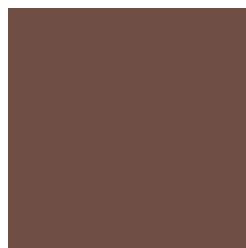
TEXTURED BLACK



LIGHT GRAY



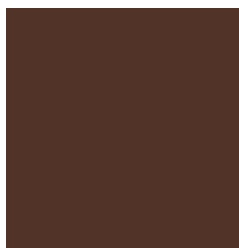
GRAY



BROWN



TAN



RUST

McNICHOLS offers eco-friendly powder coating for ECO-MESH® and ECO-ROCK® in 13 standard colors. Due to the printing process, color swatches may vary from actual colors. Please inquire about our custom colors and our paint matching capabilities!



McNICHOLS ECO-MESH® CUSTOM COLUMNS



Round Column



Round Column



Round Column



Custom Column



Square Column



Round Column

McNICHOLS ECO-ROCK® CONTAINMENT SYSTEMS

McNICHOLS ECO-ROCK® creates decorative boundaries with a sustainable twist. This Wire Mesh container, often called a “gabion,” can be customized to your desired size and filled with natural rock, recycled concrete, glass, and other materials. Constructed with heavy, woven intercrimp wires, ECO-ROCK® maintains its strength and flexibility, foregoing weld marks that can snap under pressure. ECO-ROCK® can be used as partitions, vertical entryways, seating, and decorative elements in both indoor and outdoor settings. With materials and finishes that are recycled or otherwise environmentally-friendly, ECO-ROCK® assists with LEED certification and helps enhance your “green” design!

ECO-ROCK® PRODUCT OPTIONS

PRIMARY MATERIAL	Galvannealed Steel (Most Common), Aluminum, Carbon Steel, Stainless Steel
PRODUCT FINISH	Mill, Sandblasted, Eco-Friendly Powder Coatings with 13 Standard Colors (Please See Page 6 for Color Choices)
WEAVE TYPE	Woven – Intercrimp Weave, 1515 Crimp Style
MESH SIZE	2" x 2" and 3" x 3" Square Mesh (Other Sizes Available)
WIRE DIAMETER/ WIRE GAUGE	0.148" Thick (9 Gauge) or 0.192" Thick (6 Gauge)
BULGE WIRE DIA./ WIRE GAUGE	0.105" Thick (12 Gauge) or 0.148" Thick (9 Gauge)
BULGE WIRE SPACING	12" on Center (Vertically), 18" on Center (Horizontally)
CHANNEL/BENT PLATE ANGLE SIZE	Up to 12": 10 Gauge (.1345" Thick) Channel with a 1" Return Greater Than 12": 2" x 2" Bent Plate Angle, 10 Gauge (.1345" Thick)
PANEL WIDTH	36" to 72"
PANEL HEIGHT	36" to 96"



Wall-Mounted Rock-Filled Facade



Free Standing Rock-Filled Wall



Free Standing Rock-Filled Wall





Photography on this spread: ©MikeTorreyPhotography

THE SUMMIT RANCHO BERNARDO

SAN DIEGO, CALIFORNIA

THE HOLE OBJECTIVE

The planners who updated The Summit Rancho Bernardo, a 105-acre corporate campus northeast of downtown San Diego, were charged with renovating this complex comprised of commercial/office buildings. Their plan included providing tenants and their employees with new campus amenities, as well as creative areas of green spaces for gatherings and outdoor activities. The campus, located on a plateau surrounded by picturesque natural rocks, rich earth tones and vegetation, has a view of Cowles Mountain, a familiar summit characterized by warm shades of soil and rock. With parking lots interspersed around buildings and landscaping, the challenge was to improve the look of the campus while adding elements and activity spaces reflecting the beauty of the surrounding native topography.

Built on a crest, the building's surrounding land required a combination landscape and hardscape that would accomplish multiple objectives: 1) cost-effectively provide an attractive way to manage a naturally occurring slope; 2) complement the master plan; 3) ensure the outdoor space has the elements needed for recreational enjoyment; and, 4) serve as a partition to screen parking areas while defining the overall space.



Working in collaboration with DES Architects + Engineers (DES) of Redwood City, CA, the landscape designer, Lastras de Gertler (LdG) Landscape Architects of San Diego, knew they would need a hardscape system that could be assembled in various configurations and serve multiple functions. DES and LdG partnered with Level 10 Construction and BrightView Landscape Development, both of San Diego, to tackle the project.

THE HOLE SOLUTION

Rocio Gertler, the principal of LdG, and the team, turned to **McNICHOLS ECO-ROCK®**. The gabion-style wire containers created a partition and divider system that is custom-filled with angled rocks harvested from a local quarry. This Wire Mesh, framed grid system was integrated into seating, partitions, and decorative features. Assembled in container-style arrangements along the slope outside the fitness center, the system became the basis of LdG's plan for amphitheater-style seating that also became an outdoor extension of the fitness center. Hand-filled by BrightView with indigenous rocks, **ECO-ROCK®** in the amphitheater is capped with Ipe wood and installed in varying heights and depths along manicured greenscapes and platform steps.

ECO-ROCK® is also highlighted in other areas of the campus in addition to the platform steps. Along walkways, **ECO-ROCK®** can be seen filled with patio stones larger than those in the amphitheater seating. In the outdoor eating area, **ECO-ROCK®** is applied to the front of a dining counter as a way to repeat the rock design feature throughout the amenity area.



Gertler said, "We wanted a design that could bring down the expense of the grounds." Cost efficiency was a key factor in LdG's choice of landscape and hardscape material.

"To make it personal and add interest, we wanted to create a place of plantings, hardscape, and furniture," she said. "We wanted a scenario that was rustic, and with the mountain view, we wanted to bring natural materials into the plan and introduce them in an artistic way."

"We like that **ECO-ROCK®** is a system," said Gertler, noting that "we knew we would need to use the material in different ways, so we wanted a system with different sizes and functions."

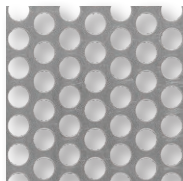
According to Howard Jeng of DES Architects + Engineers, the newly designed amenities on the campus combined with the addition of glass elements to surrounding buildings, turned a once monolithic-looking concrete setting into an aesthetically pleasing office park that is home to technology companies and light industrial tenants. The redesigned entrance and patio areas helped define the entry point, as well as various parts of the campus, he said.

Completed in 2016, the project earned the 2017 Orchid Award for Landscape Architecture from the San Diego Architectural Foundation.

McNICHOLS®

In business since 1952, **McNICHOLS CO.** is the worldwide leader in supplying “Hole Products” including **McNICHOLS®** Perforated and Expanded Metals, Wire Mesh and Designer Metals, as well as a complete line of Metal and Fiberglass Grating and Flooring Products. Our Metals Service Centers are strategically located in 19 cities across the country, but are all part of one “Hole Network.” Customers choose **McNICHOLS** because of our knowledgeable associates, vast product inventory, and superior customer service. Please allow us to serve you on your next project!

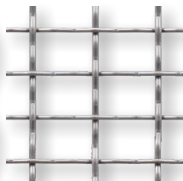
YOUR HOLE NETWORK



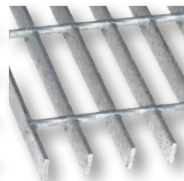
PERFORATED METAL



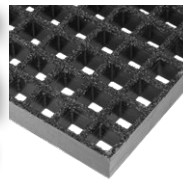
EXPANDED METAL



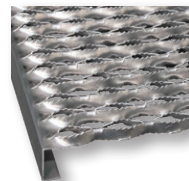
WIRE MESH



BAR GRATING



FIBERGLASS GRATING



PLANK GRATING

Industrial & Architectural Hole Product Solutions Since 1952.

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