LiveWall® BRAND

Installation Guide

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LiveWall, LLC
A Subsidiary of Hortech, Inc.

P.O. Box 533
Spring Lake, MI 49456

(877) 554-4065
fax (616) 842-3273

LiveWall.com
sales@livewall.com

BEFORE GETTING STARTED...

Please review this guide and the customized shop drawings supplied with your LiveWall order. If you have questions, please call us at 877-554-4065. We would be happy to help!

Tools for Installation (Furnished by Installer)
Chop Saw with Carbide Blade for Cutting Aluminum
Drill
Drill Bits (1/4" and 3/16")
Hex Driver / Screw Gun
Laser or Bubble Level
Marker / Pencil
Plumb Bob and Chalk Line
PVC Pipe Primer and Glue
Spring Loaded Clamps - Two Medium Sized
Square
Tape Measure

Tools for Installation (Furnished by LiveWall)
GapTools®
Teflon Tape
Pipe Slime
Torque Bits for RainRail Fasteners and Set Screws

See LiveWall.com/components for part photos & descriptions.

Components Typically Furnished with LiveWall Order	
Furring Strips (VertiRail®)	Engineered Furring Brackets
Insulators or Shims (Furring Strip to Wall)	*Furnished upon request,* for use on metal or uneven wall surfaces
Slot Rails	Hold the bottom row of planters
RainRails®	Hold planters in place and serve as irrigation conduits
Screws, Fastening (RainRail to Furring Strip)	Fasten slot rails and RainRails to furring strips
Connectors (RainRail)	Connect adjacent pieces of RainRail
Adapters (RainRail)	Connect RainRail end to irrigation feed
End Plugs (RainRail)	Cap the end of a run of RainRail
Screws, Set (for RainRail Fittings)	Prevent displacement of RainRail connectors, adapters and end plugs
Drip Emitter Assemblies or Spray Nozzles	Conduct water from RainRail to planter
Mainline Irrigation Components	May include backflow preventer, air gap, controller, screen/disc filter, fertilizer injector, and/or descaling components
HideAway Brackets	Mount contractor-supplied facing material to building wall in systems with side-feed irrigation, and stabilize valves against water hammer
Planters (WallTer®)	Hold planted inserts, available in large or standard sizes
WindClip® and Screws, Limiting (for Planters)	*Furnished upon request,* provide security against theft or wind uplift
Inserts (for WallTer® Planter)	Hold soil and plants, available in large or standard sizes
Rear Drain Assembly - Tubes and Fittings	*Supplied with rear-drain planters,* drains excess water from planters to sewer or storm drain

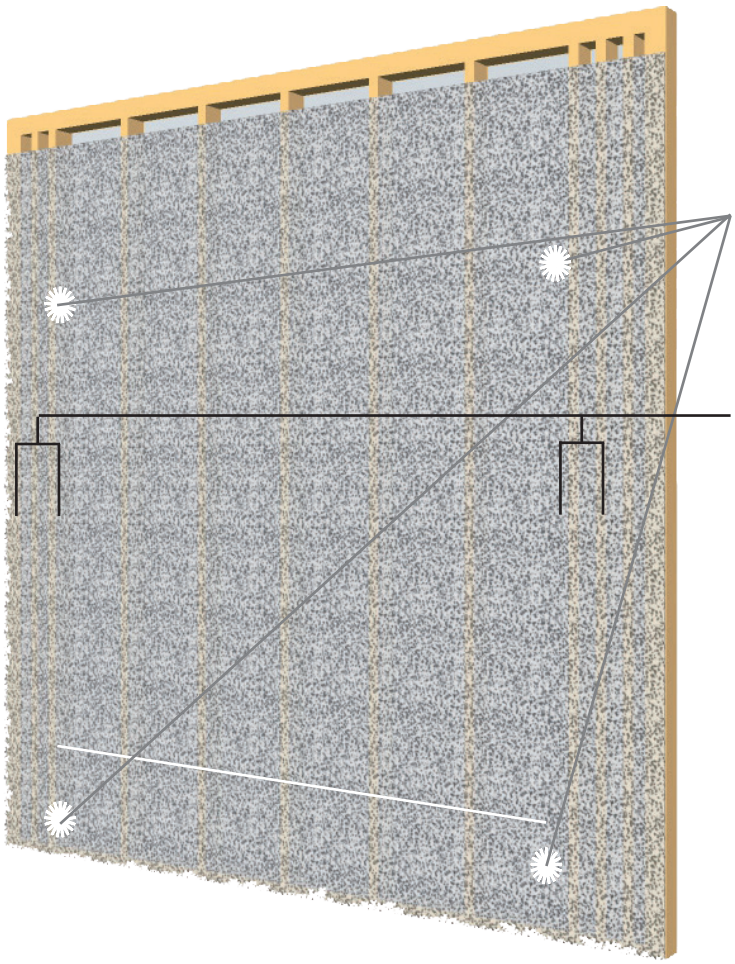
Components Furnished by Installer	
Wall Anchors (Construction Screws)	Mount furring strips and HideAway brackets to building wall
Site Drainage and/or Drain Connection	Drain excess runoff from planters
Irrigation Pipe and Water Feed (SCH 80 PVC)	Connects pressurized water lines to irrigation valves
Perimeter Facing Material (typ. Wood or Metal)	Conceals irrigation components on systems with side-feed irrigation
Electrical wire and hookup	Connect controller to electricity
Protective Backing Material	Breathable barrier such as Tyvek® (outdoors) or waterproof membrane such as 20 mil polypropylene or EPDM (indoors)

Components supplied by LiveWall or Garden Center	
Potting Soil	See LiveWall.com for recommendations
Plants	Follow guidelines in the supplied LiveWall Plant Design Guide

STEP 1: Measure Wall Dimensions

Using chalk and tape measure, mark the location of the corners of the LiveWall, including the corners of the chase concealments. See Step 7 for chase concealment requirements, and consult the shop drawings supplied with your order to confirm the appropriate spacing for your project.

Mark the location for installation of the bottom slot rail. IMPORTANT: If the installation uses *rear-drain planters*, leave a 1.5" gap between the bottom of each furring strip and the bottom of the slot rail. See Step 4 for details.



Mark corners of the LiveWall structure.

If the system has ***side-feed irrigation,*** *leave space to run the irrigation feed.*

See shop drawings to confirm required width for irrigation feed.

Note: Systems with rear-feed irrigation may not require side facing material.

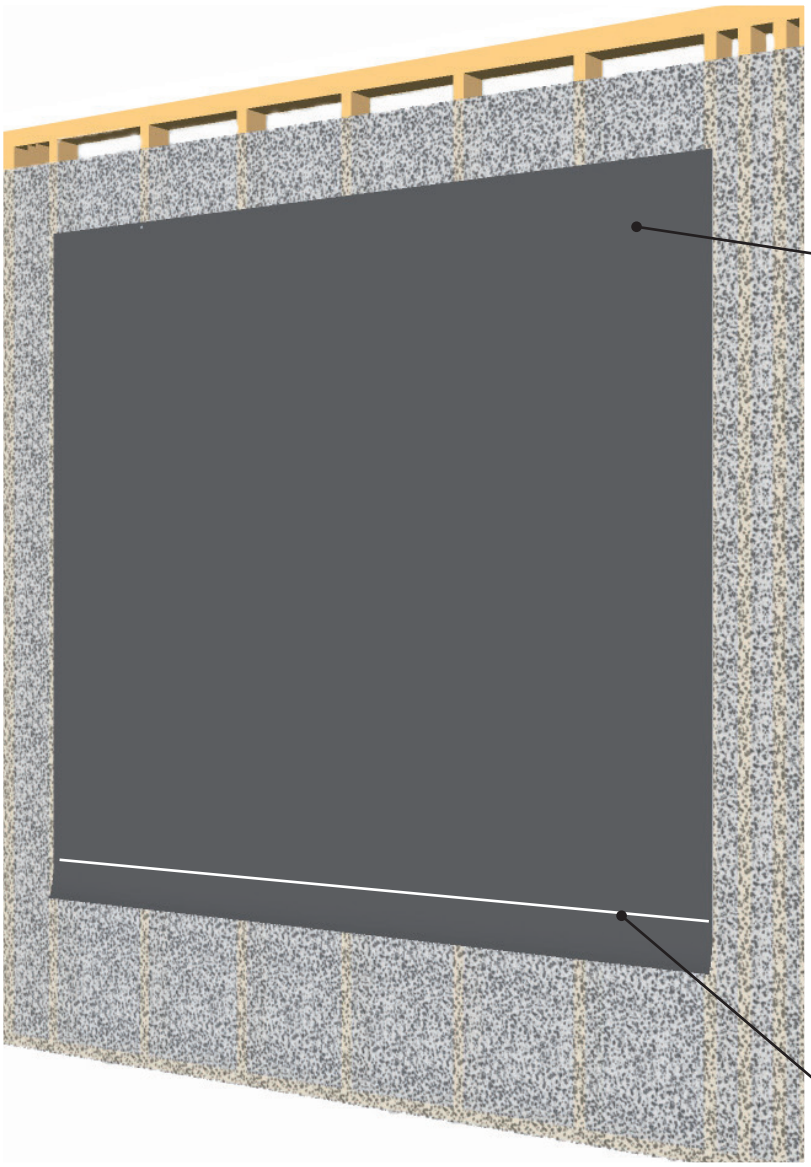
STEP 2: Hang Protective Backing

Tack the top and sides of an oversized piece of backing to the wall(slightly larger than the perimeter of the installation—and later trimmed to size).

OUTDOORS: Contractor-sourced breathable barrier, such as Tyvek® Commercial Wrap D.

INDOORS: Contractor-sourced waterproof membrane such as 20 mil polypropylene or EPDM.

Draw or snap a horizontal (level) chalk line. This line is used to align the bottom of the VertiRail columns.



Backing to extend slightly beyond the perimeter of the LiveWall structure.

Snap Chalk line defining where the bottom of the VertiRails will end.

Important: If planter style is Rear Drain, this should be 1.5" higher than the bottom of the horizontal slot rail.

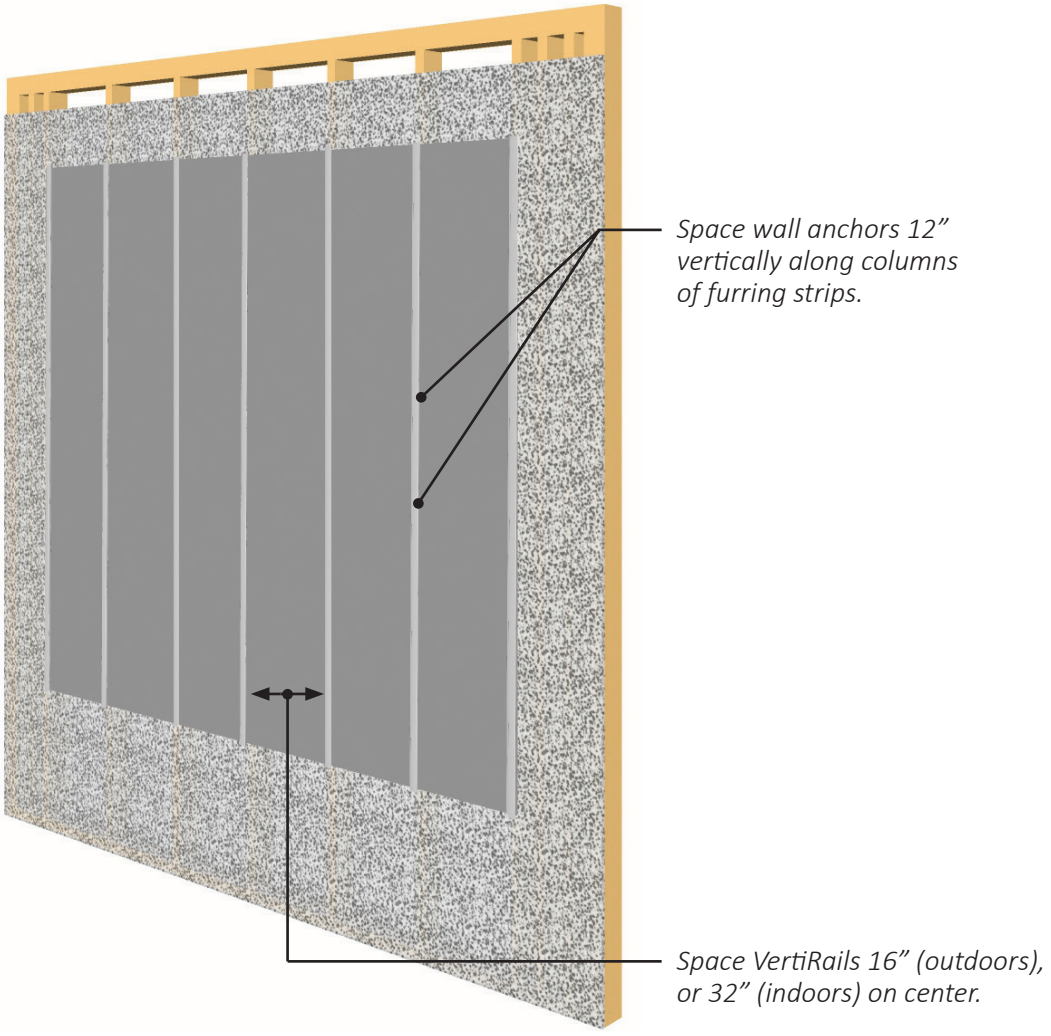
STEP 3: Install Furring Strips (VertiRail®)

Use a tape measure and bubble level or plumb bob to properly measure and ensure that all aluminum furring strips are set vertically plumb and correctly spaced.

OUTDOORS: Typically 16” on center
INDOORS: Typically 32” on center

Attach furring strips by driving top and bottom anchors, then all other anchors. Provide one anchor per 12 vertical inches to a solid, strong anchor point. Contractor to source anchors appropriate for type of building wall structure. To prevent galvanic reaction, use plastic insulators between furring strips and *metal* building walls.

IMPORTANT Consult the shop drawings provided with your order for project-specific furring strip layout.



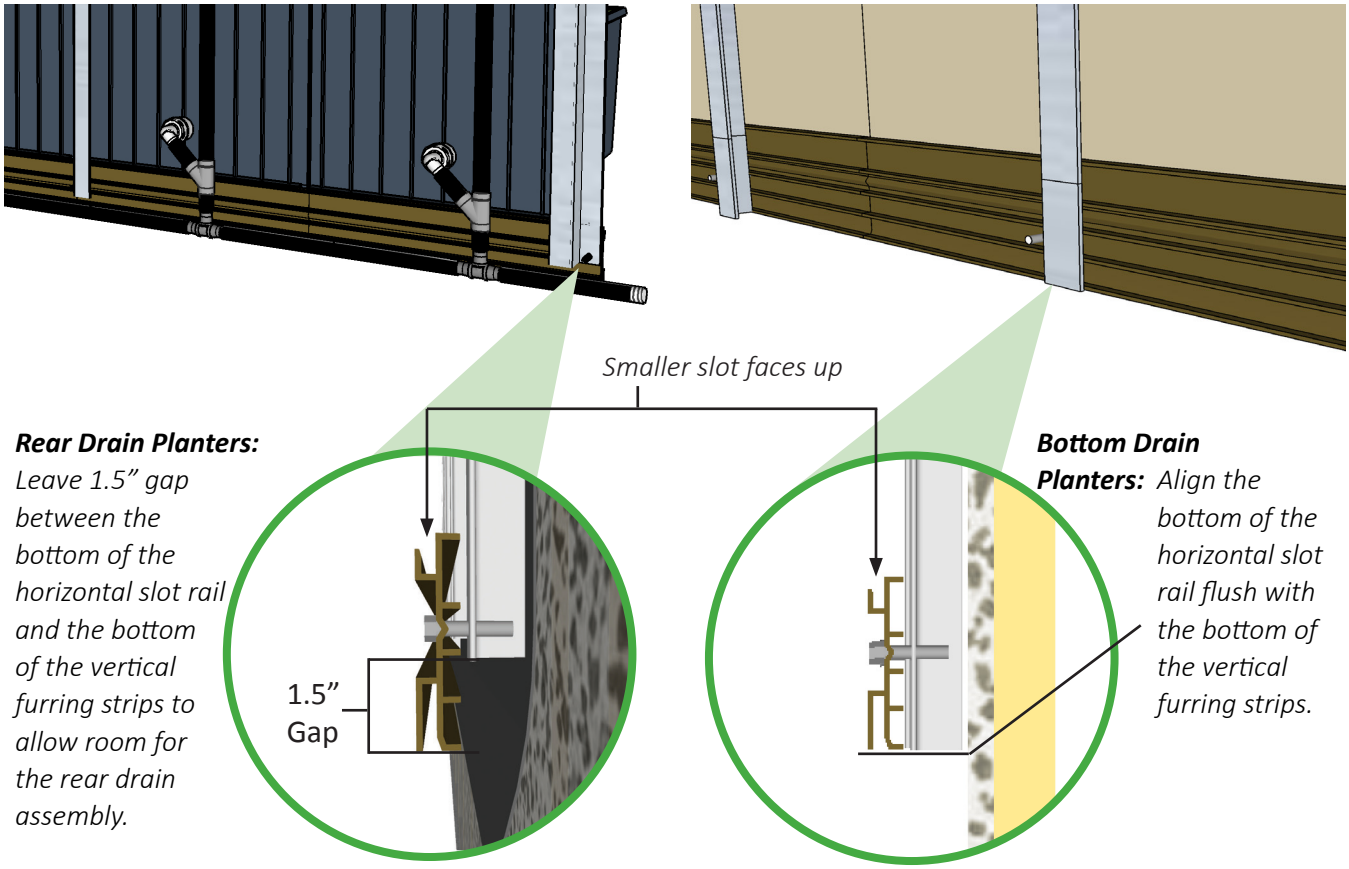
STEP 4: Install Horizontal Slot Rail on Bottom Row

Slot Rails are used to hold the bottom row of wall planters in place.

Orient slot rail lengths correctly with the top (the shorter slot) facing up. The alignment of furring strips to the slot rail will be dictated by the planter drain type:

BOTTOM DRAIN: Align the bottom of the slot rail with the bottom of the furring strips.
REAR DRAIN: Leave a 1.5" gap between the bottom of the slot rail and the bottom of the furring strips. The rear-drain hose assembly connects across the wall in this gap.

- Set the horizontal slot rail level and clamp in place with medium sized spring loaded clamps.
- Mark fastener locations with a marker wherever horizontal slot rail(s) and vertical furring strips intersect.
- Unclamp and remove the horizontal slot rail. Drill through the marked locations using a 1/4" drill bit. We recommend using a drill press for greatest efficiency.
- Level and clamp the slot rail(s) back in place. Drive the supplied stainless steel fastening screws through the 1/4" pilot holes to mount the horizontal slot rail(s) to the vertical furring strips.



Rear Drain Planters: *Leave 1.5" gap between the bottom of the horizontal slot rail and the bottom of the vertical furring strips to allow room for the rear drain assembly.*

Bottom Drain Planters: *Align the bottom of the horizontal slot rail flush with the bottom of the vertical furring strips.*

STEP 5: Install RainRails and Fittings

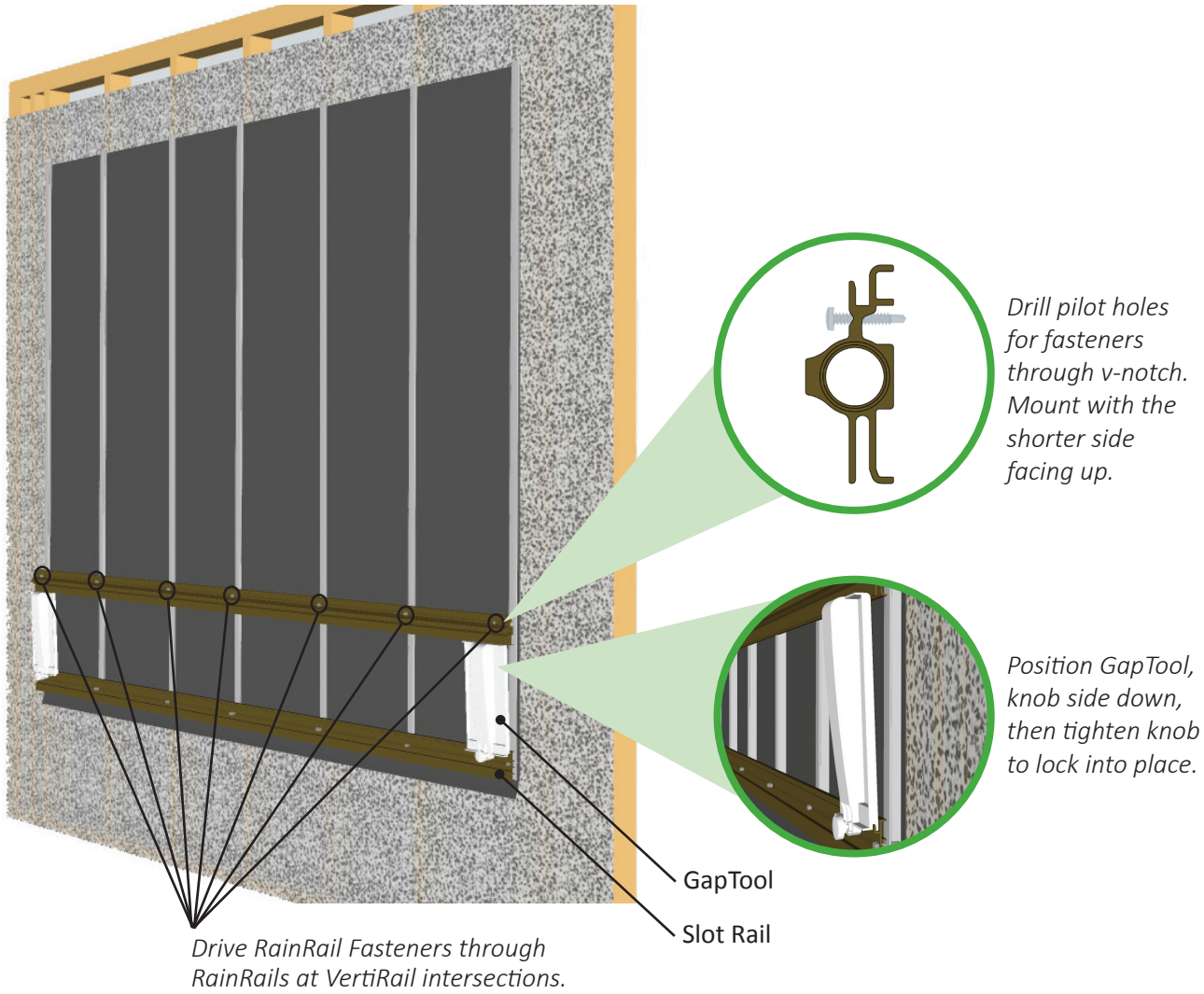
- Depending on the size of the wall structure and type of irrigation feed, your order may have a combination of RainRail in varying lengths with and without rear-tapped holes. Your wall will be designed to eliminate the need for cutting of RailRails. It is critical to ensure correct placement of the RainRails according to the shop drawings.

- Place a GapTool at either end of the bottom slot rail, knob side down, and tighten knob to hold the tool in place.

- Level, clamp and mark locations of 1/4" pilot holes in the v-notch between the upper (shorter) slot and the hollow irrigation conduit.

- Drill pilot holes (as marked in v-notches) *preferably* on drill press. If using a hand drill, start drilling on a downward angle, then redirect toward the bottom of the v-notch as it begins to cut into the aluminum.

- Clamp the RainRail(s) back in place. Drive the supplied stainless steel fastening screws through the 1/4" pilot holes to mount the RainRails to the furring strips.



Drill pilot holes for fasteners through v-notch. Mount with the shorter side facing up.

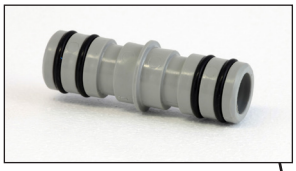
Position GapTool, knob side down, then tighten knob to lock into place.

Drive RainRail Fasteners through RainRails at VertiRail intersections.

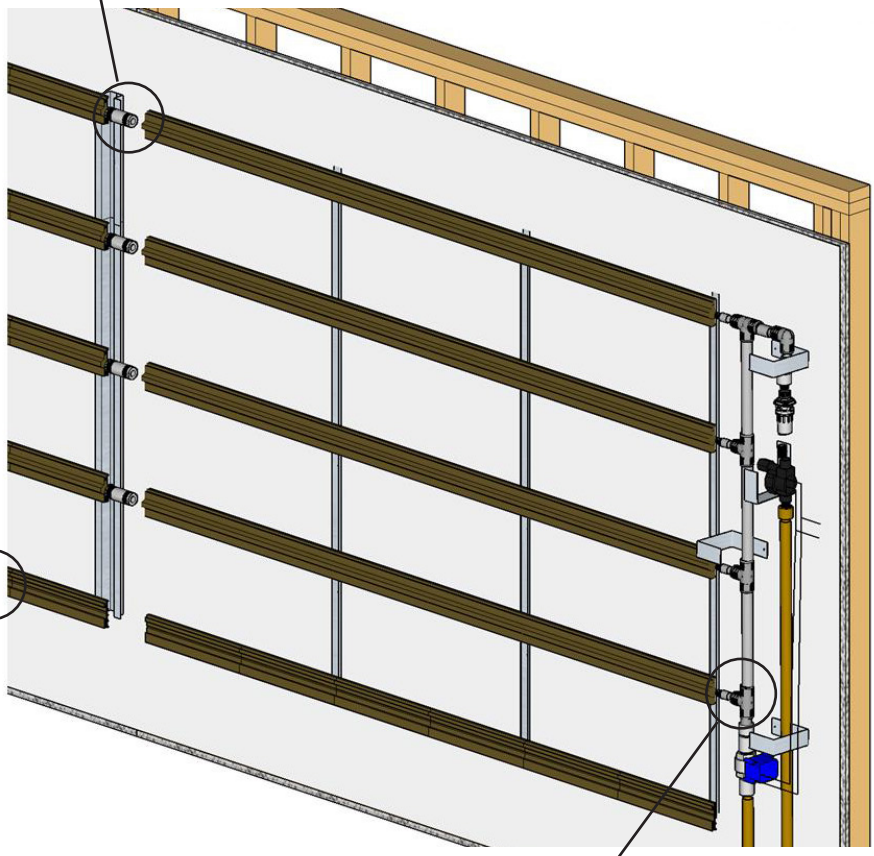
STEP 5: Install RainRails and Fittings (CONTINUED)

Apply pipe slime lubricant to o-rings, then install RainRial fittings and secure with supplied set screws.

RainRail Connector



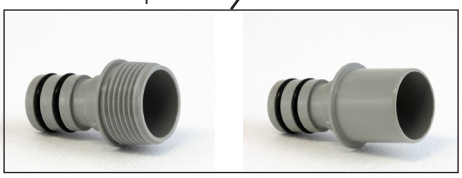
Connect adjacent RainRail lengths.



RainRail End Plug

Use at the end of each row of RainRail.

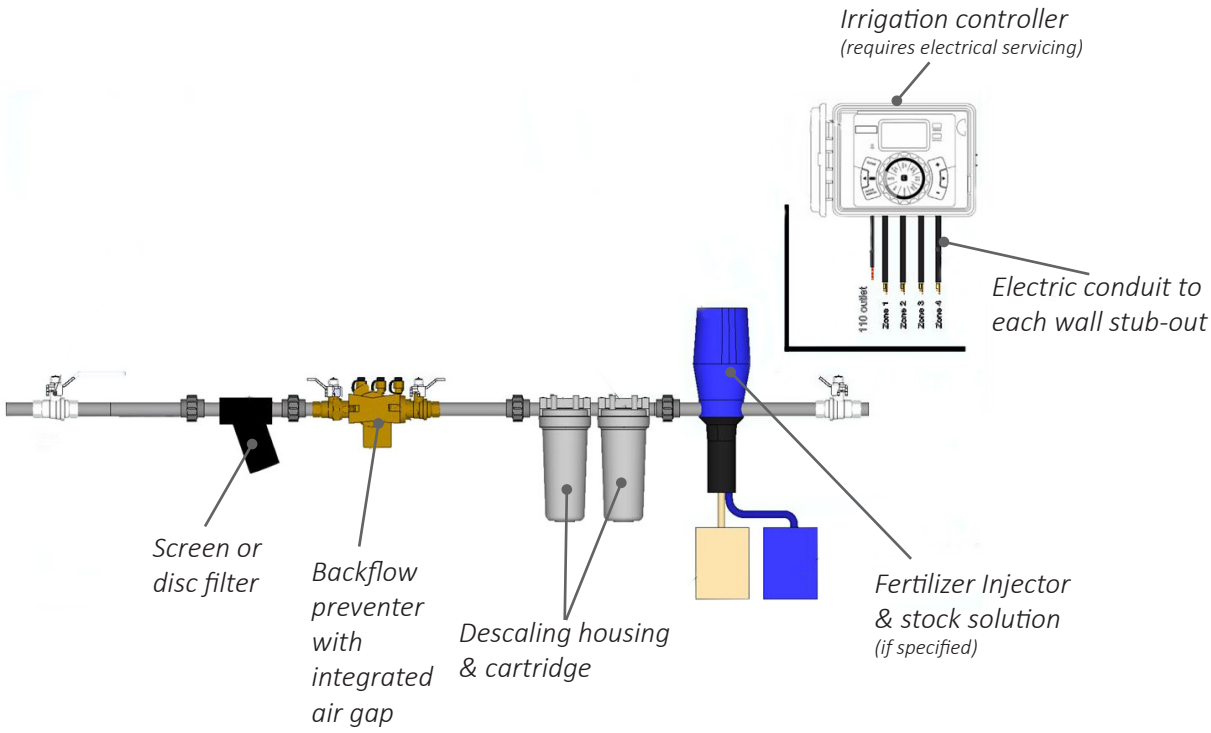
RainRail Adapters



For systems with Side-Feed Irrigation:
Use at the end of RainRail row to connect to the irrigation infrastructure (threaded, slip and/or LightBlock adapter fittings may be supplied depending on the irrigation feed configuration).

STEP 6: Install Irrigation Main Line

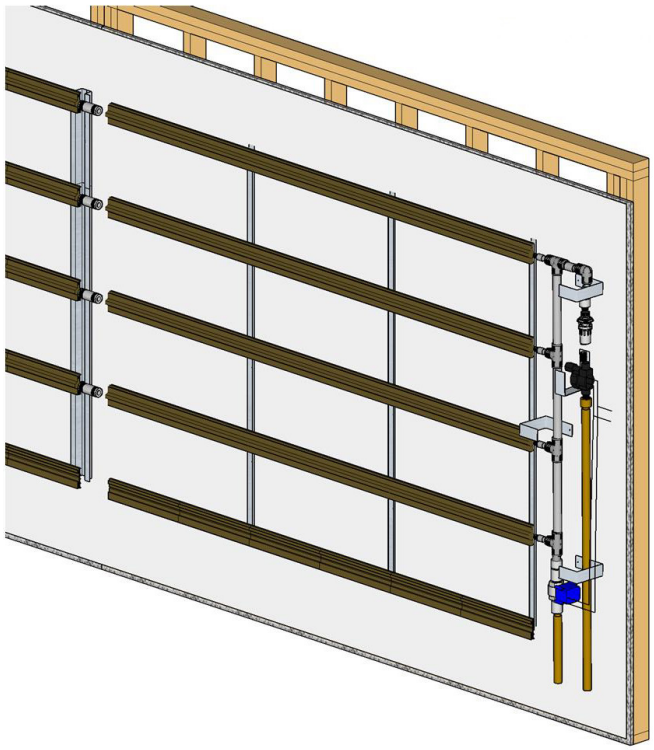
- Connect mainline irrigation components to a 3/4” mainline with a minimum 25PSI water pressure and 10 gallons per minute water volume.
- Typical mainline will include backflow preventer with an integrated air gap (required by code), and screen or disc filter.
- Descaling housing and cartridges may be included to prevent mineral buildup in nozzles or drip emitters.
- If fertilizer injector is included, follow instructions to dilute fertilizer solution and set rate of uptake. Fertilizer bucket must be placed below the fertilizer injector to allow uptake of solution.
- Mount controller and hook up to electrical supply.



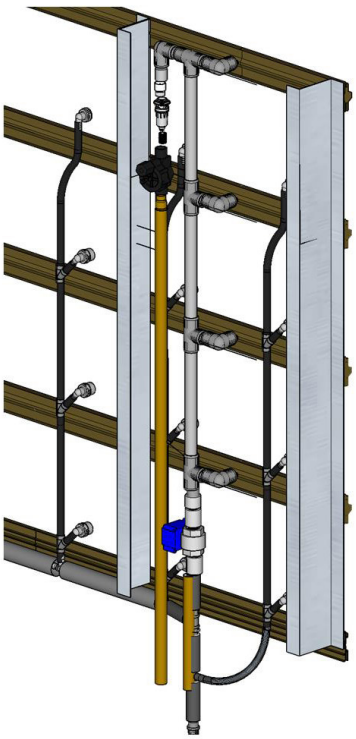
STEP 7: Install Irrigation Feed

- Connect the irrigation valves to pressure regulators and RainRails using LiveWall supplied pipe and fittings. Use LiveWall supplied teflon tape on all threaded irrigation fittings. Do not overtighten.
- If LightBlock fittings are used, they do not require glue, and contain 'teeth-like' fittings and o-rings to create a watertight hold. Push fittings firmly together and ensure each is fully engaged.
- If PVC fittings are used, pipe and fittings must be primed and glued together.
- Wire valve(s) to controller(s) according to manufacturer instructions.
- **Consult shop drawings supplied with the order for irrigation feed assembly instructions.**

Side-Feed Irrigation Assembly (typical)



Rear-Feed Irrigation Assembly (typical)
View From Rear

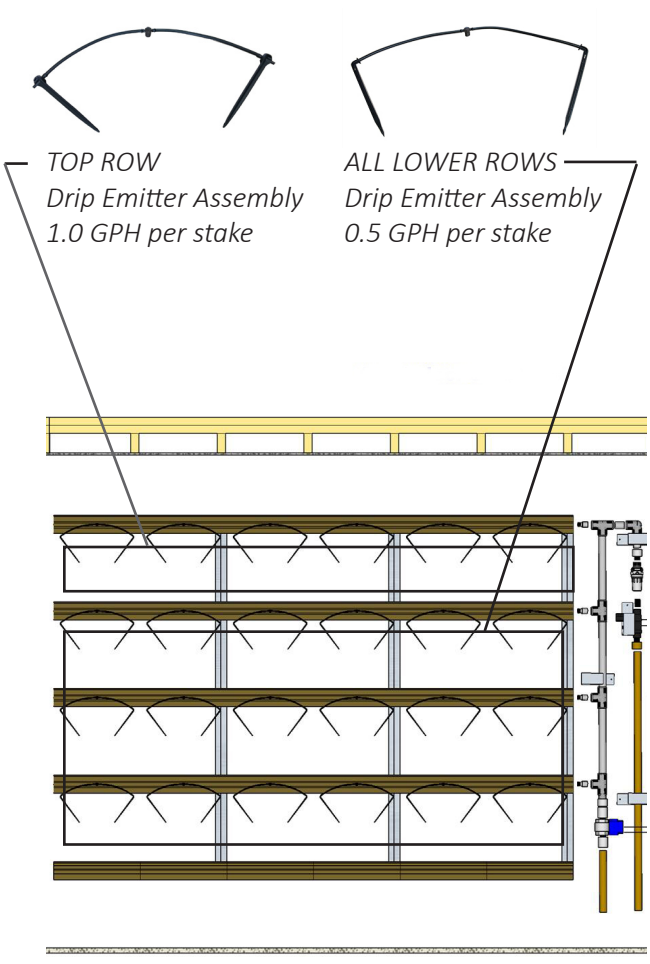


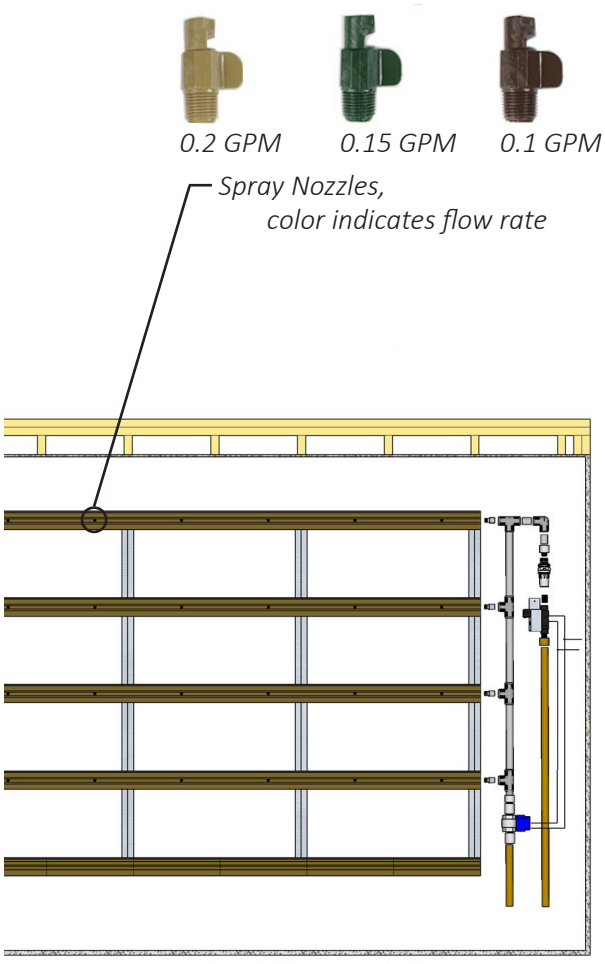
STEP 8: Install Irrigation Nozzles or Drip Emitters

- Clear debris from RainRails to prevent clogged nozzles or drip emitters.
  OUTDOORS: Run the irrigation system to flush out debris.
  INDOORS: Run compressed air through the RainRails to blow out debris (not to exceed 20 psi).

- Install irrigation drip emitters or spray nozzles to fit snugly yet not overly tight.
  DRIP EMITTERS: Use 1.0 GPH size emitters on top row,
  and the 0.5 GPH emitters on all other rows.
  SPRAY NOZZLES: The nozzle color indicates the flow rate.
  Follow shop drawings for correct nozzle placement.

- Test irrigation system. If indoors, wait until planters and rear drain assembly are installed.





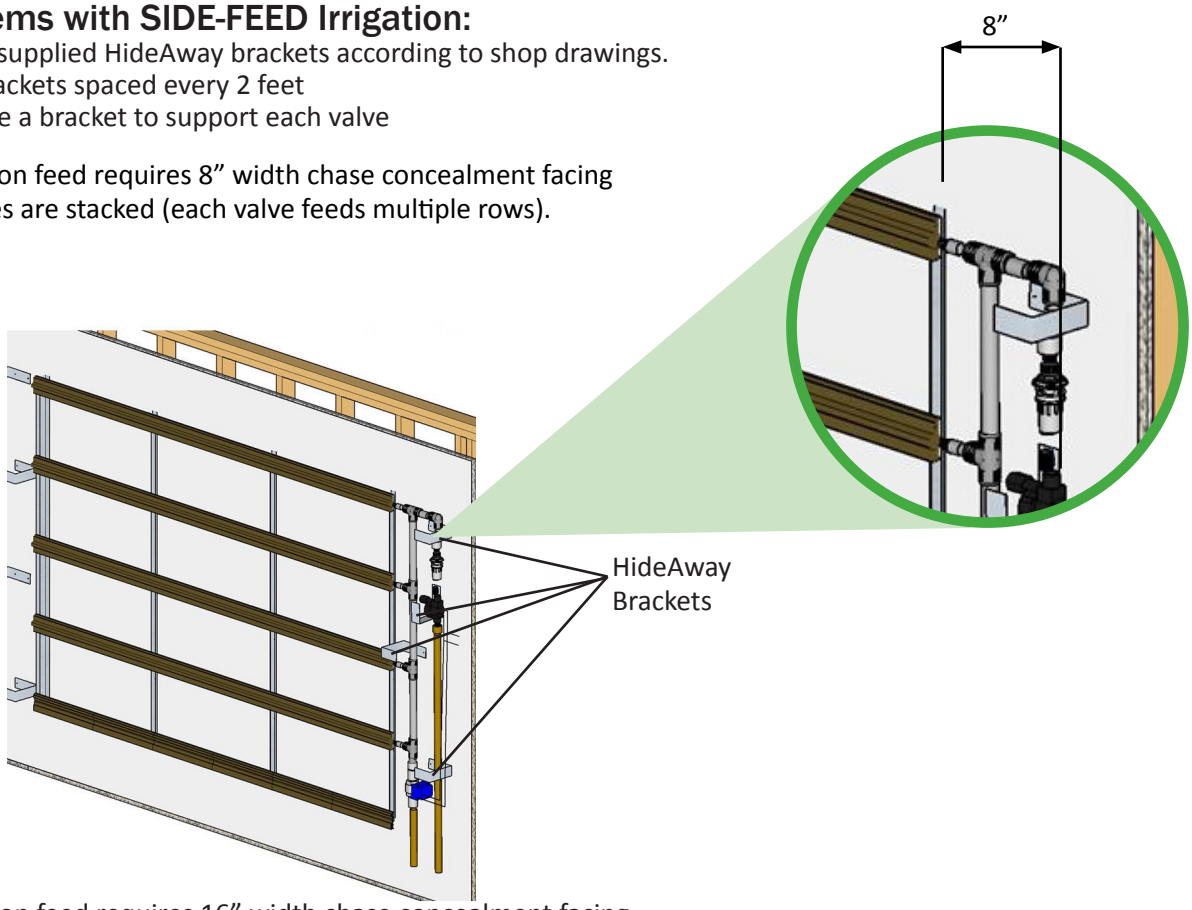
STEP 9: Install Brackets

Systems with SIDE-FEED Irrigation:

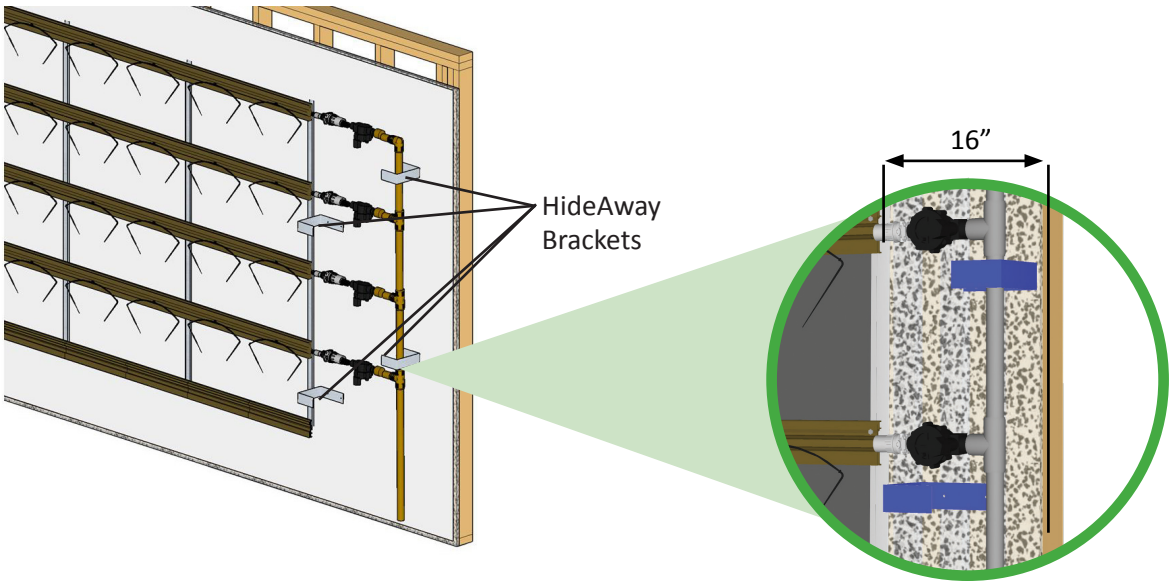
Install supplied HideAway brackets according to shop drawings.

- Brackets spaced every 2 feet
- Use a bracket to support each valve

Irrigation feed requires 8” width chase concealment facing if valves are stacked (each valve feeds multiple rows).



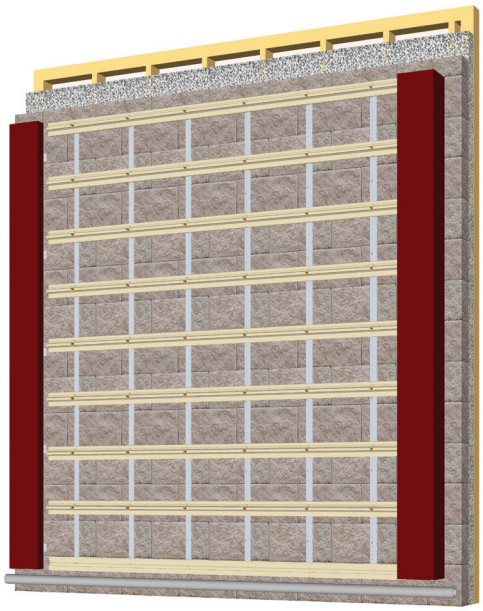
Irrigation feed requires 16” width chase concealment facing if valves are inline with the RainRails (each valve feeds a single row of RainRail).



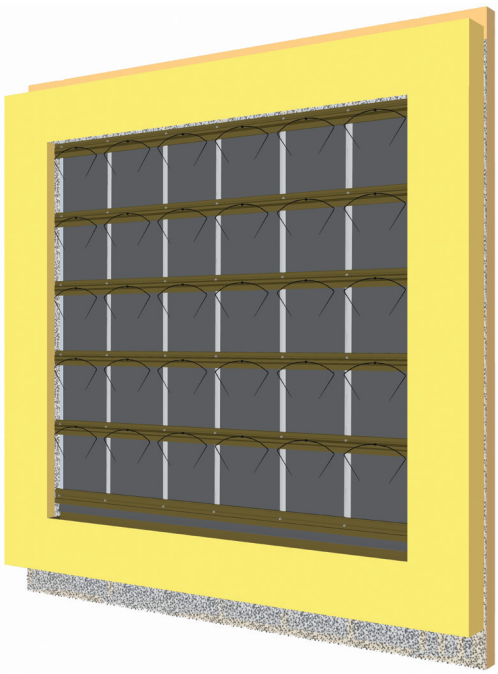
STEP 10: Install Facing Material

Systems with SIDE-FEED Irrigation:

Cover the irrigation feed with specified facing material (typically aluminum, painted sheet metal, cedar, or similar product).



In most applications, both sides of the wall have equal width facing material.



If desired, the entire living wall may be framed with facing material.

Note: Additional HideAway brackets will need to be ordered for this option.

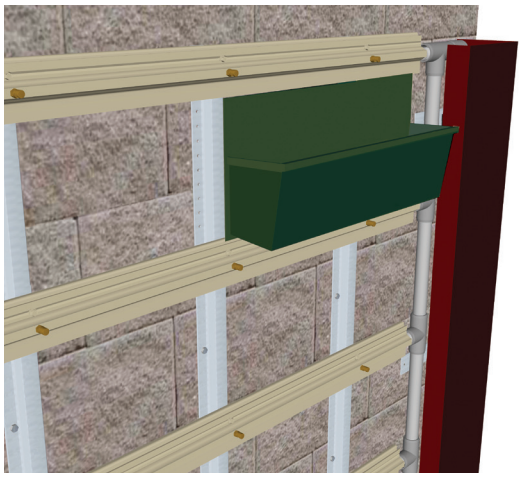
STEP 11: Install Wall Planters

Systems with STANDARD size planters:

- Install WallTer™ wall planters top edge first, followed by bottom edge.
- Planters have an overlapping lip and thus should be installed from RIGHT TO LEFT.
- If included for wind resistance or as an anti-theft measure, install limiting screws in score lines toward top of planters.

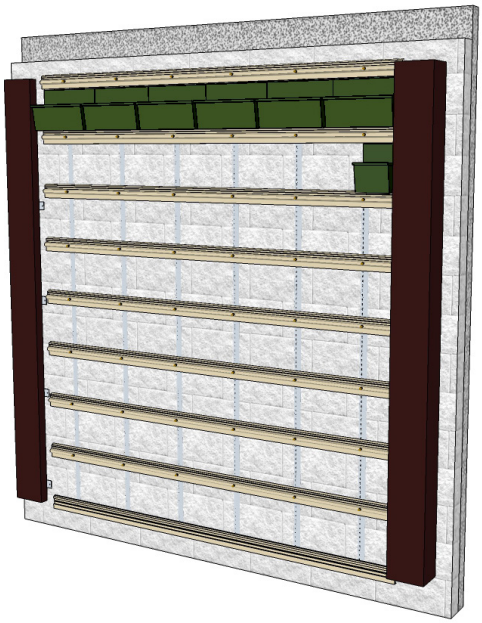
  FOR WIND RESISTANCE: Typically used on planters 20’ above ground level.
  In regions prone to hurricanes, typically installed on all planters.

  FOR ANTI-THEFT: Upon request, typically used on the first 8’ of planters above ground level.



Start the top row with a 16" long (Full Width) planter on the right hand side.

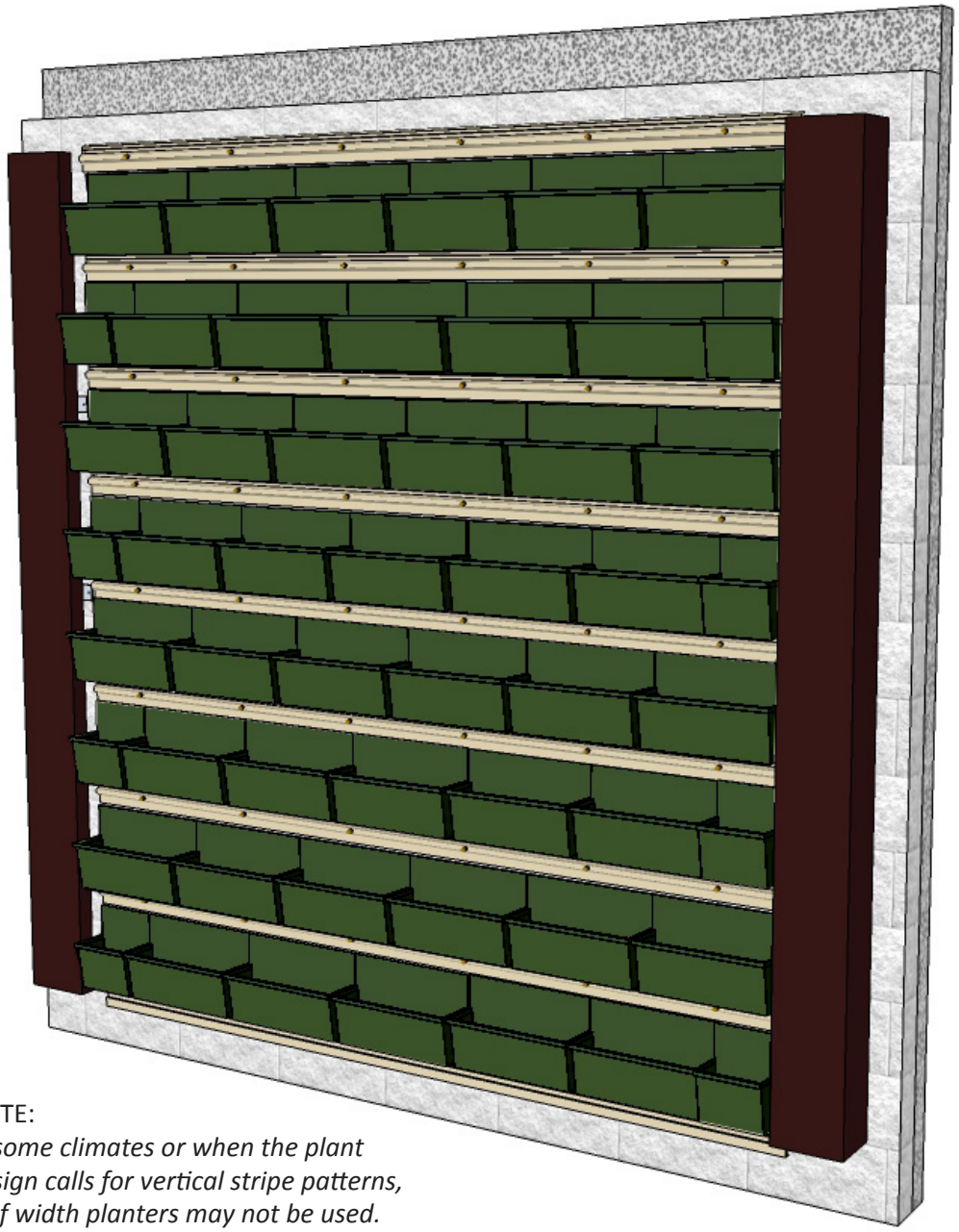
All following modules in the top row will be full width.



The second row starts with an 8” wide (half width) planter on the right side. This is followed by a series of 16" wide (full width) planters, and ends with another half width planter.

STEP 11: Install Wall Planters (CONTINUED)

The third row is just like the first.
Then the pattern is repeated.
The end result is a staggered, brick-like pattern.

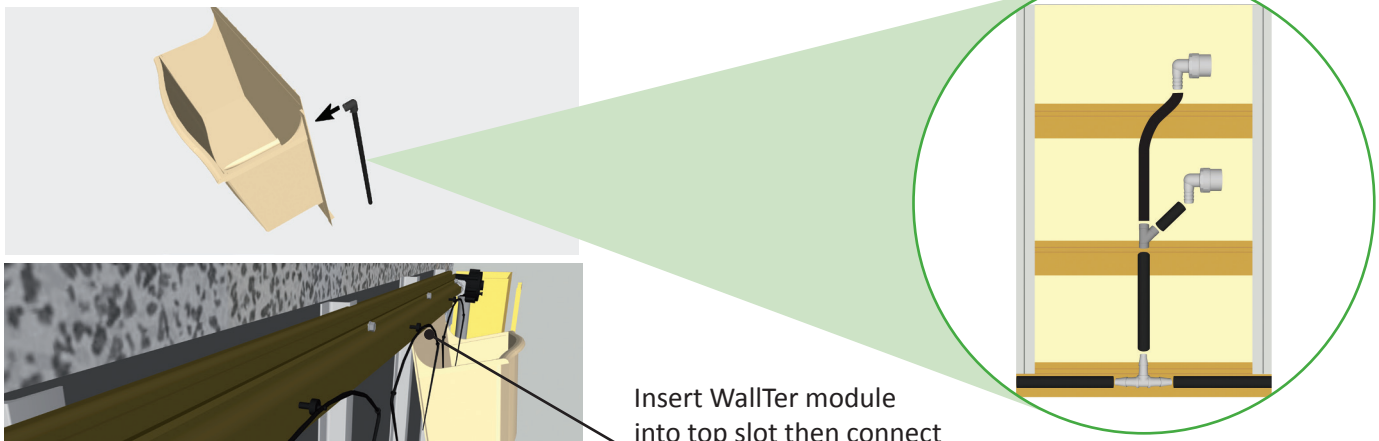


NOTE:
In some climates or when the plant design calls for vertical stripe patterns, half width planters may not be used. In this case, all rows will contain only full width planters.

STEP 11: Install Wall Planters (CONTINUED)

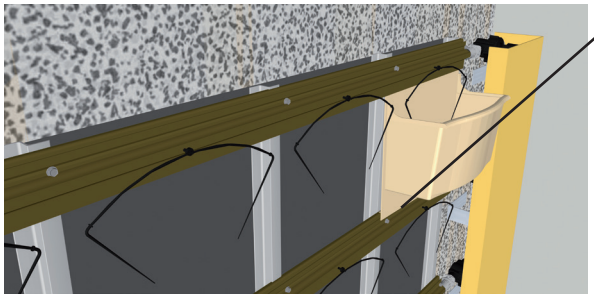
Systems with LARGE size planters with drain tubes:

- Install threaded elbow on back of planter boxes. Do not use sealants or lubricants.
- Install large size wall planters top edge first, followed by bottom edge.
- Planters have an overlapping lip and thus should be installed from RIGHT TO LEFT.
- If theft or wind-uplift is a concern, install limiting screws in score lines toward top of planter modules.

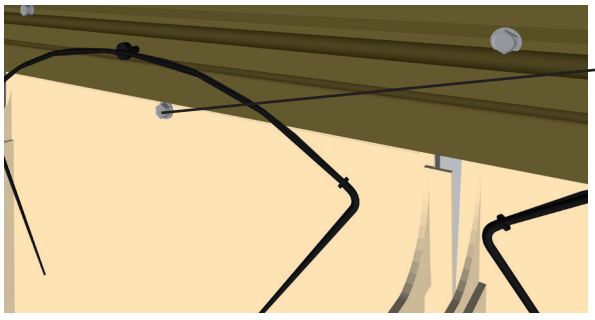


Insert WallTer module into top slot then connect drain tube to spout on back of WallTer.

If the planters have rear-drains, assemble the drain tubes and fittings according to the project specific shop drawings.



Drop WallTer module into bottom rail and secure with provided set screw.



Install limiting screws in score line of planters (if theft or wind uplift is a concern).

STEP 12: Install and Water Plants

Place planted inserts into the wall planters according to specified design.

RUN IRRIGATION AFTER INSTALLATION
SUFFICIENT TO MOISTEN SOIL THOROUGHLY

See LiveWall.com/maintenance for recommended irrigation settings.

LiveWall®

Need help with your installation?

Call 877-554-4065 or
Email sales@livewall.com

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