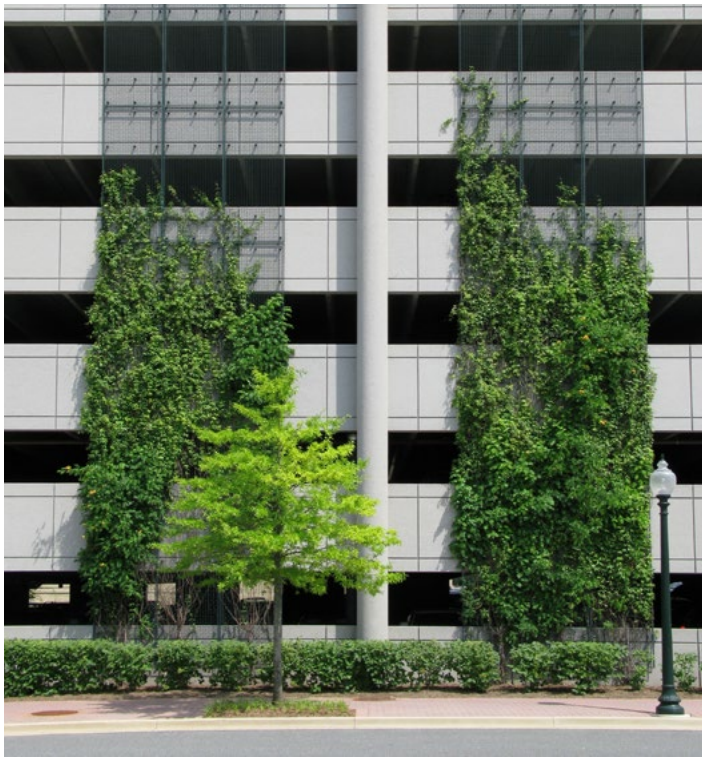
Tournesol



greenscreen®

Greenscreen®

Greenscreen® is the leader in green facade systems, pioneering living architecture since 1993, joining Tournesol in 2022. Greenscreen's innovative, three-dimensional trellis panels transform building exteriors into dynamic, living art.

The panel system delivers robust structural integrity without a heavy frame, and supports climbing vines on walls, columns, fences, and other structures, contributing to biodiversity, reducing urban heat, and improving air quality. Trusted by landscape architects, contractors, and developers, Greenscreen offers comprehensive technical support and detailed installation guidance, ensuring that every project—whether multi-family developments, hospitality, or commercial and civic facilities—benefits from sustainable, visually stunning solutions.

greenscreen®

FROM OUR PANELS, POSSIBILITY GROWS

All Greenscreen® projects start with our three-dimensional panels which are engineered for plant growth and reliable exterior installations. We fabricate domestically using high-quality 14-gauge, ASTM A641 galvanized steel wire. Two 2" x 2" grids are welded together with unique zig-zag trusses—when completed, these panels are 3" deep. This construction delivers lightweight rigidity that resists bowing or deformation.

CONSTRUCTION

Except for posts and gates for fencing, all other Greenscreen applications use steel structure provided by others.

VINE SELECTION

Twining vines work best on our 3D Trellis, but selection depends on a number of factors. Get planting tips and a comparative chart of recommended plants at tournesol.com/trellis_plants.

PANEL PARAMETERS

Dimensions

Available width: 6" to 48"
Available length: 12" to 168"

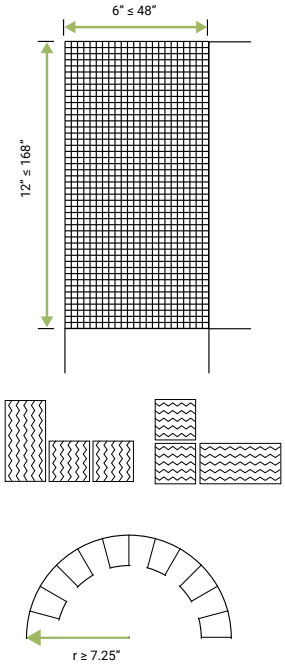
Length and width of panels are in 2" nominal increments. Allow for a tolerance: ⅛" in width and ¼" in length. Trim adds an additional 1/8" per side.

Panel Orientation

Mounting can be horizontal or vertical, but all panels should maintain the same orientation.

Columns & Curves

Specify any circle or arc with an exterior radius ≥7.5".

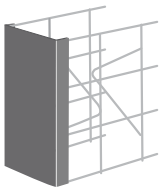


POWDER-COAT COLORS

After welding, trellis is primed and powder-coated for durability. To view colors and order samples visit: tournesol.com/materials.

TRIM OPTIONS

Each panel has four edges that can be finished with Channel Trim, Edge Trim, or left untrimmed. While exterior edges should have trim, adjoining edges in tiled installations don't require trim. When selecting trim note that the Channel Trim should not be specified for the bottom edge. Trim adds 1/8"; adding trim on all four sides would add 1/4" to both width and length.

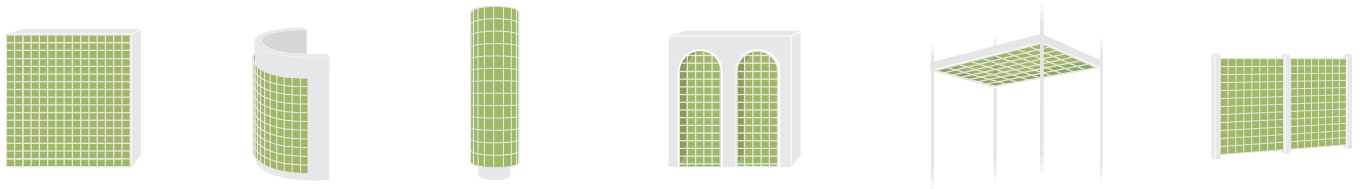


Channel Trim 5104

Edge Trim 5105

APPLICATIONS

Designed to work with architecture, Greenscreen can be mounted to buildings and steel structures by others in a broad range of applications.



Walls

Mount Greenscreen on any flat or curved facade.

Columns

Greenscreen can be curved. Smallest exterior radius is 7.5".

Overhead & Infill

Inset or surface-mounted; can span 4' openings unsupported.

Fencing

Flat or curved panels mount between posts.

WE'RE HERE TO HELP

Tournesol is here to advise you at any point in your project, from planning and quoting, to assembly and installation guidance.

tournesol.com/advisors

REQUEST A QUOTE

When you are ready to get pricing, submit your plans and project information at tournesol.com/request-quote.

WALLS

greenscreen®

WALLS

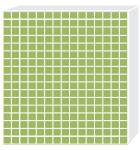
greenscreen®

WALLS

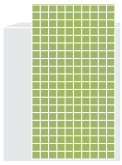
Greenscreen® panels transform building facades into vibrant, energy-efficient displays. They support climbing and deciduous vines that shade structures in summer and allow sunlight to heat buildings in winter.

Panels can be fabricated for flat or curved walls, matching building contours. The system's modular design ensures a seamless and secure installation.

Our fabrication team can modify panels to fit unique shapes. Meet with an Advisor to discuss your project.

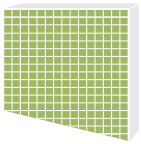


Add panels for continuous coverage



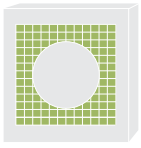
Cantilever up to 20%

Curve to match contours



Angle cut any edge

Fabricated to meet design needs



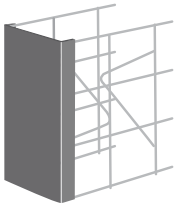
Cut out for aesthetic or functional reasons

WALL MOUNTING

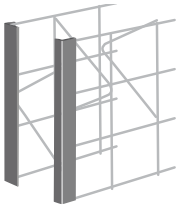
Use Greenscreen® mounting clips to secure panels to building facades. There are two options for standard wall mounting clips designed to keep trellises in place. Custom clips can be designed to accommodate unique conditions.

TRIM OPTIONS

Each panel has four edges that can be finished with Channel Trim, Edge Trim, or left untrimmed. While exterior edges should have trim, adjoining edges in tiled installations don't require trim. When selecting trim, note that the Channel Trim should not be specified for the bottom edge. Trim adds 1/8"; adding trim on all four sides would add 1/4" to both width and length.



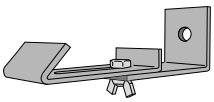
Channel Trim 5104



Edge Trim 5105

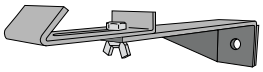
CLIP 5132R Close fitting clip.

+/-1" airspace between the wall and the back of the panel.



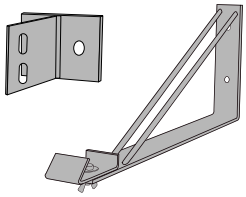
CLIP 5132G Deeper clip.

+/-5" airspace between the wall and the back of the panel.



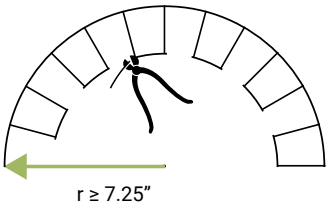
CUSTOM CLIPS

We can design custom clips to accommodate unique site conditions.

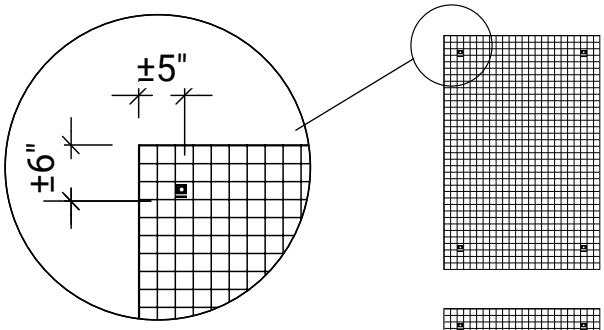


CURVED WALLS

When fabricating Greenscreen® trellis to curved facades, the Cut-to-Curve method is used.



Small sections of the grid panel are removed to create a flexible trellis that can curve to meet field conditions. Information about Crimp-to-Curve can be found in the Fencing section on page 18.



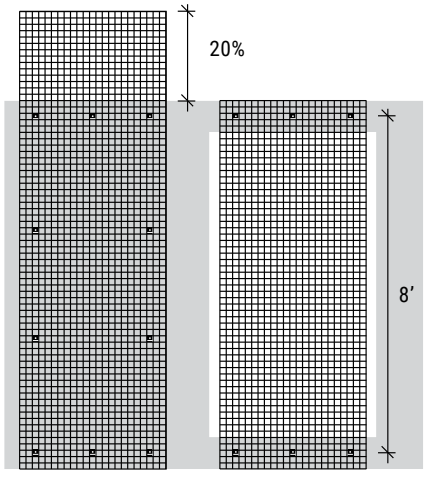
CLIP LOCATION

We recommend that clips are placed ~5" from a vertical edge between two vertical trusses, and ~ 6" from a horizontal edge.

MOUNTING CONFIGURATION

A number of factors can influence the quantity of clips and mounting location, but a good rule of thumb is to use 4 or more clips on a 4' x 6' panel, 6 or more for a 4' x 8' panel, and 8 or more for a 4' x 12' panel.

Work with one of our Advisors to create plans for your Greenscreen trellis project. Installation instructions will be provided.



OPEN SPANS & CANTILEVERING

Span a vertical opening up to 8' unsupported.

Cantilever up to 20% of panel length.

INFILL & OVERHEAD

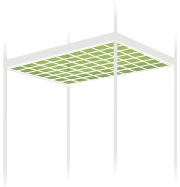
INFILL & OVERHEAD

INFILL & OVERHEAD

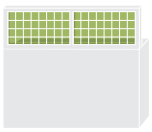
Greenscreen® panels can fill steel structures built by others such as alcoves, guardrails, pergolas, and archways.

These panels allows filtered light into a space, while also serving as a visual and physical barrier.

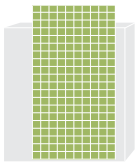
Fabricated to fill openings



Designed to fill overhead structures



Fabricated to infill guardrails



Accommodates projections from structure

Fabricated to meet design needs

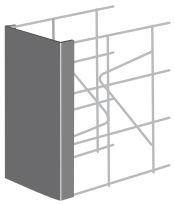
Cut out for aesthetic or functional reasons

INFILL & OVERHEAD MOUNTING

The lightweight and rigid panels are easy to lift into place and attach. They use simple, concealed hardware at attachment points. Panels can be mounted in alcoves to sit flush with the building exterior. They can also be mounted to walls and floors for versatile application.

TRIM OPTIONS

Each panel has four edges that can be finished with Channel Trim, Edge Trim, or left untrimmed. While exterior edges should have trim, adjoining edges in tiled installations don't require trim. When selecting trim, note that the Channel Trim should not be specified for the bottom edge.



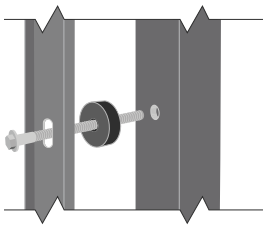
Channel Trim 5104

Edge Trim 5105

Trim adds 1/8"; adding trim on all four sides would add 1/4" to both width and length.

CONCEALED FASTENER

Slots are drilled in the Channel Trim before powder-coating. Panels are typically attached to steel structure by others with SS tek screws and necessary spacers.



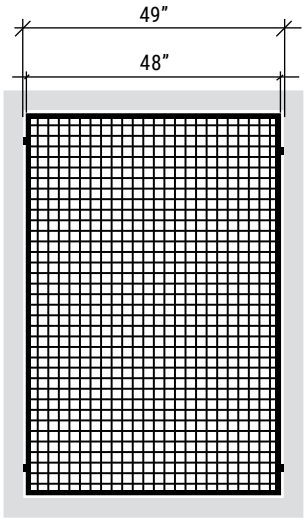
INFILL WIDTH CALCULATION

Length and width of panels are in 2" nominal increments. Allow for a tolerance: 1/8" in width and 1/4" in length.

Trim adds an additional 1/8" per side.

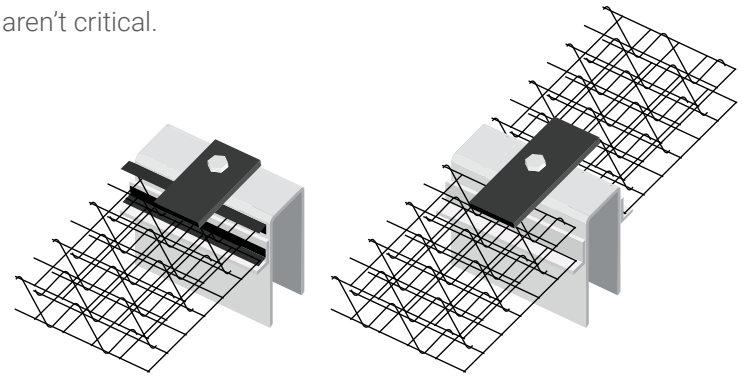
For a 48"W panel, the suggested opening would be 49".

We supply UV stabilized POM spacers in various thicknesses to accommodate field conditions.

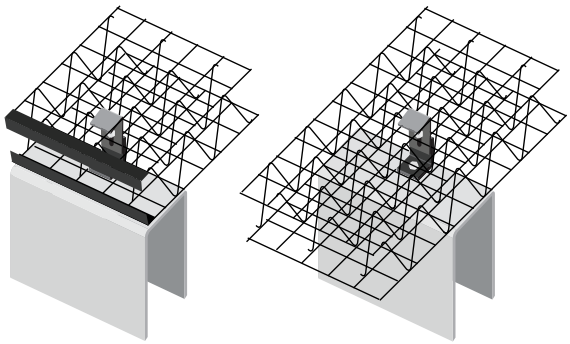


OVERHEAD MOUNTING

Greenscreen® can be added overhead to existing structures. Overhead with infill mounting rests on the angle steel provided by others, and is secured with Greenscreen flat clips. Overhead panels can also be surface mounted and secured with 5132R wall clips. This method is easier to specify because exact measurements aren't critical.



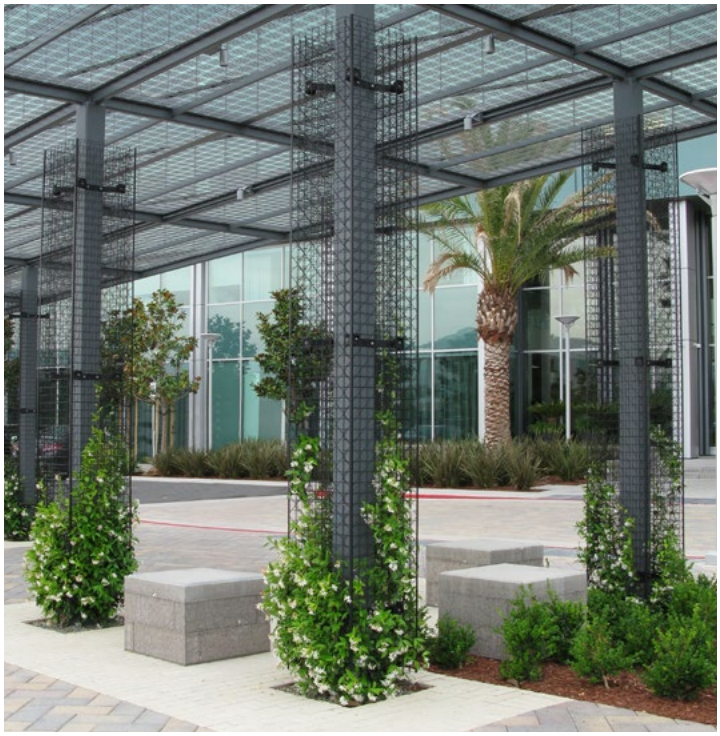
Representation of infill mounted overhead resting on 2" x 2" welded steel angles and steel structure by others, secured with Greenscreen flat clips.

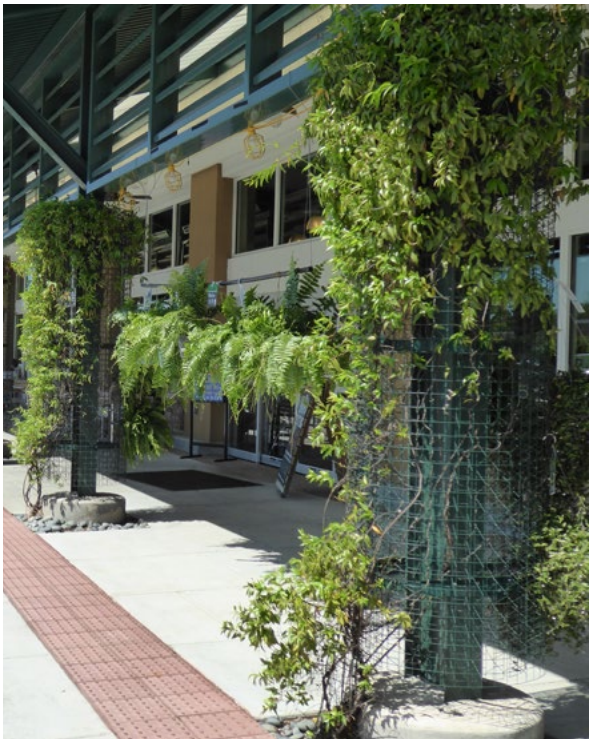


Representation of surface mounted overhead resting on steel structure by others, secured with Greenscreen 5132R clips.

COLUMNS

COLUMNS

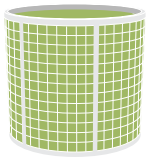




COLUMNS

Bring art to life with trellis that wraps posts, columns, and piers with growing vines. Mounted to wood, metal, or concrete, Greenscreen® curved and square columns can be customized to meet a wide variety of project requirements.

Wraps around freestanding posts



Large radius columns

Custom square column

greenscreen®

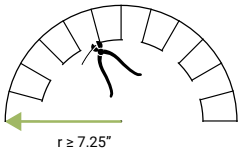
FABRICATING COLUMNS

Greenscreen® panels can be Cut-to-Curve to wrap around columns. When finished with optional trim band and closed using 5131 Flex-C Rings, columns rest on 5132V clips customized to fit a post by others. Our standard 3" post can be supplied if needed for freestanding options.

The most cost-effective standard column uses a single, uncut 48"W panel, which creates a column with a diameter of approximately 15.5". Connect with an Advisor to discuss your column project.

CUT-TO-CURVE

Small sections of the grid panel closest to the structure are removed to allow the necessary shortening of the inner radius.



OPTIONAL TRIM BAND

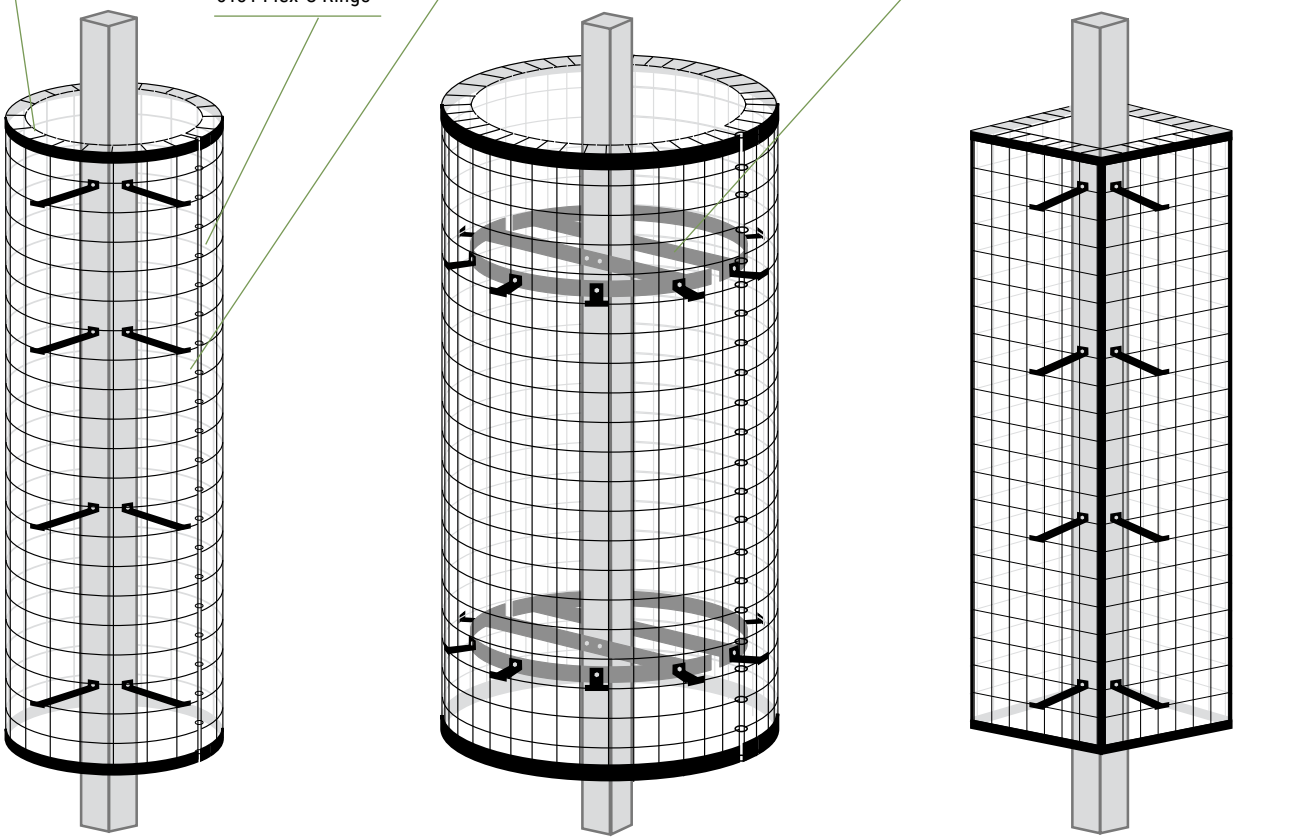
For a finished look, flat trim can be applied to the top and bottom edges.

5132V CLIPS

Custom-length 5132V Clips will be fabricated to fit the column radius to the post.

CUSTOM RADIUS BANDS

For larger columns, custom radius bands can be attached to the post before clips are attached.



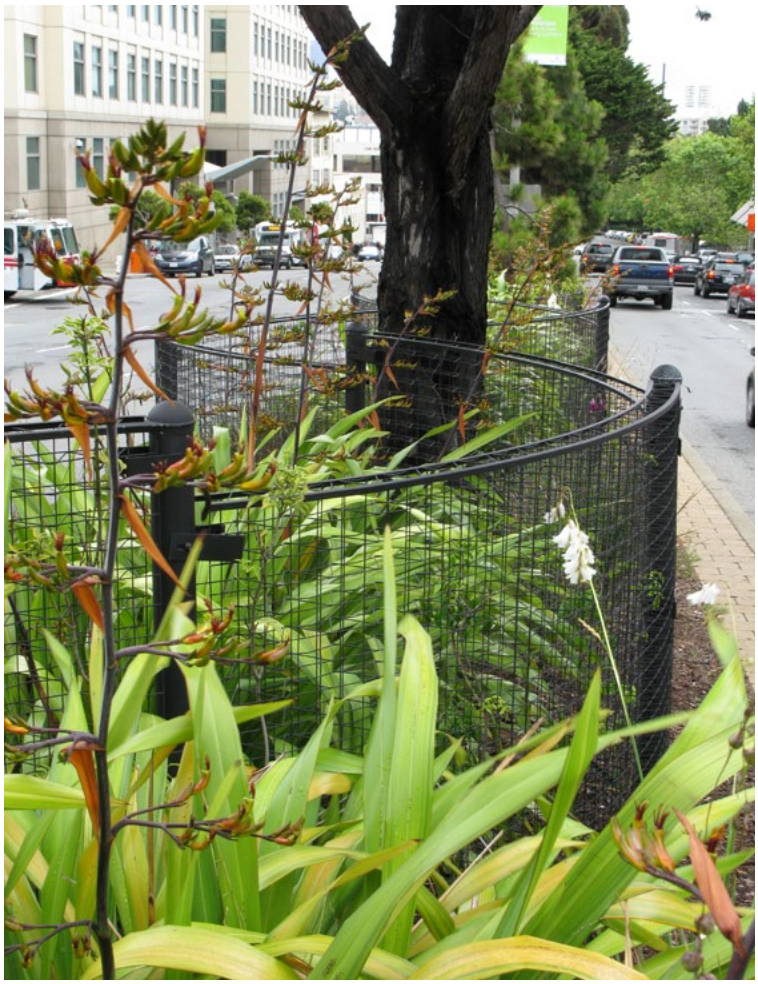
Standard Column

Custom Large Radius Column

Custom Square Column

FENCING

FENCING

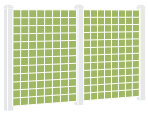


FENCING

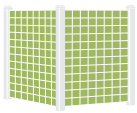
Greenscreen® freestanding fencing is a modular system made up of steel posts, trellis panels, and mounting hardware, offering flexible design options for privacy, shade, and enclosure.

The 3” deep trellis panels support plant growth, creating the look and benefits of a living fence.

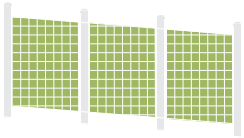
Note: Greenscreen does not meet the code requirements for a swimming pool enclosure in most regions.



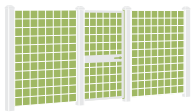
Post-mounted fencing



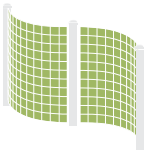
Screen building utilities



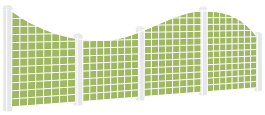
Match slope angles precisely



Add gates to control access



Curved to match contours



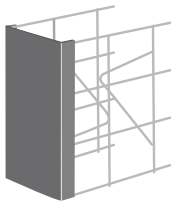
Unique top edge

greenscreen®

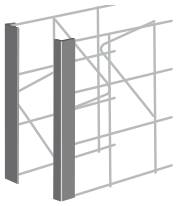
POST-MOUNTED FENCING

Greenscreen® freestanding fencing is a modular product consisting of posts, panels, and mounting hardware with nearly unlimited capabilities.

TRIM OPTIONS



Channel Trim 5104



Edge Trim 5105

Each panel has four edges that can be finished with Channel Trim, Edge Trim, or left untrimmed. While exterior edges should have trim, adjoining edges in tiled installations don't require trim. When selecting trim, note that the Channel Trim should not be specified for the bottom edge. Trim adds 1/8"; adding trim on all four sides would add 1/4" to both width and length.

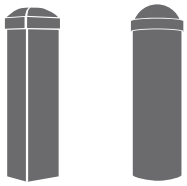
POST OPTIONS

3" Square steel posts with 3/16" wall are standard. They match panel thickness and support straight or 90° connections. Round posts are used for unique angles or curved fences.

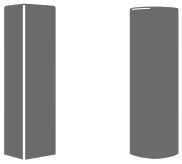
Square posts are available with a Square Cap or a Welded Flat Cap.

Round posts are available with a Round Cap or a Welded Flat Cap.

Posts are available for embedment or with a welded base plate; size based on project requirements. Greenscreen can provide engineering services for posts.



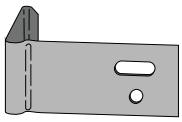
Round & Square Posts with Caps



Round & Square Posts with Welded Flat Caps

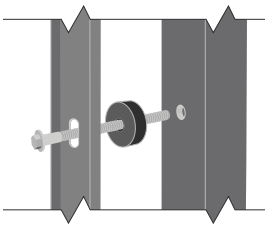
Welded Base Plate

SNAP CLIP 5133X



Trim on the vertical panel edges is optional when using 5133X Clips, which allow for quick installation and lower cost compared with the Concealed Fastener.

CONCEALED FASTENER



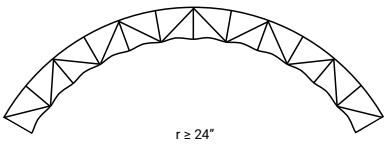
The concealed fastener offers a cleaner look but is more labor intensive to install than Snap Clips. Slots drilled in Channel Trim accommodate 1/4" diameter through bolts at intermediate posts or a threaded insert at end posts.

GATES

Standard gates are tube steel frame construction with infill panel powder-coated to match. Connect with an Advisor about options.

Gate hardware by others. Greenscreen recommends hardware that is mechanically fastened rather than welded. Posts adjacent to gates may need to have a thicker wall or deeper footing to account for weight of gate.

CRIMP-TO-CURVE

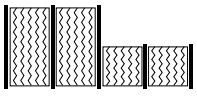


Greenscreen® panels can be crimped to create curved fencing. Panels can only curve in one direction. To achieve a reverse (compound) curve, directional change must occur at a post location.

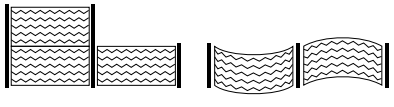
Crimp-to-Curve fence panels cannot have a radius smaller than 24". The Cut-to-Curve method can create a tighter radius; however, this approach is not suitable for fences. For more on Cut-to-Curve, see the Walls section, page 6.

PANEL ORIENTATION

Panels can be mounted on fence posts either horizontally or vertically, but all panels should maintain the same orientation. All fences with curved panels will need to be crimped-to-curve in horizontal orientation.



Vertical Orientation



Horizontal Orientation