



greenscreen®
by Tournesol

Design Guidelines for Green Façades & Site Amenities on Parking Structures



Our work on the 303,000 square foot "green" garage allowed us to create a captive growing space that supports climbing plants using Greenscreen® trellis panels and a variety of flowering vines.

Project: New York Botanical Garden | Architect: Ennead Architects

Architect of Record and Engineer: DESMAN Design Services | General Contractor: E.W. Howell



greenscreen®

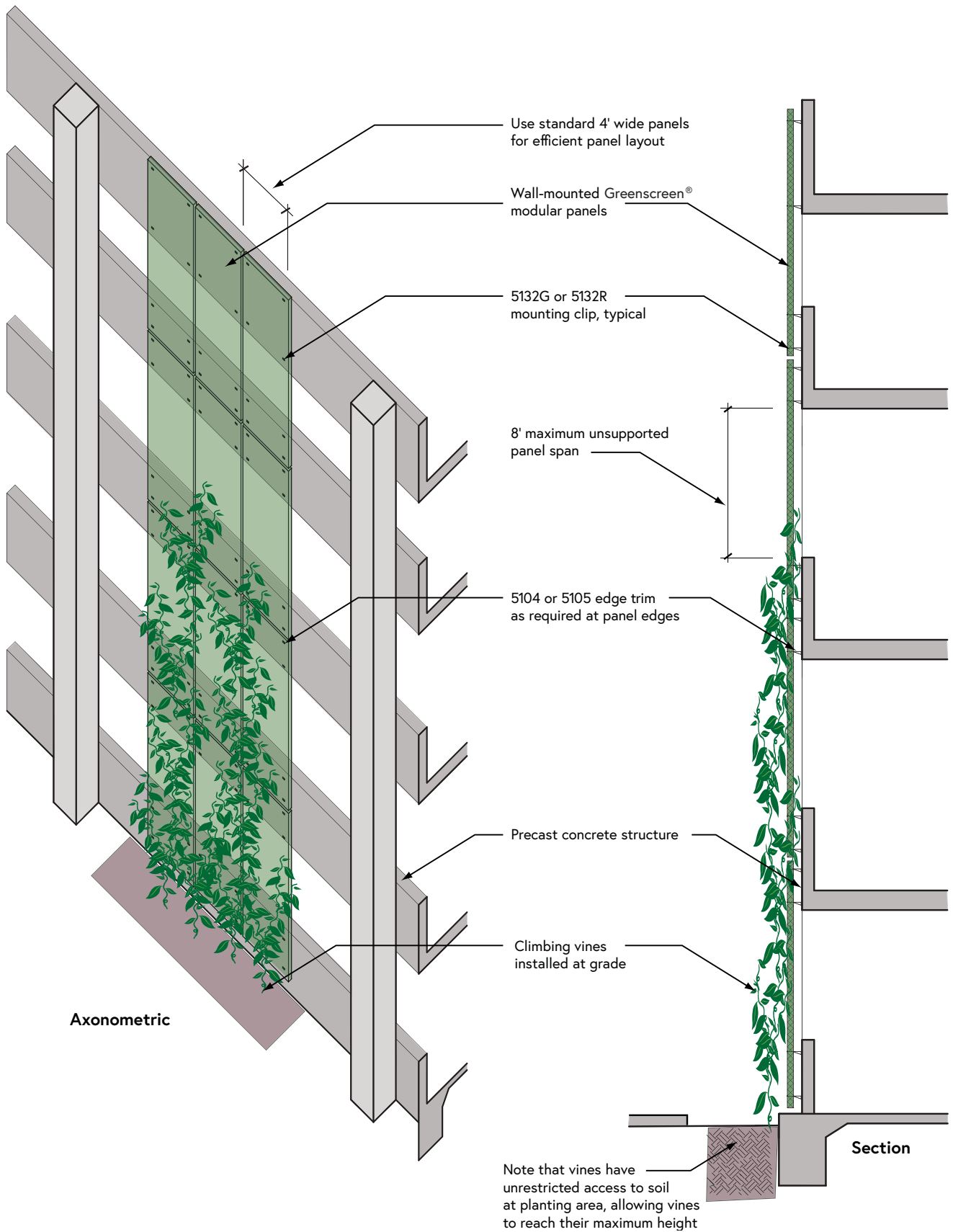
by Tournesol

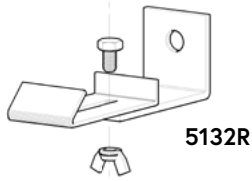
Level up urban landscapes with vibrant green facades. Greenscreen® Trellis panels bring the value of biophilia to your projects. Our trellises are an effective strategy for adding shade and shelter, welcoming nature to the built environment. Explore our guide to learn how to integrate trellises to new or existing structures. Discover a curated selection of inspirational projects and learn why professionals have trusted Greenscreen® Trellis to elevate building facades since 1993.

Call us at 800.542.2282 and partner with an Advisor who will guide you through the design process.

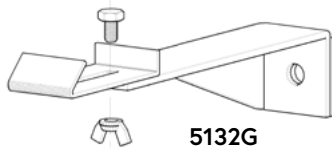
Parking Structure Green Façade Details

Wall Mounted

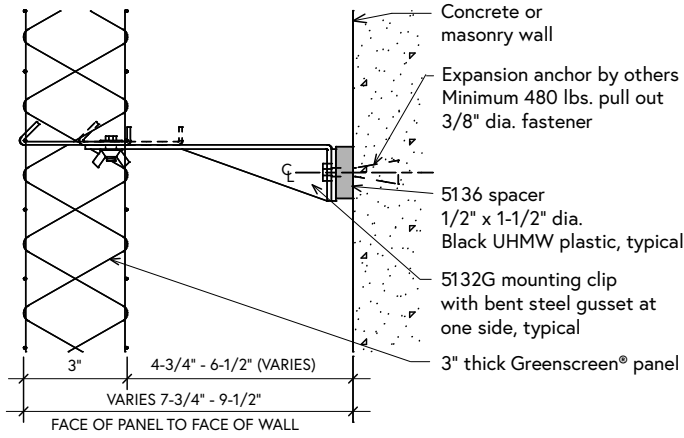




5132R



5132G



ADJUSTABLE MOUNTING CLIPS

The 5132R and 5132G adjustable clips provide panel support for both download and uplift. The clips can mount to wall surfaces or to a steel frame. The sled with slot allows for panel adjustment and ease of installation.

NOTES:

- Blade clips can also be used but allow for less flexibility in the field
- All precast mounting surfaces are typically in the same plane



Project: Fishers Place at Metro Center, Rockville, MD • Architect: HOK

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Parking Structure Green Façade Details Wall Mounted Project Examples



ABOVE:
HORIZON AT PLAYA VISTA
Los Angeles, CA

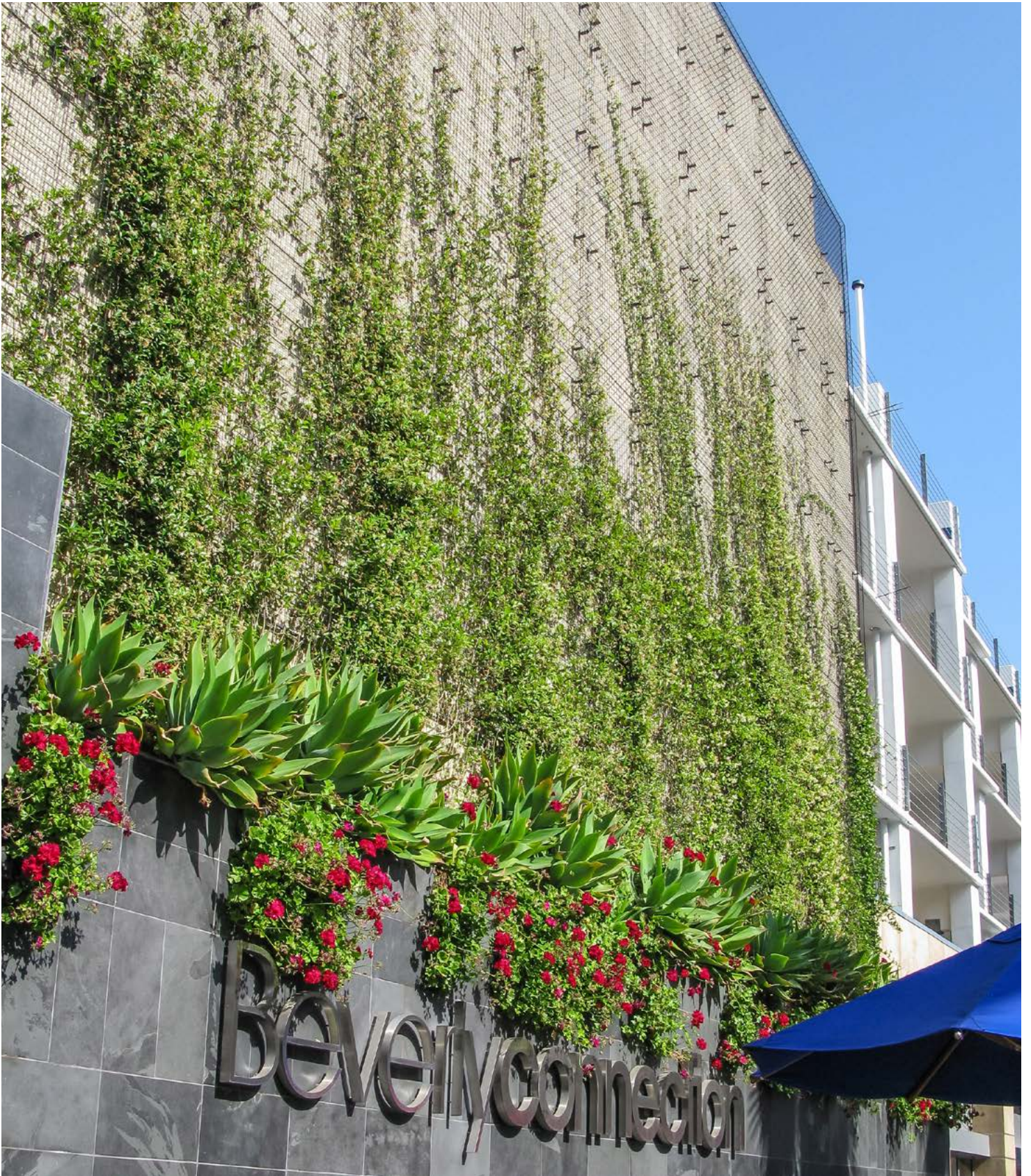
Wall mounted Greenscreen® panels are used on the parking structure and store entries serving a multi-building office cluster.

*Architect: Johnson Fain/HKS
Contractor: Morley Builders
Installer: BAPKO Metal, Inc.*

OPPOSITE PAGE:
BEVERLY CONNECTION
Los Angeles, CA

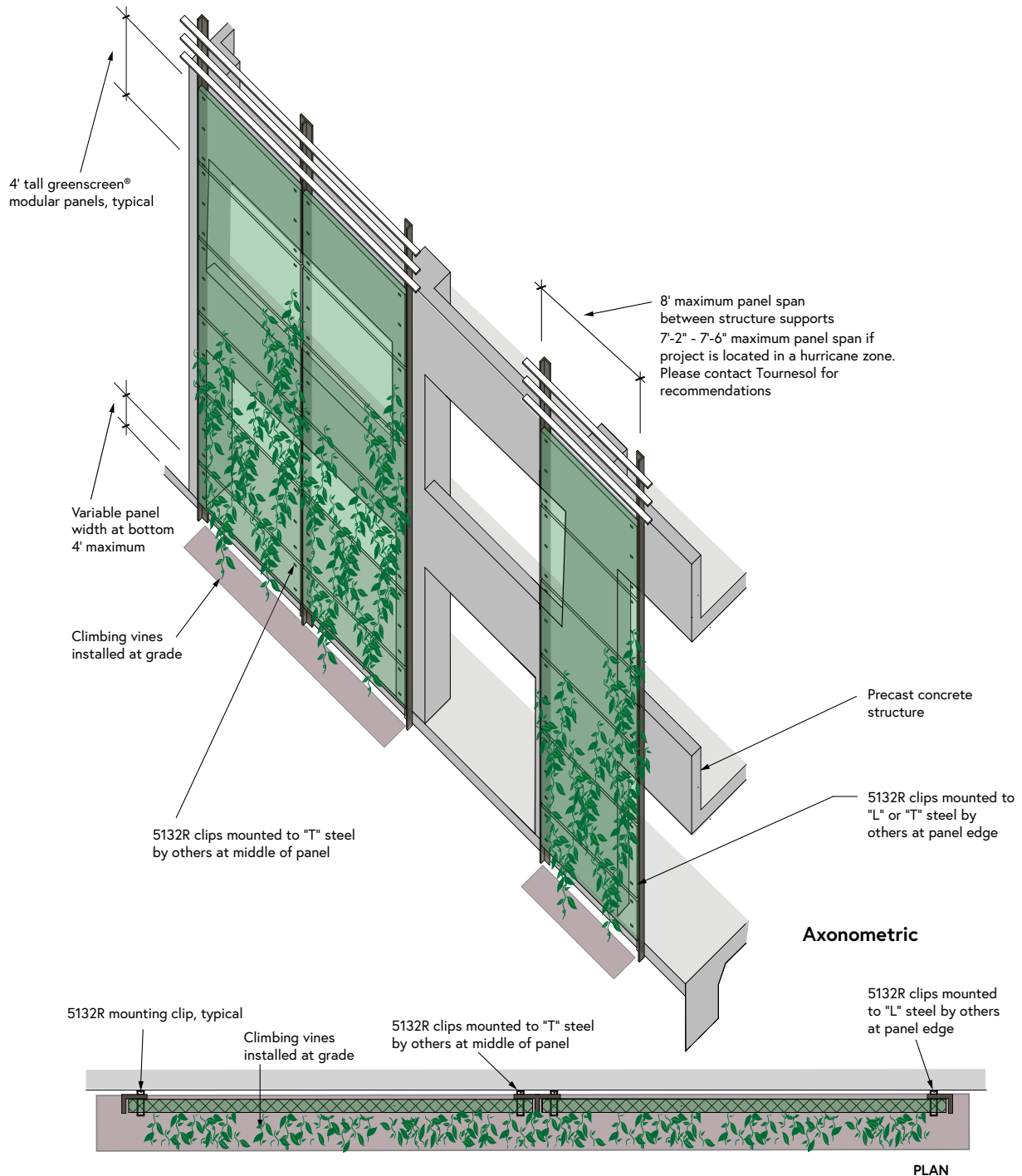
A parking structure is enhanced with a Greenscreen® green façade. Modular panels are wall mounted and vines grow from above grade planters.

*Architect: Gensler
Contractor: Shakman Construction Company*



Parking Structure Green Façade Details

"T" & "L" Support Steel

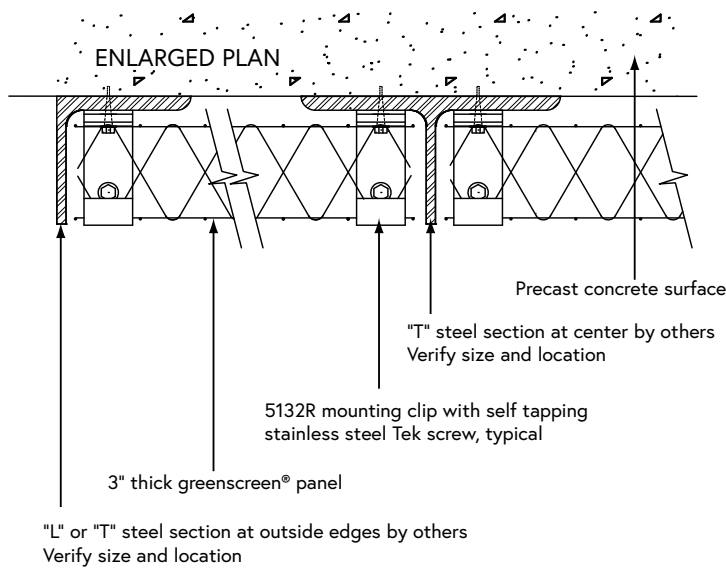
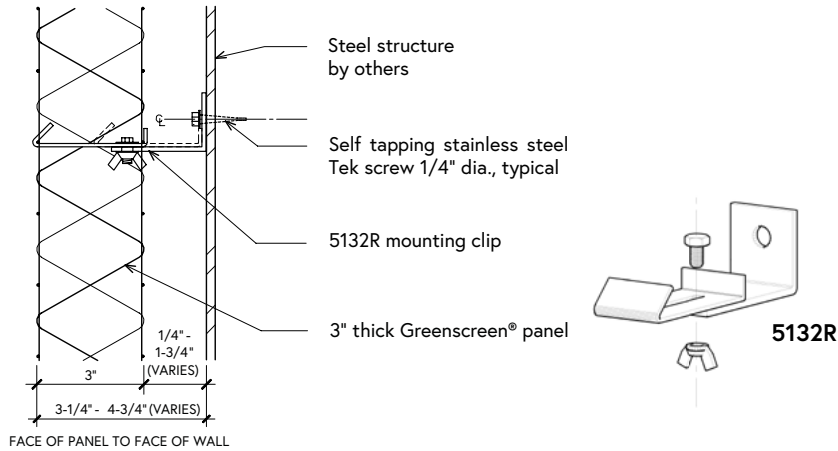


5132R CLIP MOUNTED TO VERTICAL STEEL BY OTHERS

The 5132R clip provides panel support for both download and uplift. The clip can mount to wall surfaces or to a steel frame.

NOTES:

- 4' tall Greenscreen® panels mounted horizontally to steel "L" and "T" sections
- 5132R used for attachment to steel support structure
- Steel "L" and "T" sections are sized, provided and installed by others
- No panel edge trim required for this layout; allows for maximum value engineering



Close-up of 5132R clip mounted to "T" steel by others with twining Honeysuckle Vine

Parking Structure Green Façade Details

"T" & "L" Support Steel Project Examples



ABOVE:

U.S. CENSUS BUREAU HQ

Suitland, MD

Greenscreen® panels with structural steel by others are used to create green façades for two large GSA parking structures.

Architect: SOM/HKS Architects

Landscape Architect: Mahan Rykiel Assoc./EDAW

Contractor: Skanska USA Building Inc.

Installer: Manufab

OPPOSITE PAGE:

HOUSTON MEMORIAL GARAGE

Houston, TX

"T" steel frame provides structural support for Greenscreen® panels. Note that the "T" steel is provided by others.

Architect: Morris Architects

Landscape Architect: MetroNational

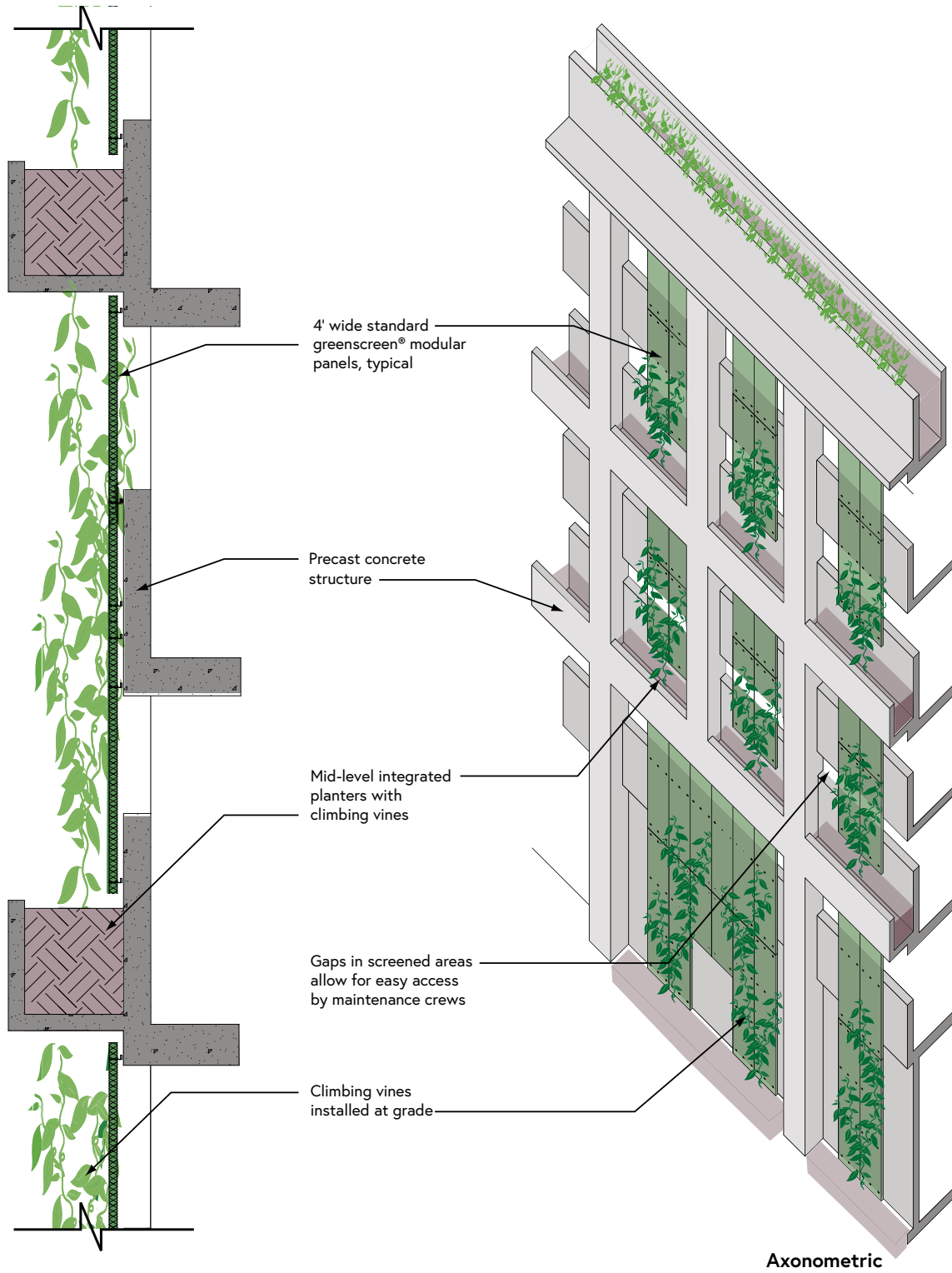
Contractor: Multiple 2002-2014



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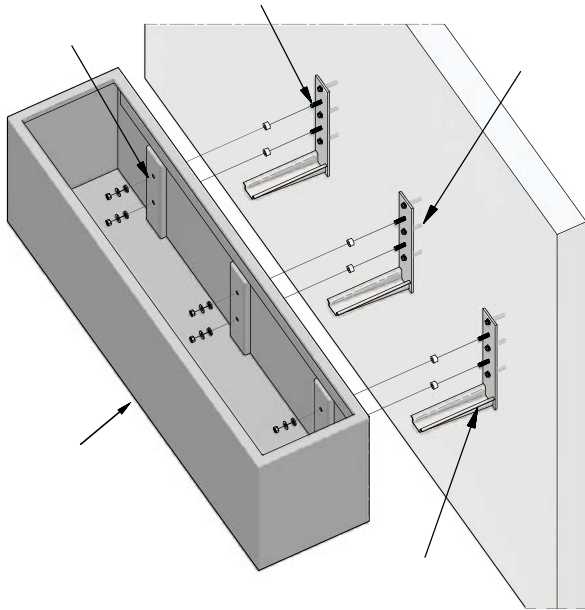
Parking Structure Green Façade Details

Integrated Planters



Enlarged Section Detail

Axonometric



Tournesol Hanging Box – see back cover for more information

ELEVATED PLANTER CONSIDERATIONS

When considering elevated planters, keep in mind the following for best results:

- Integrate planters into the design and structure of the façade from the beginning of the design process
- Allow for maintenance access from the interior of the garage
- Planter will require irrigation and drainage
- Vines will typically grow 3 to 5 times the depth of the soil. For a 2' deep planter, vines could be expected to grow 6' to 10' tall. For a 3' deep planter, vines could be expected to reach a height of 9' to 15'



Project: Seminole Casino Coconut Creek, FL • Architect: Friedmutter Group • Contractor: Moss Anderson

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Parking Structure Green Façade Details Integrated Planters Project Examples



ABOVE:
**3RD STREET
PARKING STRUCTURE**
Beverly Hills, CA

Precast planters integrated into the façade and planted with a mix of bougainvillea and jasmine.

*Architect: International Parking Design
Contractor/Installer: Bomel Construction*

OPPOSITE PAGE:
THE ELLINGTON
Oakland, CA

Tournesol Planters located behind the Greenscreen® panels on the precast surface at every level with integrated lighting by others.

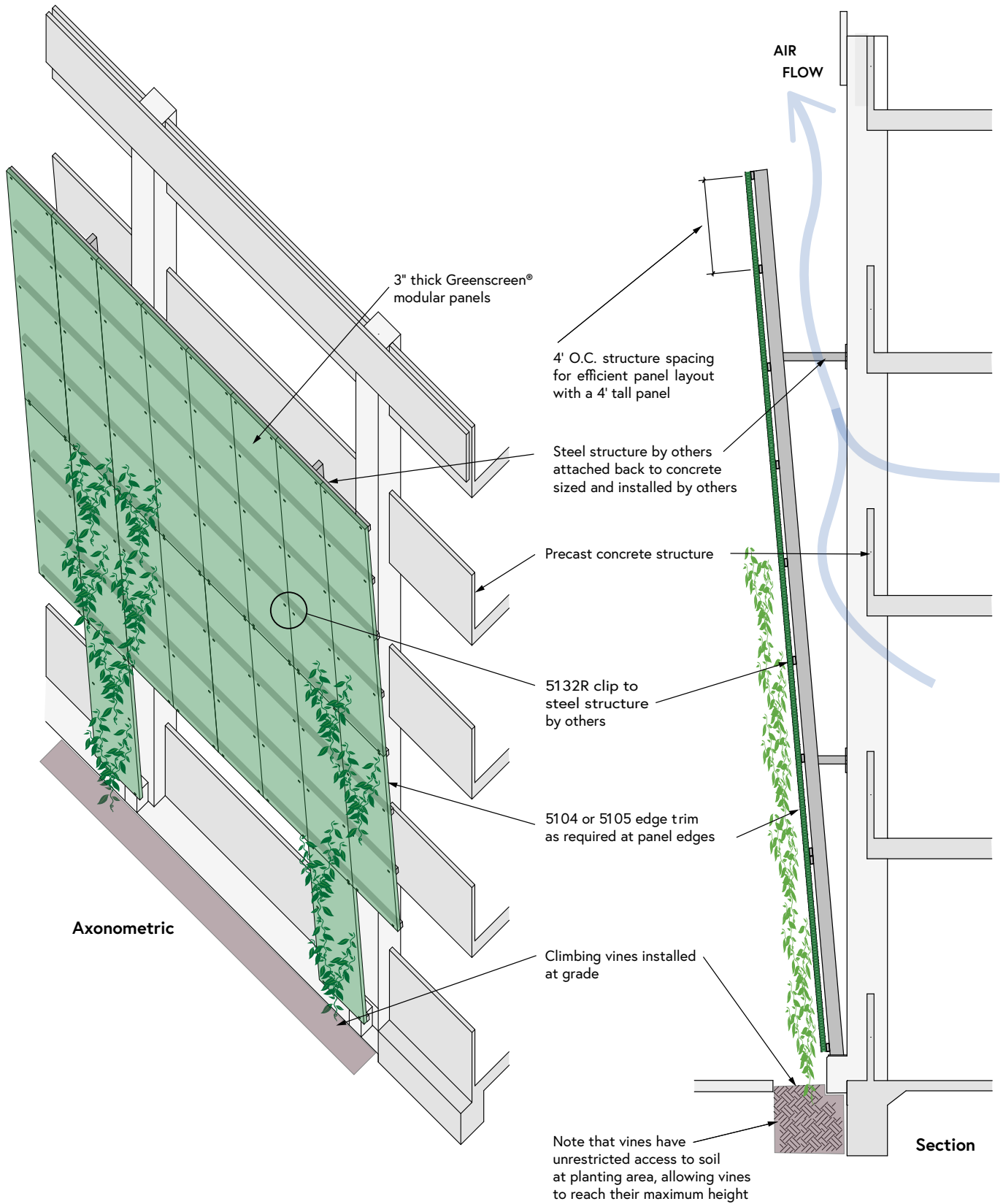
*Architect: Perkins&Will
Contractor: Swinerton Builders
Installer: C.E. Toland & Son*

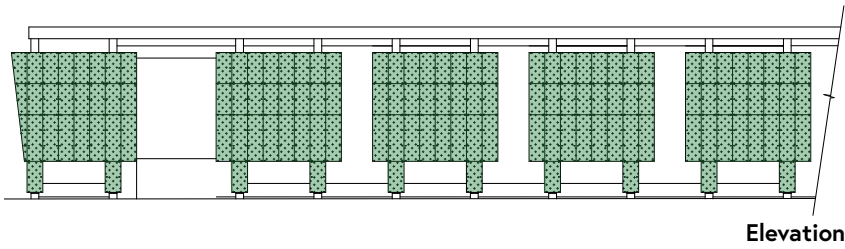


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Parking Structure Green Façade Details

Steel Structure Attached to Precast



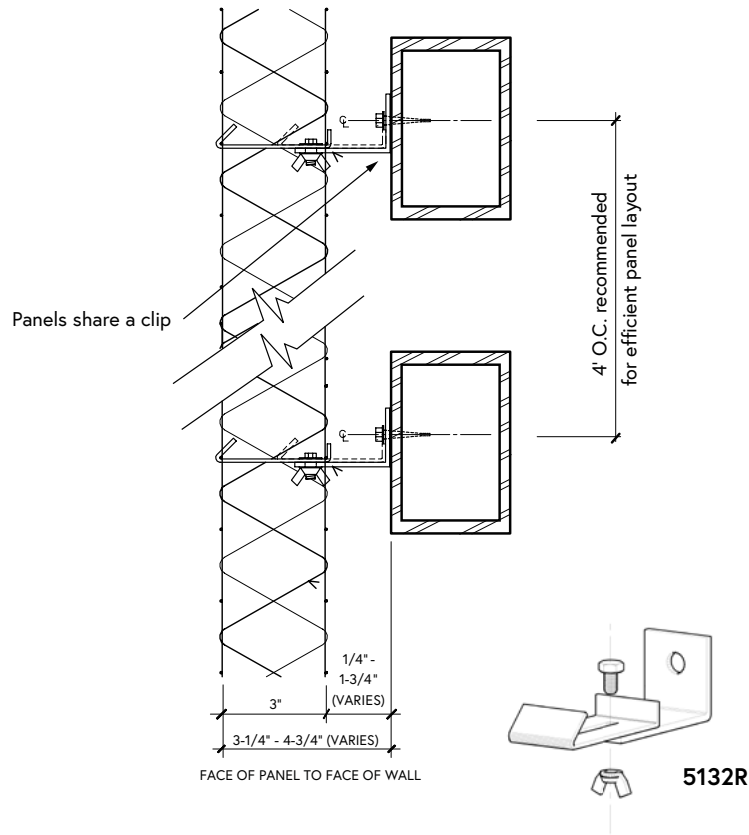


5132R ADJUSTABLE CLIP

The 5132R adjustable clip provides panel support for both download and uplift. The clip can mount to wall surfaces or to a steel frame. The sled with slot allows for panel adjustment and ease of installation.

NOTES:

- 4' wide Greenscreen® panels mounted to structure by others
- Steel support structure sized, provided and installed by others



Project: California State University, Fullerton, CA • Architect: AC Martin Partners, Inc.

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Parking Structure Green Façade Details Steel Mounted Project Examples



ABOVE:
WORLDMARK ANAHEIM
Anaheim, CA

Greenscreen® can camouflage adjacent parking structures with wall mounted, modular trellis panels.

*Architect: Ankrom Moisan
Landscape Architect: LRM Landscape
Architecture
Installer: The Bratton Corporation*

OPPOSITE PAGE:
ISSAQUAH TRANSIT CENTER
Issaquah, WA

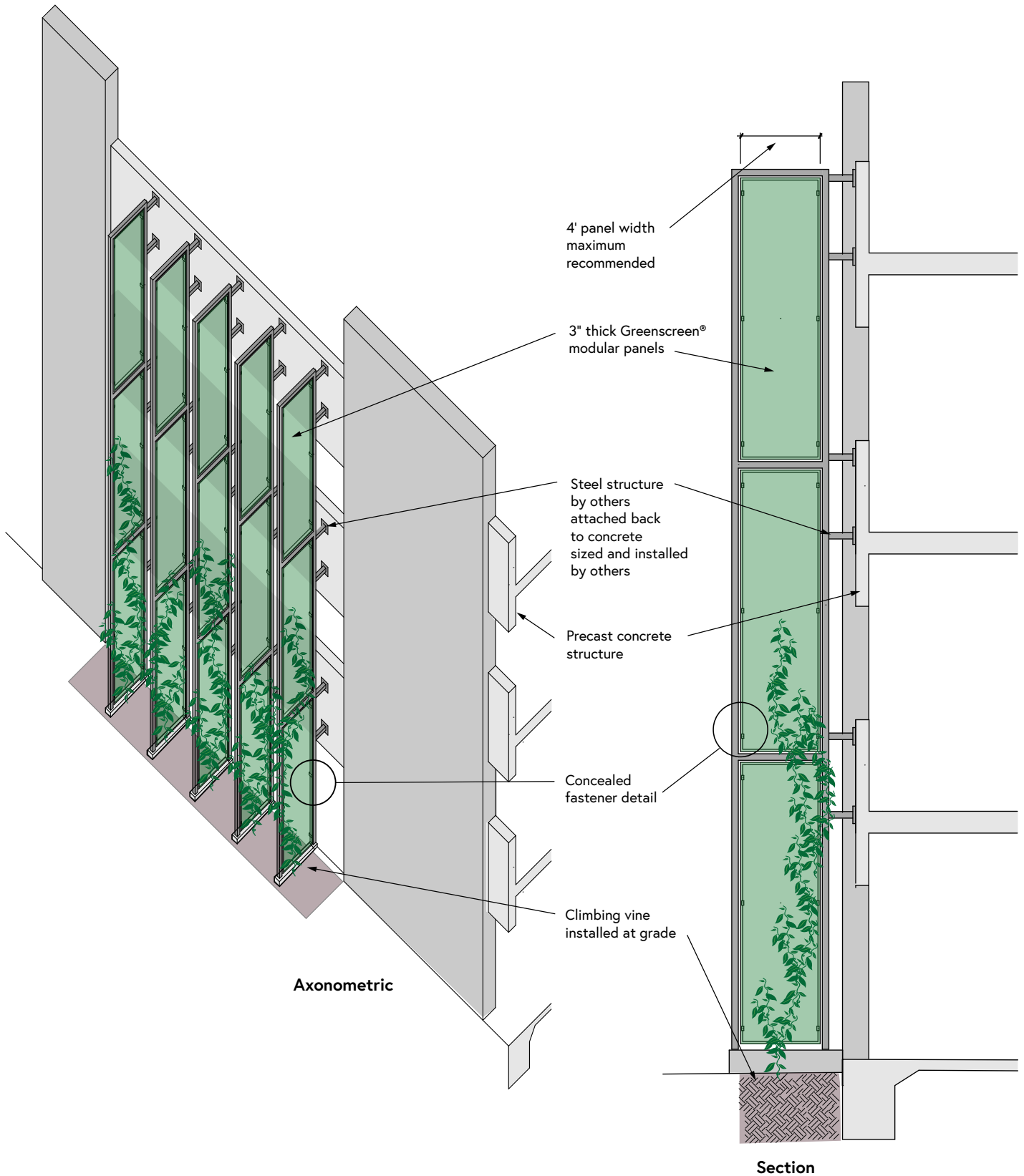
Structural steel supports are provided by others.

*Architect: MBT Architecture
Contractor: KPFF
Installer: Harbor Pacific Contractors*



Parking Structure Green Façade Details

Steel Fins Structure Attached to Precast

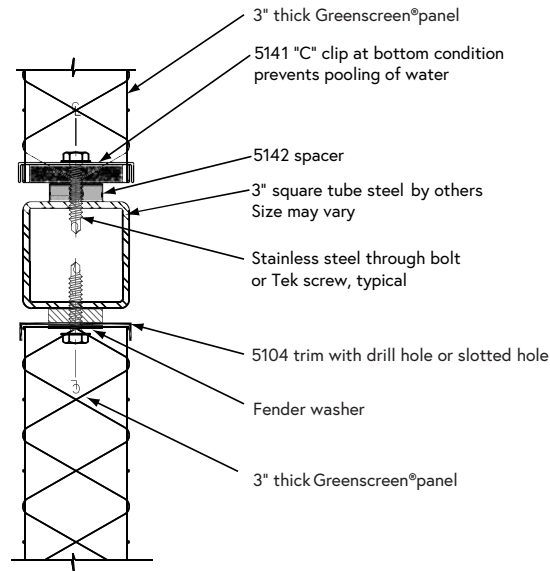


CONCEALED FASTENER

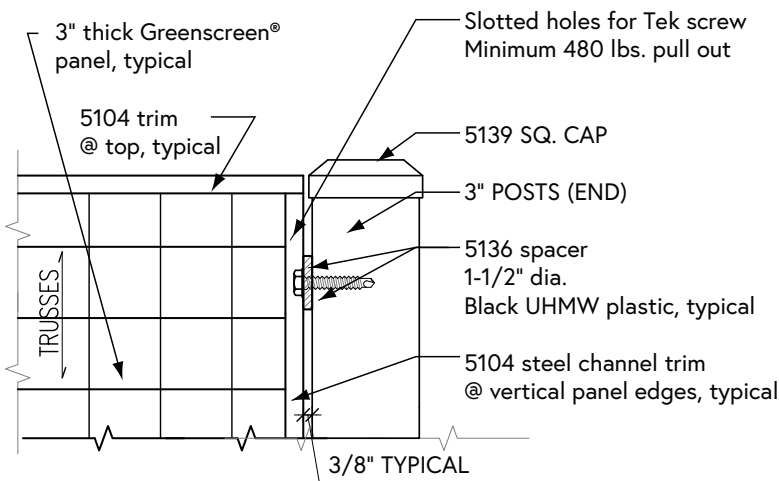
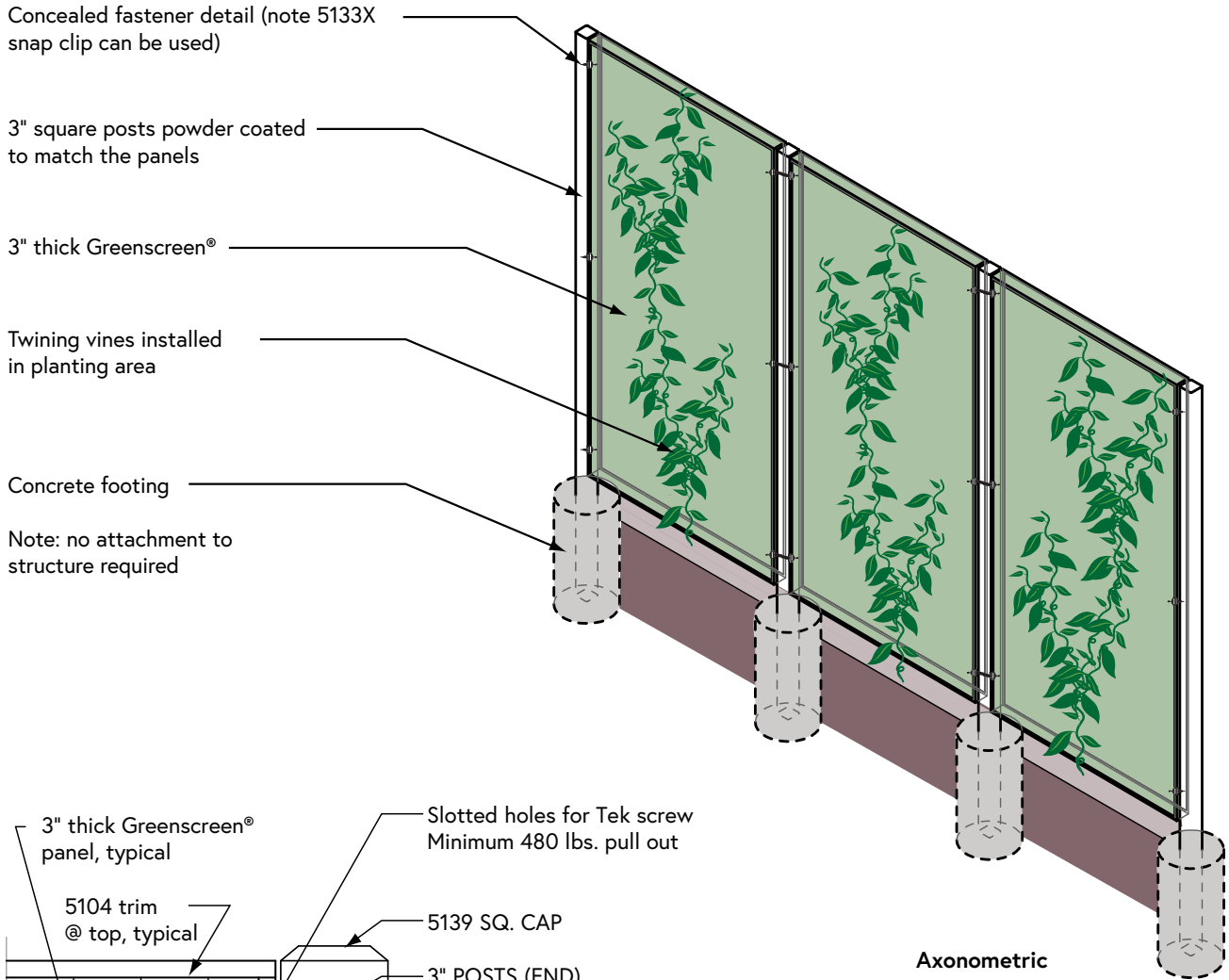
The Greenscreen® concealed fastener can be used to mount to a concrete wall or steel frame at a head, jamb or sill condition. Panel edge trim required.

NOTES:

- Greenscreen® modular panels mounted to structure by others
- Standard concealed fastener used for attachment to steel
- Steel support structure sized, provided and installed by others
- Panel edge trim required
- Allows for maximum airflow



Project: LDS Institute at Arizona State University Parking, Tempe, AZ • Architect: Architekton • Installer: Skyline Steel • GC: Layton Construction



CONCEALED FASTENER DETAIL



*Project: Rockville Town Square, Rockville, MD • Architect: WDG • Contractor: The Whiting-Turner Contracting Company
Installer: Metal Sales & Services, Inc.*



Site Furnishings

Planters, Tables & Benches



WILSHIRE COLLECTION

A versatile modular solution for any outdoor space available in aluminum, steel, fiberglass, or lightweight GFRC.

Bring life to campus, multi-family, mixed-use, retail, and hospitality landscapes with Wilshire, our most popular spacemaking planter. Versatility, durability, and customizability set it apart - it's why the landscape architecture community specifies Wilshire on so many projects.





WILLARD BENCHES & TABLES

Pair Willard with Wilshire and Boulevard Planters

This line of benches and tables extend the spacemaking capabilities of our Wilshire and Boulevard Planters. Its straightforward design doesn't compete with other design elements of your space. You can count on Willard's generous proportions and rugged construction to hold up on rooftops, streetscapes, and campuses.



Willard Bench



Willard Bar



Willard Counter



Willard Gathering Table

Hospitality Amenity Deck

Bioretention & Kitsap Planters on Pedestals



ABOVE:
SERIF AND THE LINE HOTEL
San Francisco, CA

Kitsap Modular Metal Planter Walls with Wally Collection wood benches and platform seating, Wilshire, and Urban planters.

Architect: Handel Architects, LLC
Landscape Architect: Surfacedesign, Inc.
Installer: Lendlease

OPPOSITE PAGE:
BIORETENTION PLANTERS

Our Bioretention Planters are pre-built and installed on-site to collect stormwater from drain leads and downspouts. Plants and media filter water, removing organic and inorganic solids, and slowly release the water into the storm drains, reducing peak discharge rates.

We offer a range of standard sizes in both aluminum and GFRC - Glass-Fiber Reinforced Concrete, but most bioretention projects are custom.

Bioretention Planters

HOW DOES BIORETENTION WORK?

Included with Planter:

- 1. Planter
- 2. Clean-out
- 3. Drainpipe
- 4. Overflow
- 5. 4" Dia. Outlet

Option Accessories:

- 6. Splash Box
- 7. Level Spreader

Customer Supplied:

- 8. Media
- 9. Landscape Fabric
- 10. Fabric Sleeve (optional)



Water enters the Splash Box.



Water flows down the Level Spreader.



Water trickles through perforations into media.



Water percolates through media and fabric.



Water pools in the bottom of the planter.



Water enters perforated drainpipe and exits.



KITSAP MODULAR PLANTER WALLS

Kitsap is a modular metal planter wall system that allows designers to sculpt unique spaces.

Kitsap can be built in powder-coated aluminum, powder-coated mild steel, or weathering steel. This customizable solution can be modified in length, height, angles, and curves to suit any landscape, and is a popular choice for rooftops.

OUR ADVISOR TEAM

Success starts here!

Whether your project is early in the planning phase or nearing a deadline, our experienced team of Advisors are here to help.

tournesol.com/advisors



WILSHIRE HANGING BOX

With a lightweight fiberglass planter, pre-engineered brackets, and easy-to-use mount template, these hanging planter boxes are the ultimate large-scale, wall-mounted planter solution.

