

GREEN ROOF + AMENITY DECK

PRODUCTS AND CONSULTING



CATALOG 9



GREENRISE TECHNOLOGIES

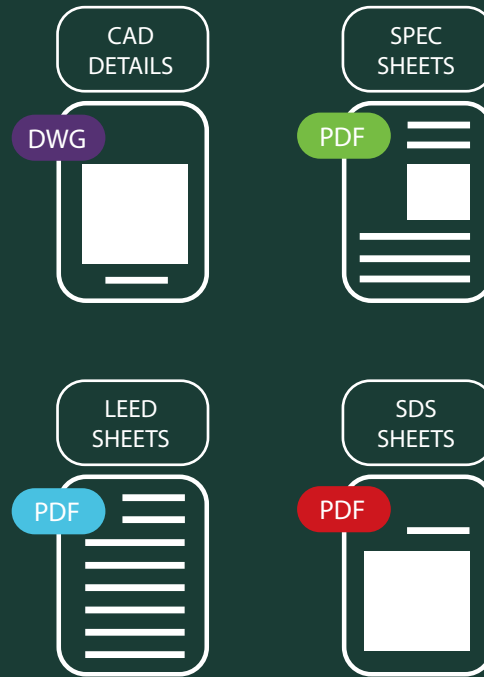
As an industry leader in stormwater management compliance, we offer solutions for sediment and erosion control, engineered soils, and turnkey vegetative roofing.

We provide component selection and design assistance, installation and maintenance, and other consultation options for architects, building owners, and general contractors.

Let our expertise and knowledge guide you toward a successful project!

Now offering Accredited AIA CEU & LA CES courses by video conference or in-office presentations.

Visit our website for a complete library of specifications and product downloads



Our primary clients are:



Office



Hotel



Education



Government



Commercial



Healthcare



Industrial



Multi-Family

“

We were extremely pleased with the green roofs that Greenrise provided and installed at two of the offices we recently developed, that we have asked them to provide a green wall for another project.

Ravenclyff – Michael Woody, Developer

I am amazed by how fast the GRT green roof system was installed. Everyone was flexible to fit into a tight timeline, which was so important for site scheduling. The green roof looked complete from day one!

Sharp & Diamond Landscape Architecture –
David Stoyko, Landscape Architect

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*Minimum product specs shown in catalog. Go to www.greenrise.com for full specifications.

GRT VISTA MODULES
WITH SEDUM TILES/MATS

SALISBURY UNIVERSITY

MOTLEY RICE OFFICE BUILDING



GRT IPE TILES & PEDESTALS



GRT LAYERED SYSTEM
WITH WIND UPLIFT &
SLOPE COMPONENTS

GRT CONCRETE PAVERS

GRT ARTIFICIAL TURF

GRT CUSTOM METAL EDGING

GRT EXTENSIVE & INTENSIVE
LAYERED SYSTEMS

GRT IPE DIMENSIONAL DECKING

GRT CUSTOM PLANTERS



GRT CUSTOM METAL PLANTERS

GRT CONCRETE CURB EDGING

GRT VISTA MODULES WITH CUSTOM PLANTS



GRT IPE DIMENSIONAL LUMBER

GRT FIBERGLASS PLANTERS



GRT PORCELAIN PAVERS & PEDESTALS



GRT INTENSIVE LAYERED SYSTEMS

GRT EXTENSIVE LAYERED SYSTEMS

GRT CUSTOM METAL PLANTERS

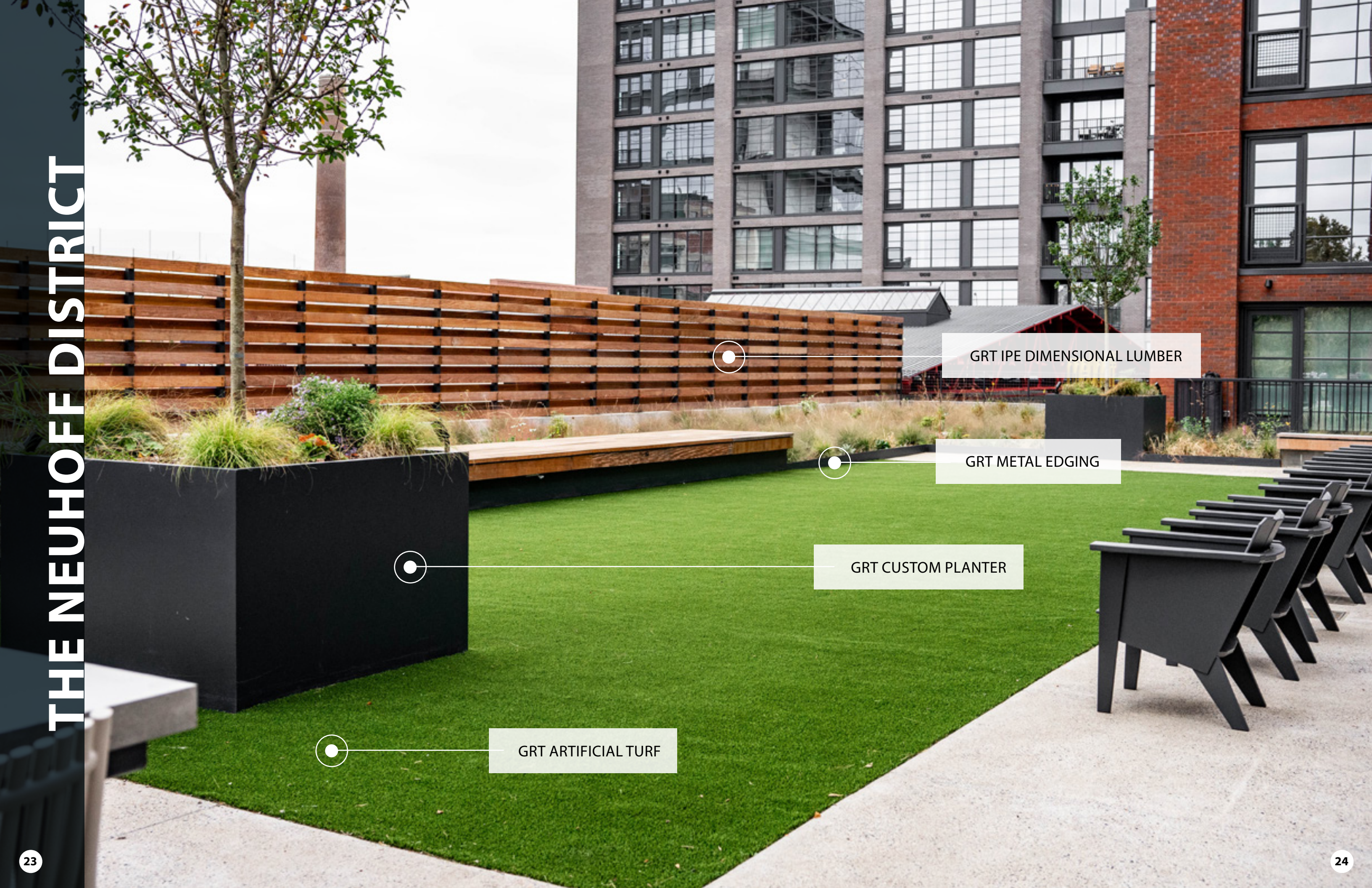
GRT IPE TILES & PEDESTALS

GRT VISTA MODULES

GRT IPE PAVERS

GRT CONCRETE PAVERS

GRT CUSTOM PLANTERS



GRT IPE DIMENSIONAL LUMBER

GRT METAL EDGING

GRT CUSTOM PLANTER

GRT ARTIFICIAL TURF

MUSIC CITY CENTER

191,000 SQUARE-FOOT GREENROOF,
DESIGNED FOR STORMWATER RETENTION
AND URBAN HEAT ISLAND REDUCTION

BUILT TO HANDLE 2.6-MILLION-GALLON
STORMWATER OFFSET

AWARDED THE GREEN ROOFS FOR HEALTHY
CITIES SPECIAL RECOGNITION AWARD



LAYERED vs. MODULAR

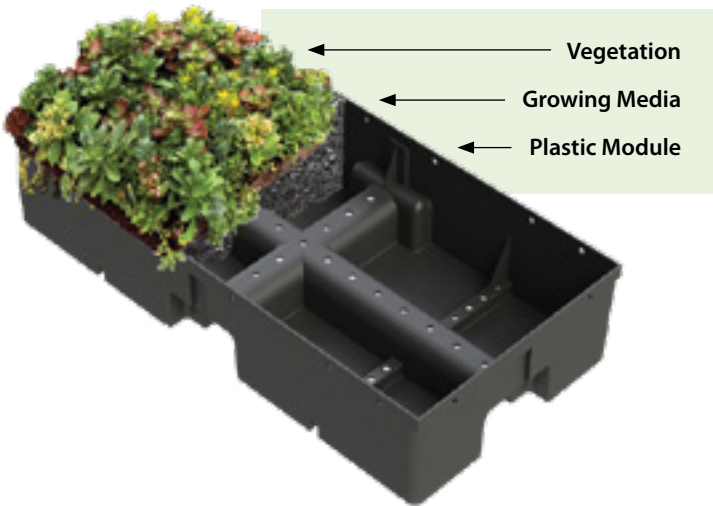
There are several key differences between layered and modular green roof systems.

LAYERED SYSTEM



In a **layered system**, the depth of the growing media is customizable and can accommodate a variety of small to large sized vegetation, including trees. This allows for unlimited design options, including amenity rooftop decks, and opportunities for increased biodiversity and stormwater detention and retention.

MODULAR SYSTEM



In a **modular system**, the trays are pre-assembled with growing media and low maintenance, drought tolerant plants. The vegetative trays are placed on the roof in configured designs, and often require less expertise for installation.

DESCRIPTION	LAYERED	MODULAR
	COMPONENTS ARE LAYERED AND BUILT IN PLACE ON THE ROOF	COMPONENTS PRE-ASSEMBLED IN PLASTIC TRAYS FOR PLACEMENT ON ROOF
AVAILABLE DEPTHS	ALL DEPTHS	4", 6", & 8"
GROWING MEDIA	EXTENSIVE OR INTENSIVE	EXTENSIVE OR INTENSIVE
SYSTEM WEIGHT	FULLY ADJUSTABLE	PREDETERMINED
WATER RETENTION CAPACITY	FULLY ADJUSTABLE	PREDETERMINED
DESIGN CONFIGURATIONS	UNLIMITED	SOMEWHAT LIMITED
PLANT OPTIONS	UNLIMITED	SEDUMS & GRASSES TYPICAL
EDGING	REQUIRED	OPTIONAL
IRRIGATION REQUIRED	YES / RECOMMENDED	YES / RECOMMENDED
SYSTEM PARTS (# REQUIRED)	4 PLUS	ALL IN ONE
ASSEMBLY REQUIRED	YES	NO
USE ON STEEP SLOPED ROOFS (> 4:12)	YES	NO
USE ON RETROFIT ROOFS	YES	YES
MAINTENANCE REQUIRED	YES	YES
WATERPROOFING MEMBRANE REQ./TYPE	YES / ANY	YES / ANY
REMOVAL FOR ROOF MAINTENANCE	DIFFICULT	EASY
COST COMPARISON	PROJECT DEPENDENT / APPROX. EQUAL	PROJECT DEPENDENT / APPROX. EQUAL
INSTALLATION		
EXPERTISE REQUIRED	YES	NO
CURVED AREAS	EASY	DIFFICULT
ADJACENT TO DECKING	EASY	EASY
URBAN LOGISTICS	CRANE (TYP.)	CRANE/ELEVATOR/ STAIRS



The GRT Vista modular series and GRT layered green roof systems are the next generation of vegetated systems and are ALWAYS EVOLVING! Their features are based on continuous feedback and updates from code officials, stormwater regulations, designers, and installers across North America. The GRT Vista modular design combines total stormwater control with cost effective installation.

Contact us for assistance in selecting which system is best suited for your project needs

Modular | GRT VISTA Series



Features of the GRT Vista modular series include: recycled plastic, built-in reservoirs, irrigation channels, inset handles, root-aeration vents, corner extensions for no soil-loss gaps, and sidewall gussets for added strength.

ITEM	H ₂ O RETENTION*	SATURATED WEIGHT	WATER DISPERSAL	DEPTH	COST
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GRT VISTA 4" LITE MODULE

Vegetation (Sedum Tiles/Plugs) 3.5" Lt. Wt. Ext. Engineered Soil 12" x 24" x 4"	1.1 gal/sf	20 psf	12 gal/min/lf	4"	\$\$
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The GRT VISTA 4" LITE modular system is the answer for weight-sensitive projects, in one easy to install package.

GRT VISTA 4" MODULE

Vegetation (Sedum Tiles/Plugs) 4" Ext. Engineered Soil 12" x 24" x 4"	1.35 gal/sf	25-30 psf	12 gal/min/lf	4"	\$
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The GRT VISTA 4" modular system is the optimal balance for weight restrictions, low-cost, and stormwater retention, in one complete system.

GRT VISTA 6" & 8" MODULES

Vegetation (Ext./Int. Plants) 6"- 8" Ext./Int. Engineered Soil 12" x 24" x 6" or 8"	1.9 - 2.6 gal/sf	35-55 psf	12 gal/min/lf	6" - 8"	\$\$\$
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The GRT VISTA 6" & 8" modular systems offer the solution for maximum stormwater capture and the most flexibility for plant selection.

*H₂O retention numbers includes estimated retention by vegetation



Layered | GRT Series

The GRT Series layered system design offers a balance between weight and stormwater control and has customizable component options to meet specific project requirements. Features include: sedum tiles or plugs, extensive or intensive engineered soil, drainage mat, optional mineral wool for increased stormwater retention/detention, and root barrier.

Contact us for assistance in selecting which system is best suited for your project needs

ITEM	H ₂ O RETENTION**	SATURATED WEIGHT	IRRIGATION	DEPTH	COST
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GRT FEATHERWEIGHT

Vegetation (Sedum Tiles/Plugs) 2" Lt. Wt. Ext. Engineered Soil* 0.5" Drain Mat Root Barrier (as required)	.64 gal/sf	18 psf	Required	2.5"	\$
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The GRT Featherweight system is a novel solution for projects that have weight constraints or value engineered (VE) budgets.

The engineered soil composition is slightly higher in organic additives than typical extensive systems, to allow a sufficient nutrient base in a thin profile. Irrigation is highly recommended for this system.

GRT 2 + 1

Vegetation (Sedum Tiles/Plugs) 2" Ext. Engineered Soil* 1" Mineral Wool 0.5" Drain Mat Root Barrier (as required)	1.3 gal/sf	24 psf	Recommended (site specific)	3.5"	\$\$
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The GRT 2+1 is the perfect balance of maximum water retention within a lower-weight system.

This synergy of engineered soil and premium mineral wool allows the system to work in harmony and provide the vegetation with needed nutrients and aeration, while retaining as much stormwater as a standard 4" deep layered system.

*soil depths can be customized
**H₂O retention numbers includes estimated retention by vegetation

ITEM	H ₂ O RETENTION**	SATURATED WEIGHT	IRRIGATION	DEPTH	COST
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GRT CLASSIC

Vegetation (Ext./Int. Plants) 4" Ext./Int. Engineered Soil* 0.5" Drain Mat Root Barrier (as required)	1.3 gal/sf	29 psf	Recommended (site specific)	4.5"	\$
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The GRT Classic is a cost effective system that meets minimum depths and stormwater retention requirements for most U.S. cities.

This 'tried & true' standard of the green roof industry has been proven for many years, and will continue to be specified.

GRT WATERHOG

Vegetation (Sedum Tiles/Plugs) 4" Ext./Int. Engineered Soil* Filter Fabric 1" High Retention Drain Mat Root Barrier (as required)	1.78 gal/sf	36 psf	Recommended (site specific)	5"	\$\$
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The GRT WaterHog is a premium, high performance system for stormwater management.

The GRT WaterHog has the infrastructure of the GRT Classic system, with the addition of a high-retention drainage mat, that provides almost 25% more retention than the Classic.

GRT WATERHOG XL

Vegetation (Sedum Tiles/Plugs) 4" Ext./Int. Engineered Soil* Filter Fabric 1" Mineral Wool 1" High Retention Drain Mat Root Barrier (as required)	2.4 gal/sf	42 psf	As Needed (site specific)	6"	\$\$\$
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The GRT WaterHog XL is the standard WaterHog system with an additional 1" layer of premium mineral wool, which increases the retention capacity to over 50% above the Classic!

This is the system to choose when stormwater control is a priority.



GRT DRAIN MAT PLUS | 0.5"

GRT Drain Mat Plus 0.5" is a double sided ½" thick drainage core with an extruded polymer matrix of tangled monofilaments, thermally bonded to spunbond fabric on one side and a non-woven fabric on the other side. This double-sided fabric drain mat can eliminate the need for an extra protection sheet for the roof's waterproofing system.

CORE SPECIFICATIONS

MATERIAL	Extruded Polymer		
COMPRESSIVE STRENGTH	>30,000 psf (ASTM D1621 modified & ASTM D4716) (Flow rate may be decreased)		
TRANSMISSIVITY	2 gpm/ft at .02 gradient		

FABRIC SPECIFICATIONS

MATERIAL	Non-Woven and Spunbond Fabrics		
PUNCTURE STRENGTH	<u>NON-WOVEN</u> 70 lbs	<u>SPUN BOND</u> 35 lbs	<u>ASTM</u> D4833
PERMEABILITY	120 gal/min/ft²	185 gal/min/ft²	D4491



GRT DRAIN MAT | 0.5"

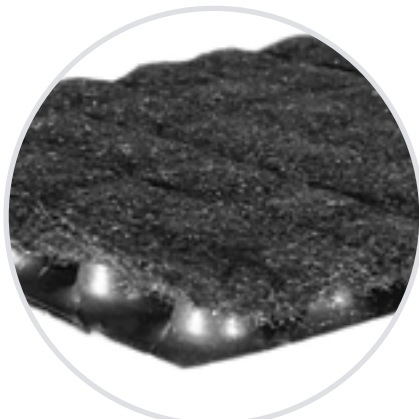
GRT Drain Mat 0.5" is a ½" thick drainage core with an extruded polymer matrix of tangled monofilaments, thermally bonded to a non-woven geotextile and molded into waffle patterns. It provides excellent filtering performance, high tensile and tear strength, and is a functional and economic choice for use in typical layered systems.

CORE SPECIFICATIONS

MATERIAL	Extruded Polymer
COMPRESSIVE STRENGTH	>30,000 psf (ASTM D1621 modified & ASTM D4716) (Flow rate may be decreased)
TRANSMISSIVITY	2.1 gpm/ft at .02 gradient

FABRIC SPECIFICATIONS

MATERIAL	Non-Woven Geotextile
PUNCTURE STRENGTH	250 lbs (ASTM D6241)
PERMEABILITY	120 gal/min/ft² (ASTM D4491)



GRT HIGH COMPRESSION MAT | 0.5"

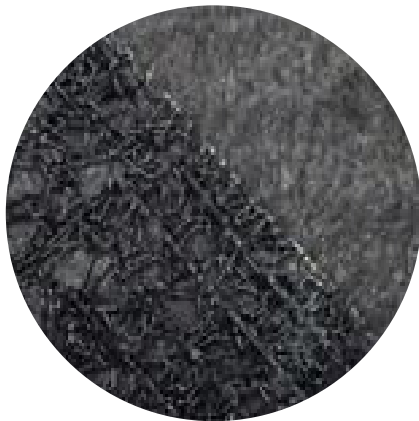
GRT High Compression Drainage Mat 0.5" is a geocomposite drainage mat consisting of a dimpled polymeric core, covered with a non-woven geotextile filter fabric on top, and a protection fabric on the bottom. The core of this drain mat offers high compression and stormwater retention, while permeable filter fabric prevents engineered soil from entering and blocking the core. This is for use with heavy loads, such as pavers and pedestals or concrete curbing.

CORE SPECIFICATIONS

MATERIAL	Polymeric
COMPRESSIVE STRENGTH	>15,000 psf (ASTM D1621 modified) (Flow rate not impacted)
TRANSMISSIVITY	4.9 gpm/ft at .05 gradient

FABRIC SPECIFICATIONS

MATERIAL	Non-Woven Geotextile
PUNCTURE STRENGTH	65 lbs (ASTM D4833)
PERMEABILITY	150 gal/min/ft² (ASTM D4491)



GRT LOW FLOW DRAIN MAT | 0.25"

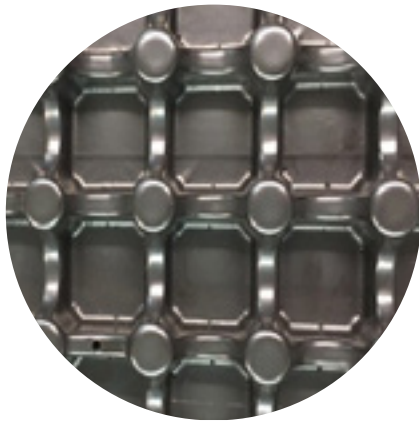
GRT Low Flow Drain Mat 0.25" is a 1/4" thick drainage core with an extruded polymer matrix of tangled monofilaments, thermally bonded to a non-woven geotextile. With high tensile and tear strength, this drain mat provides additional stormwater detention time and slows the rate of stormwater flow to roof drains.

CORE SPECIFICATIONS

MATERIAL	Extruded Polymer
COMPRESSIVE STRENGTH	>30,000 psf (ASTM D1621 modified & ASTM D4716)
TRANSMISSIVITY	1 gpm/ft at .02 gradient

FABRIC SPECIFICATIONS

MATERIAL	Non-Woven Geotextile
PUNCTURE STRENGTH	70 lbs (ASTM D4833)
PERMEABILITY	120 gal/min/ft² (D4491)



GRT HIGH RETENTION DRAIN MAT | 1.0"

GRT High Retention Drain Mat is a 1.0" thick high-retention drainage panel made from 100% recycled high-density polypropylene. For use with green roof systems when maximizing water retention capacity is a priority. This drain mat is to be used in conjunction with GRT Filter Fabric for green roof installations.

MATERIAL	100% Recycled High-Density Polypropylene
COMPRESSIVE STRENGTH	> 7,000 psf
WATER RETENTION	0.458 gal/ft² (ASTM E2398/E2398M)
ACCOMPANYING GRT PRODUCT	GRT FILTER FABRIC

GRT ROOT BARRIER 20

GRT Root Barrier 20 is a smooth polyethylene 20 mil geomembrane film that is the typical standard used in layered green roof systems. It is a protection layer that aids in protecting the waterproofing system from plant root intrusion.



MATERIAL	Black Polyethylene Geomembrane
THICKNESS & WEIGHT	20 mil & 76 lbs/roll (Other thicknesses available upon request)
BREAK STRENGTH	96 lb/in (ASTM D6693)
PUNCTURE RESISTANCE	40 lbs (ASTM D4833)

GRT ROOT BARRIER 30

GRT Root Barrier 30 is a smooth HDPE 30 mil geomembrane film for use when required by municipalities or project specifications. It aids in protecting the waterproofing membrane from root intrusion from more aggressive/larger plants.

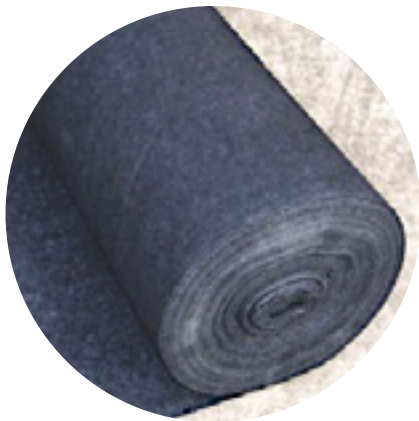


MATERIAL	Black Polyethylene HDPE
THICKNESS & WEIGHT	30 mil & 115 lbs/roll (ASTM D5199) (Other thicknesses available upon request)
BREAK STRENGTH	144 lb/in (ASTM D6693)
PUNCTURE RESISTANCE	60 lbs (ASTM D4833)



FILTER FABRIC

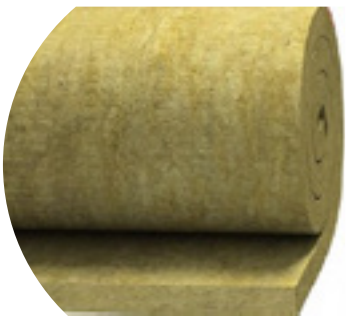
MINERAL WOOL



GRT FILTER FABRIC

GRT Filter Fabric is a non-woven, needle punched geotextile separator for green roof systems. A permeable solution to prevent engineered soil from blocking drainage in a GRT Layered System or as an optional protection layer between a GRT Modular System and the roof’s waterproofing membrane. GRT Filter Fabric allows water flow at 140 gallons per minute and is UV resistant.

MATERIAL	Polypropylene
DENSITY & WEIGHT	4 oz. & 114 lbs/roll
WATER FLOW	140 gal/min/ft ² (ASTM D4491)
PERMITTIVITY	2.0 sec ⁻¹ (ASTM D4491)



GRT MINERAL WOOL

GRT Mineral Wool is a lightweight and efficient stormwater retention product, with very high water retention capacity. For use below vegetation and soil layers, it is an engineered horticultural approach to stormwater management that provides maximum water retention with minimum weight.

MATERIAL	Mineral Wool
WET WEIGHT	4.9 lbs/ft ² (ASTM E2397)
RETAINED WATER	0.54 gal/ft ²
RETAINED WATER VOLUME	≥ 89% (ASTM E2397)

CAPILLARY MAT

DRAIN COVERS AND LIDS



GRT CAPILLARY MAT

GRT Capillary Mat is a thick geotextile mat made from mechanically consolidated, needle punched, fine-denier, polyester fibers. For use in horizontal and sloped green roof applications for additional water retention.

MATERIAL	Needle Punched Polyester Fibers
FABRIC WEIGHT	28 oz/yd ² (ASTM D5261)
WATER RETENTION	0.1 gal/ft ² (ASTM E2398)
SATURATION DENSITY	1.1 lb/ft ² (ASTM E2398)



GRT DRAIN COVERS and LIDS

GRT Drain Covers and Lids provide effective drainage and protection from debris entering the roof drains for rooftop decks and green roofs. Designed to be lightweight for rooftop applications, they provide a functional purpose with a polished look. All GRT Drain Covers and Lids are made from recycled aluminum, are 100% recyclable, and may qualify for LEED points.

MATERIAL	Extruded 6063 Aluminum Alloy
DIMENSIONS	Aluminum: 15” x 15” x 6” high (inside) Custom sizes available
FINISH	Aluminum: Mill Finish Anodized
SECURITY	2 Pieces with Lockable Lid

Components



METAL EDGING

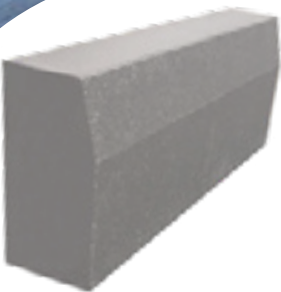


GRT METAL EDGING

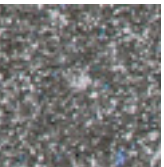
GRT Metal Edging is a strong yet lightweight, bendable restraint that provides a great finished look for both modular systems and layered green roof systems. GRT Metal Edging accommodates design curves and angles and is easy to install, making it a great alternative to structural curbing or as an edging detail for paver and tiles on rooftop walkways. Made from recycled aluminum, GRT Metal Edging is 100% recyclable and qualifies for LEED project points.

MATERIAL	Aluminum Extruded 6063 Alloy
DIMENSIONS	Varying heights 4.5", 6.5", & 8.25" heights x 8' lengths
FINISH	Mill Finish Anodized Black DuraFlex Coating available by special order
COMBUSTIBILITY	Extruded aluminum will not burn and does not emit any toxic, hazardous fumes when exposed to high temperatures
UV	Aluminum reflects ultraviolet radiation and is not damaged by harmful UV rays

CONCRETE CURB EDGING



Natural Gray



Charcoal

GRT CONCRETE CURB EDGING

GRT Concrete Curb Edging, designed for durability and function, is an attractive edging solution for defining and separating spaces on green roofs and amenity decks. With a diverse range of applications, it can be used to retain green roof vegetative systems or as a decorative edge for walkways, decking, and turf or play areas. Made of precast concrete and available in a variety of colors, GRT Concrete Curb Edging is a low maintenance and versatile edging product.

MATERIAL	Gray Cement, Crushed Limestone, Sand, Recycled Water Iron Oxide Coloring - if needed (ASTM C936)
DIMENSIONS	6" x 12" x 36" (actual) Beveled Curbs (ASTM C936)
WEIGHT	77 lbs/lf = 232 lbs/curb (ASTM C936)
COLORS	Natural Gray and Charcoal
COMPRESSIVE STRENGTH	8,000 psi minimum (ASTM C140)



GRT SEDUM TILES

GRT Sedum Tiles typically consist of at least 12 different sedum varieties, grown on 1” proprietary soil mix using the plant roots as the structural backing. GRT Sedum Tiles are designed for use in modular and layered green roof systems, planters, living walls, bioswales, and other stormwater management and green amenity applications.

SEDUM VARIETIES TYPICALLY INCLUDE AN ASSORTMENT OF:

Sedum acre ‘Golden Carpet’	Sedum hybridum
Sedum acre ‘Octoberfest’	Sedum reflexum ‘Blue Spruce’
Sedum albums (assorted)	Sedum sediforme
Sedum ellacombianum	Sedum selksianum
Sedum floriferum ‘Weihenstephaner Gold’	Sedum sexangulare
Sedum forsterianum ‘Silver Stone’	Sedum spurium ‘Coccineum’
Sedum glaucophyllum	Sedum spurium ‘Summer Glory’
Sedum hispanicum	Sedum spurium ‘Voodoo’

DIMENSIONS	12” x 24” x 1” (2 ft ²)
SQ. FT. PER PALLET	200 - 300 ft ²
DRY WEIGHT	Approx. 2 lbs/ft ²
WET WEIGHT	Approx. 6 lbs/ft ²
WEIGHT PER PALLET	600-950 lbs

GRT BULK ENGINEERED GREEN ROOF SOIL

GRT Engineered Green Roof Soil is a lightweight growing media designed for multi-layer green roof systems. It is a balanced blend of mineral aggregates and organic content, which helps to neutralize acid runoff and maintain pH levels and soil depth. For use in intensive, semi-intensive, and extensive vegetative roofs, GRT Engineered Green Roof Soil is blended and tested to ASTM standards. Available for delivery in bulk, super sacks, or cubic foot bags.

Blends may vary per geographic region and vegetative growing conditions.

EXTENSIVE SOIL - MID ATLANTIC REGION (ASTM E2399)

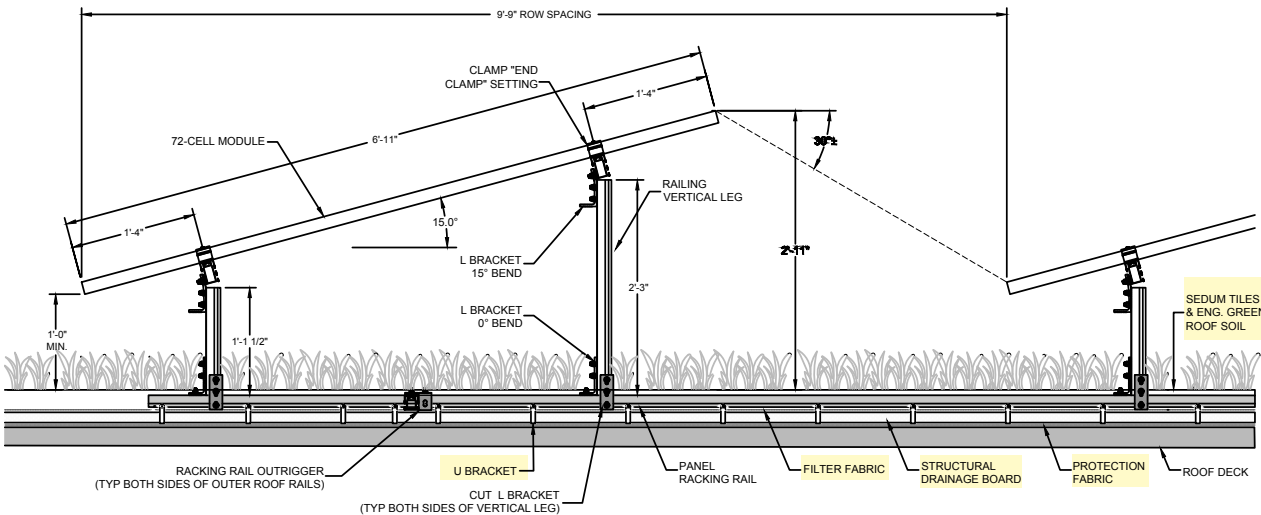
WATER PERMEABILITY	Varies per blend
DRY WEIGHT	50 - 60 lb/ft ³
MAX. SATURATED WEIGHT	68 - 88 lb/ft ³
MAX. WATER RETENTION	44% - 53%
ORGANIC MATTER	7.6%



INTENSIVE SOIL - MID ATLANTIC REGION (ASTM E2399)

WATER PERMEABILITY	Varies per blend
DRY WEIGHT	50 - 60 lb/ft ³
MAX. SATURATED WEIGHT	75 - 93 lb/ft ³
MAX. WATER RETENTION	48% - 55%
ORGANIC MATTER	7.3% - 7.6%





GRT SEDUM TILES OR GRT SEDUM MATS

10 -12 different sedum varieties, grown on a proprietary soil mix with a built-in structural backing



GRT ENGINEERED GREEN ROOF SOIL

A lightweight growing media, comprised of a balanced blend of mineral aggregates and organic content, designed for green roofs



GRT FILTER FABRIC

A highly permeable, nonwoven, needle punched polypropylene geotextile separator. Allows water flow at 140 gals. per min. and is UV resistant



GRT U BRACKET

18 gauge G90 galvanized steel 1 3/4" x 2" x 1 3/4" long x 1/2" wide 1/4" hole on each end to fit #8 stainless steel self tapping screws



GRT STRUCTURAL DRAINAGE BOARD

Polypropylene, open shell drainage panels that encourage infiltration with 95% internal and 62% surface void area available for storm water capture backing



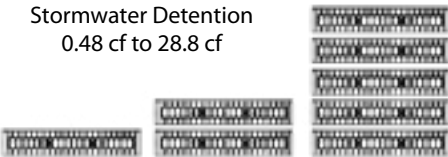
GRT PROTECTION MAT

A 1/8" thick geotextile fabric mat made from needle-punched, 100% recycled polyester fibers. Offers protection and puncture resistance for the roof's waterproofing



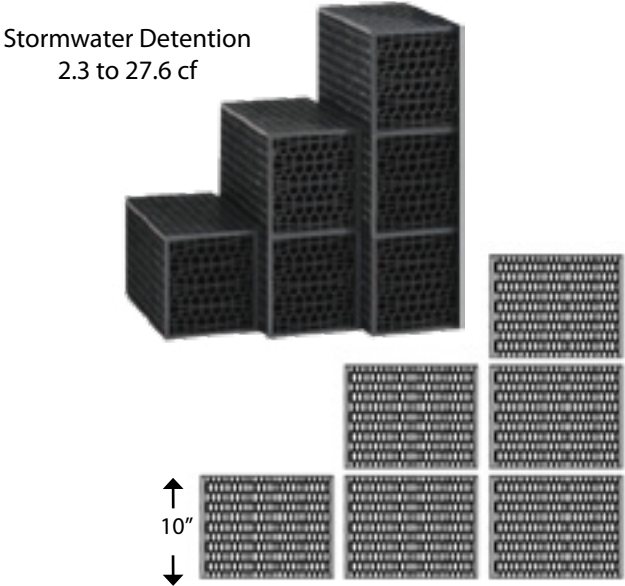


Stormwater Detention
0.48 cf to 28.8 cf



GRT 2" STORMWATER
DETENTION MODULES

GRT 2" Stormwater Detention Modules are a lightweight, effective stormwater storage solution to maximize both retention and detention. Each detention module is 2" thick, can be stacked up to 10' high, and easily configured for efficient use of space. Designed as an open shell, these modules encourage infiltration with 90% internal and surface void area available for high capacity stormwater capture. Typically installed with GRT Filter Fabric and GRT Root Barrier.



Stormwater Detention
2.3 to 27.6 cf

GRT 10" STORMWATER
DETENTION MODULES

GRT 10" Stormwater Detention Modules are an efficient and versatile stormwater storage solution to maximize retention and/or detention for blue roof projects. Each detention module is 10" thick and can be stacked up to 10' high. Designed as an open shell, these modules encourage infiltration and have 95% volume available for stormwater capture. Ideal for green space applications, GRT Stormwater Detention Modules are easily configured for efficient use of space and are lightweight for ease of installation. Typically installed with GRT Filter Fabric and GRT Root Barrier.



MATERIAL	100% Recycled Polypropylene
MODULE DIMENSIONS & WEIGHT	20" x 24" x 2" (nominal); 4 lbs. 19.68" x 23.62" x 1.97" (actual); 4 lbs.
MODULE STACKING	Maximum 10' = 60 layers
AREA VOLUME & WATER CAPACITY	0.53 cf & 0.48 cf
VOID AREA	90% volume available for water storage
COMPRESSIVE STRENGTH	240.2 psi (ASTM D 2412 / ASTM F2318)

Additional material options available upon request.

MATERIAL	100% Recycled Polypropylene
MODULE DIMENSIONS & WEIGHT	16" x 28" x 10" (nominal); 10.1 lbs. 15.75" x 28.15" x 9.45" (actual); 10.1 lbs.
MODULE STACKING	Maximum 10' = 12 layers
AREA VOLUME & WATER CAPACITY	2.42 cf & 2.30 cf
VOID AREA	95% volume available for water storage
COMPRESSIVE STRENGTH	30 psi (ASTM D2412 / ASTM F2318)

Additional material options available upon request.

Deck Pavers & Pedestal Systems

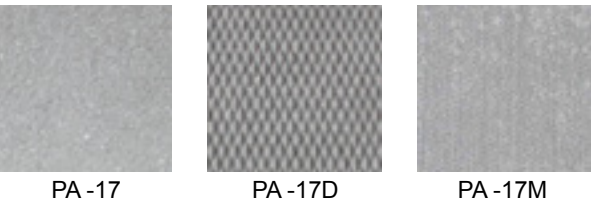
AMENITY DECK PRODUCTS



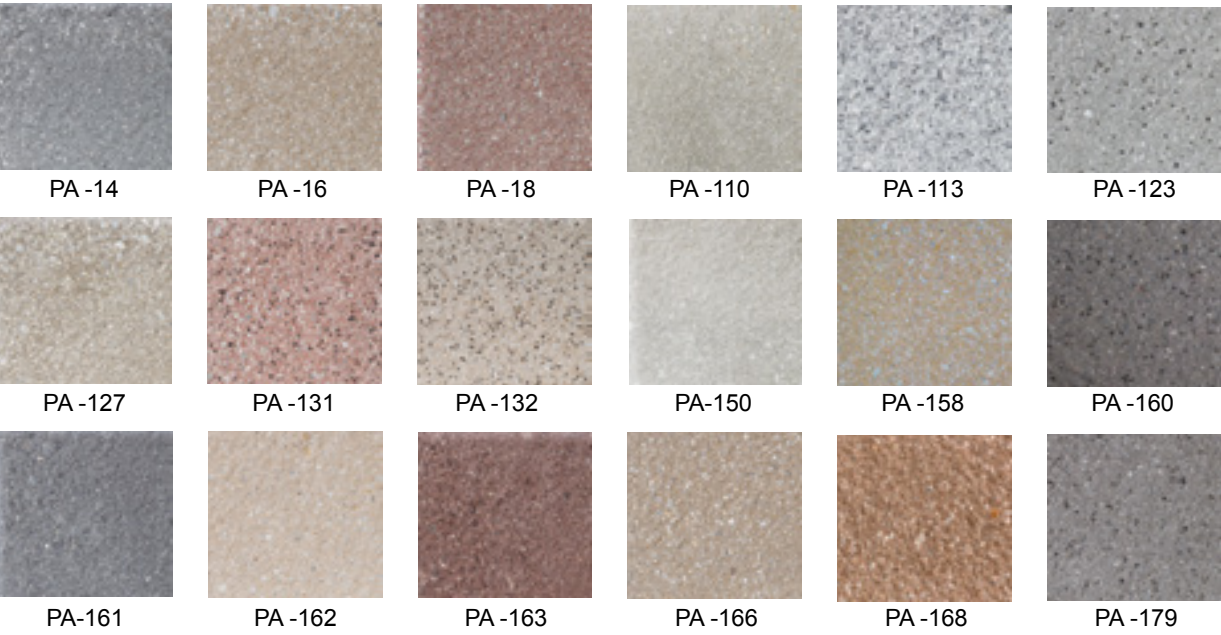


COLORS & FINISHES

NATURAL GRAY - Shotblast, Diamond, & Matte Finish



STANDARD COLORS - Shotblast Finish



PREMIUM COLORS - Shotblast Finish



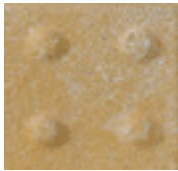
GRT CONCRETE PAVERS

GRT Concrete Pavers, designed for durability and stability, are an attractive and functional hardscaping option for creating gathering spaces or adding walking paths to patios, terraces, and rooftop areas. When installed with GRT Pedestals, these pavers offer a practical way to hide and protect roof penetrations, pipes, and uneven surfaces. GRT Concrete Pavers are available in a variety of aesthetic colors, textures, and sizes, and are A MADE IN THE USA product.

DIMENSIONS	12" x 12" x 2" 18" x 24" x 2" 24" x 24" x 2" 24" x 36" x 2"
WEIGHT	12" x 12" x 2" = 25 lbs. 18" x 24" x 2" = 72 lbs. 24" x 24" x 2" = 97 lbs. 24" x 36" x 2" = 145 lbs.
COLORS & FINISHES	Diamond or Matte Finish in Natural Gray Only Shotblast Finish (Tudor Equiv.) in Colors ShownPigment conform- ing to ASTM C979
COMPRESSION STRENGTH	Average of 55 MPa (8500 psi); with no individual unit < 50 MPa
FLEXURAL STRENGTH	870 PSI (NCMA testing procedures min. req. strength 650 psi)

GRT TRUNCATED DOME PAVERS (ADA)

GRT Truncated Dome Pavers have a distinctive textured surface that alerts pedestrians that they have stepped onto different terrain or a change in the landscape is near. Available in 4 standard colors (custom colors available upon request), these attractive pavers are suitable for a decorative addition around pool areas, rooftop walkways, and other transitional spaces. GRT Truncated Dome Pavers are fully compliant with the Americans With Disabilities Act and are A MADE IN THE USA product.



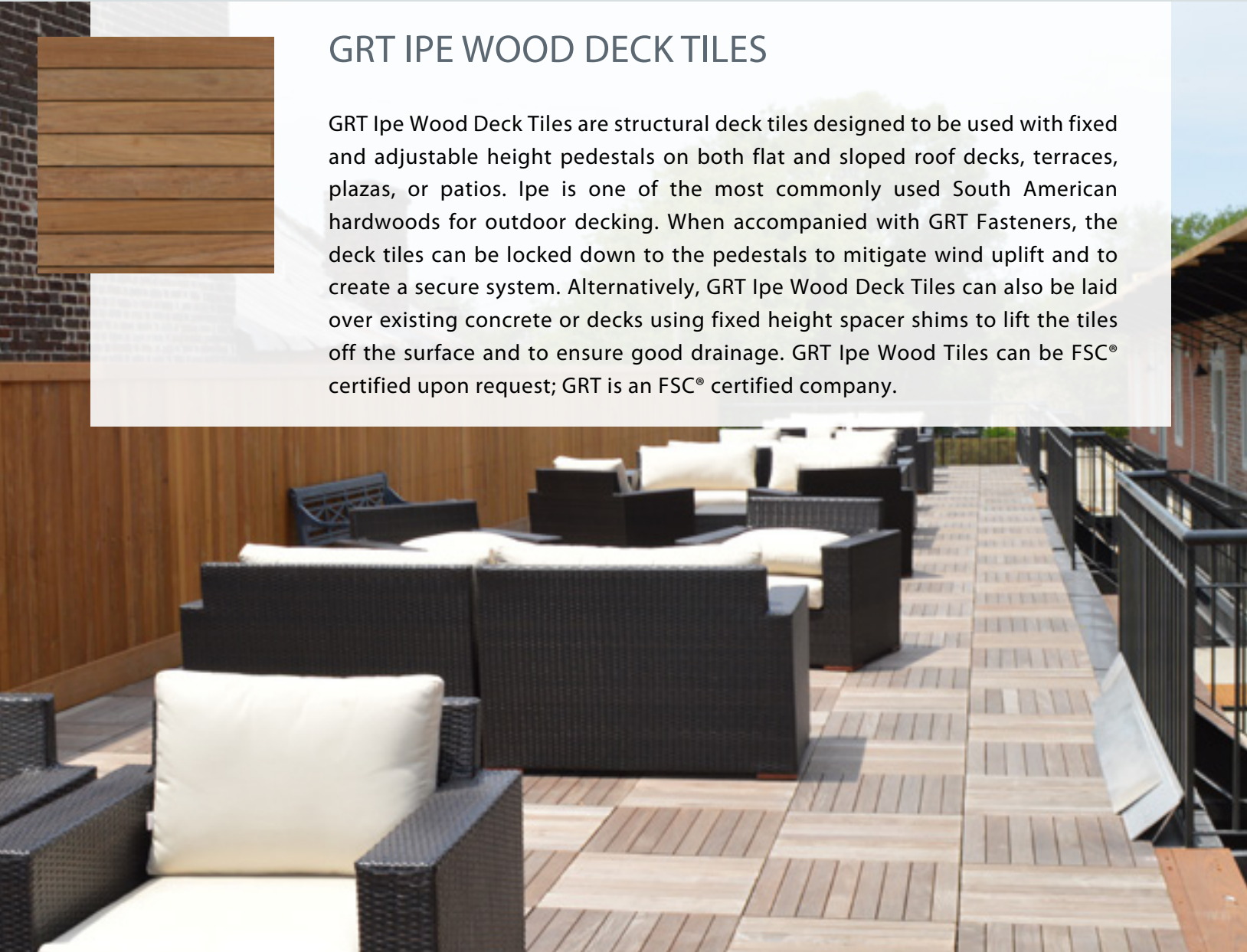
Deck Pavers & Pedestal Systems



WOOD TILES

GRT IPE WOOD DECK TILES

GRT Ipe Wood Deck Tiles are structural deck tiles designed to be used with fixed and adjustable height pedestals on both flat and sloped roof decks, terraces, plazas, or patios. Ipe is one of the most commonly used South American hardwoods for outdoor decking. When accompanied with GRT Fasteners, the deck tiles can be locked down to the pedestals to mitigate wind uplift and to create a secure system. Alternatively, GRT Ipe Wood Deck Tiles can also be laid over existing concrete or decks using fixed height spacer shims to lift the tiles off the surface and to ensure good drainage. GRT Ipe Wood Tiles can be FSC® certified upon request; GRT is an FSC® certified company.

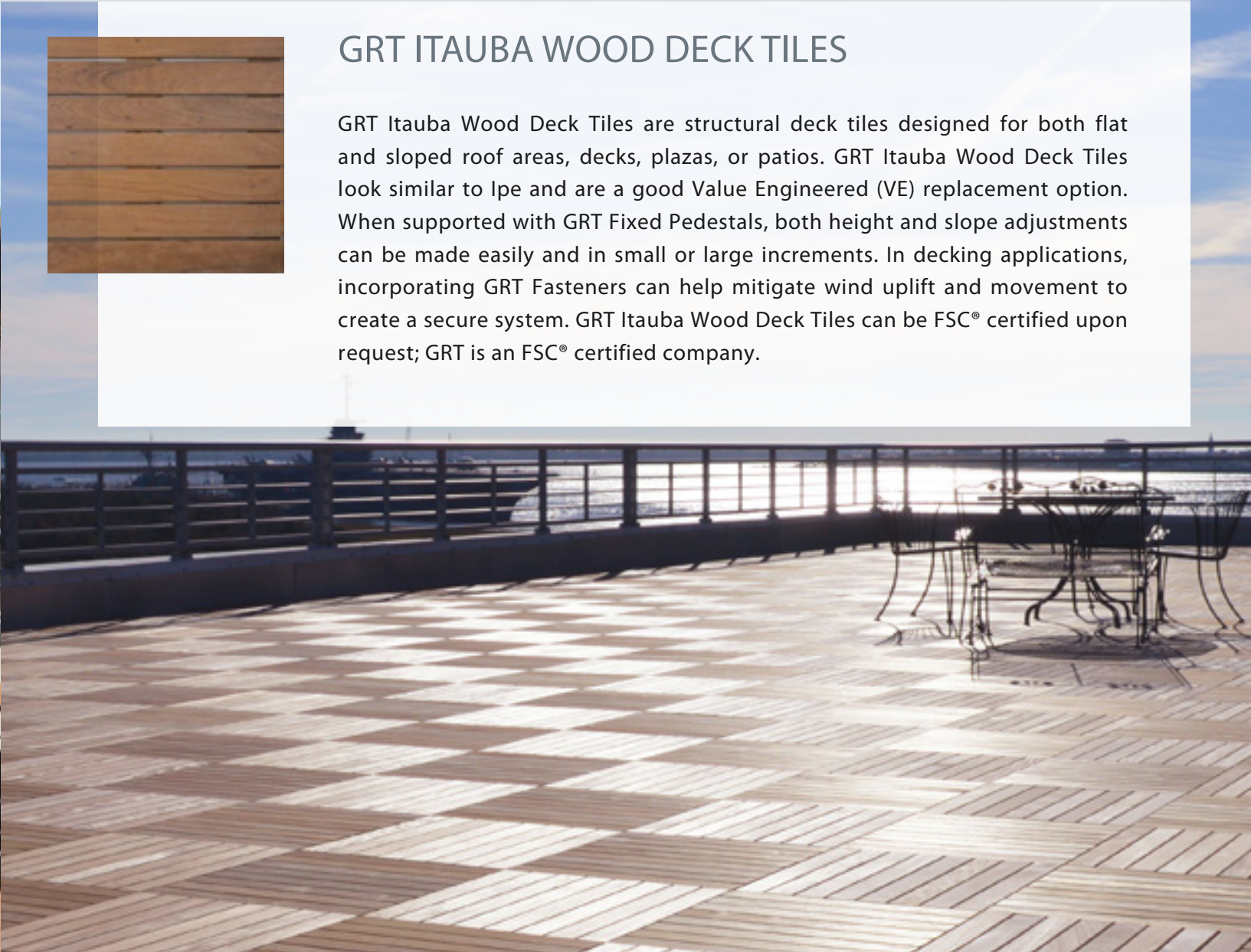


DIMENSIONS	24" x 24" x 1 5/8" (nominal); 23 7/8" x 23 7/8" x 1 1/2" (actual) 24" x 48" x 1 5/8" (nominal); 23 7/8" x 47 7/8" x 1 5/8" (actual) Custom sizes also available
WEIGHT	24" x 24" = 23.5 lbs; 24" x 48" = 48.5 lbs.
COLOR / GRAIN	Reddish-brown color, variations from olive-brown to black striping
CHARACTERISTICS	Resists termites, fire, decay, and mold Low maintenance and wear and scuff resistant
ACCOMPANYING GRT PRODUCTS	GRT PEDESTALS and GRT WOOD DECK TILE FASTENING KITS

WOOD TILES

GRT ITAUBA WOOD DECK TILES

GRT Itauba Wood Deck Tiles are structural deck tiles designed for both flat and sloped roof areas, decks, plazas, or patios. GRT Itauba Wood Deck Tiles look similar to Ipe and are a good Value Engineered (VE) replacement option. When supported with GRT Fixed Pedestals, both height and slope adjustments can be made easily and in small or large increments. In decking applications, incorporating GRT Fasteners can help mitigate wind uplift and movement to create a secure system. GRT Itauba Wood Deck Tiles can be FSC® certified upon request; GRT is an FSC® certified company.



DIMENSIONS	24" x 24" x 1 5/8" (nominal); 23 7/8" x 23 7/8" x 1 1/2" (actual)
WEIGHT	23.5 lbs.
COLOR / GRAIN	Typically yellow-brown to dark lustrous brown
CHARACTERISTICS	Resists termites, fire, decay, and mold Low maintenance and wear and scuff resistant Resists bending, shearing, warping, and twisting
ACCOMPANYING GRT PRODUCTS	GRT PEDESTALS and GRT WOOD DECK TILE FASTENING KITS

Deck Pavers & Pedestal Systems

WOOD DECKING & DIMENSIONAL LUMBER



GRT IPE & GARAPA WOOD DECKING & DIMENSIONAL LUMBER

GRT South American decking and dimensional hardwood comes in most common sizes for traditional deck building. These hardwoods are exceptionally durable, hard, stable across a broad temperature and humidity range, and resistant to twisting and warping. Ideal for roof deck patios, railings, and walkways that are often exposed to extreme temperature and weather conditions.

DIMENSIONS - IPE

<u>Nominal</u>	<u>Actual</u>	<u>Nominal</u>	<u>Actual</u>	<u>Nominal</u>
2" x 4"	1½" x 3½"	1" x 4"	¾" x 3 ½"	5/4" x 4"
2" x 6"	1½" x 5 ½"	1" x 6"	¾" x 5 ½"	5/4" x 6"
2" x 8"	1½" x 7 ¼"	1" x 8"	¾" x 7 ¼"	5/4" x 8"
2" x 10"	1½" x 9 ¼"	1" x 10"	¾" x 9 ¼"	5/4" x 10"

DIMENSIONS - GARAPA

<u>Nominal</u>	<u>Actual</u>	<u>Nominal</u>	<u>Actual</u>	<u>Nominal</u>
2" x 4"	1½" x 3½"	1" x 4"	¾" x 3 ½"	5/4" x 4"
2" x 6"	1½" x 5 ½"	1" x 6"	¾" x 5 ½"	5/4" x 6"
2" x 8"	1½" x 7 ¼"			

COLOR / GRAIN

Ipe: Typically reddish-brown in color, but can vary from olive-brown to blackish / Fine to medium grain always interlocked

Garapa: Warm pale yellow to honey-brown / Mixed fine to slightly coarse grain

CHARACTERISTICS

Resists termites, decay, and mold
Wear and scuff resistant
Weathers without splintering
Low maintenance

ACCOMPANYING GRT PRODUCTS

GRT PEDESTALS and GRT WOOD DECK TILE FASTENING KITS

Additional material options available upon request.



WOOD TILE FASTENING KITS

GRT WOOD DECK TILE FASTENING KITS

GRT Fastening Kits for use with GRT Wood Deck Tiles provide a secure connection between pedestals and the finished deck surface. The weight of the deck pavers create a monolithic system to hold the system in place and mitigate against wind uplift. GRT offers 2 fastening kit options for wood deck tile projects; choice of fastening kit is based on pedestal heights.

SCREW & WASHER

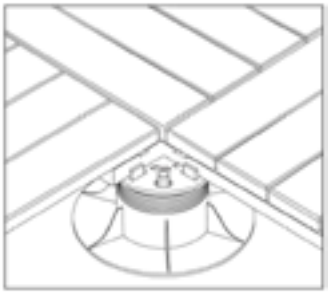


For pedestal heights > 2.5"
Easily removable for repairs and maintenance

GRT Wood Deck Tiles are engineered with a slot cut in each corner enabling a special washer and finishing screw to be inserted. Once all tiles are in place, the washer and screw are invisibly screwed into the corresponding top of the pedestal to “lock down” the tiles, ensuring a safe, secure, and level surface. Our fastening kit makes removal of a centrally-located tile simple, and eliminates the need to remove all tiles from the perimeter up to that point.

Fastening kit pedestal height > 2.5" installation:
Three wooden deck tiles are placed on a pedestal. The screw and washer is placed into the fastening slot of each wood deck tile. The fourth deck tile is placed on the pedestal and the screw is fastened down to lock the wood deck tiles in place.

PLASTIC PINS



For pedestal heights < 2.5"
More permanent connection

GRT Wood Deck Tiles have a connection hole in the bottom corners of the pavers to secure a plastic pin which provides a connection to the pedestals. Once all tiles are in place, the plastic pins are invisible, and ensure a safe, secure, and level surface. With our plastic pin fastening kit, removal of tiles for repairs and maintenance is simple and straightforward.

Fastening kit pedestal height < 2.5" installation:
Align the holes on the underside of the wood deck tiles with the plastic pins in the pedestals. Push down on tiles until connection is complete.

Porcelain Pavers



GRT PORCELAIN PAVERS

GRT Porcelain Pavers can be used to create patio, terrace, and gathering spaces or to add walking paths to rooftop areas. Made for outdoor use, these pavers are slip, chemical, and fade resistant, and a no-maintenance product. When installed on GRT Pedestals they offer a practical way to hide and protect roof penetrations, pipes, and uneven surfaces. GRT Porcelain Pavers are available in a variety of aesthetic colors, textures, and sizes, and are a MADE IN THE USA product.



DIMENSIONS

24" x 24" x 3/4" (nominal); 23 1/2" x 23 1/2" x 3/4" (actual)
*Other sizes, including mixed, available upon request

WEIGHT

25 lbs

FREEZE / THAW

Resistant (ASTM C1026)

BREAKING STRENGTH

≥ 2000 lbf (ASTM C648)

ACCOMPANYING GRT PRODUCTS

GRT PEDESTALS, GRT PAVER GRATE, & GRT PAVER GRATE FASTENING KIT

PORCELAIN PAVER SIZES

BLUESTONE	12"x12"	12"x24"	12"x48"	24"x24"	MIXED*	24"x48"
Bluestone Blue Select	●	●	●	●		●
Thermal Bluestone Full Color & Blue Select	●	●		●	●	
Bluestone Full Color	●	●	●	●		●
LIMESTONE						
Limestone, Indiana Buff Select, Indiana Grey Select	●	●	●	●		●
Indiana Variegated	●	●		●		
International White & Minimalist Greige				●		
QUARTZ						
Silver Quartz & Barge Gold		●		●		
Star Grey, African Beige, Arctic White	●	●	●	●		●
MARBLE						
Michelangelo Extra White	●	●	●	●		●
CONCRETE						
Simply Grey, Freedom White, Passion Silver				●		
TERRAZZO						
Diamond White & Fashion Grey				●		
STONE						
Natural Ivory, Modern Grey, Desert, Cosmos, Absolute, Sky, Artistic Beige				●		
Cosmopolitan Ash, White Avenue, Fashion Black				●		●
SLATE						
Montauk Grey, White, & Black	●	●	●	●		●
Vintage Slab		●		●		
California Gold, Rustic Gold	●	●		●		
Mariposa Slate				●		
PATCHWORK						
Patchwork White, Ash, & Mix				●		
TRAVERTINE						
Travertine Cross Cut Silver, Cream, & White	●	●	●	●		●
Travertine Cross Cut Scabas, Philadelphia, & Country Classic	●	●		●		
Travertine Cross Cut Pearl & Beige				●		
Travertine Vein Cut Grey & Beige						●
WOOD						
Walnut, Pepper				●		
Soul Walnut, Soul Grey, Essence Brown, Essence Grey			●			

*Mixed size tiles are a combination of 24" x 36" and 12" x 24"

Porcelain Pavers

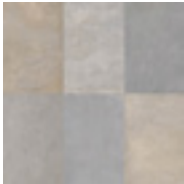
COLORS & FINISHES



BLUESTONE



Bluestone Blue Select



Bluestone Full Color



Thermal Bluestone Full Color



Thermal Bluestone Blue Select

LIMESTONE



Limestone



Indiana Buff Select



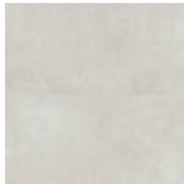
Indiana Grey Select



Indiana Variegated

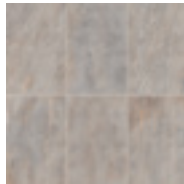


International White



Minimalist Greige

QUARTZ

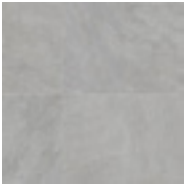


Silver Quartz

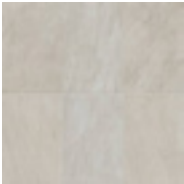


Barge Gold

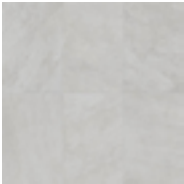
CONCRETE



Star Grey



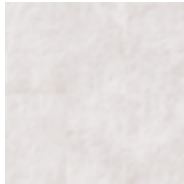
African Beige



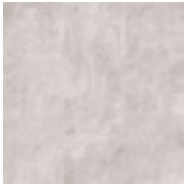
Arctic White



Simply Grey



Freedom White



Passion Silver

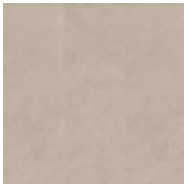
STONE



Natural Ivory



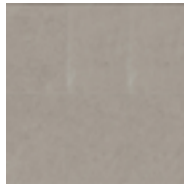
Modern Grey



Desert



Cosmos



Absolute

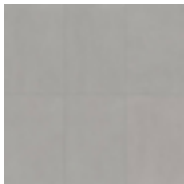


Sky

TERRAZZO



Artistic Beige



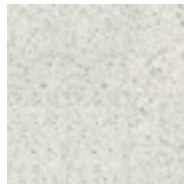
Cosmopolitan Ash



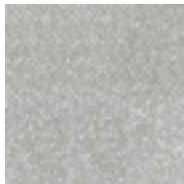
White Avenue



Fashion Black



Diamond White



Fashion Grey

SLATE



Montauk Grey



Montauk White



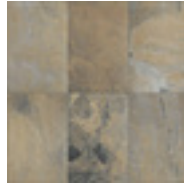
Montauk Black



Vintage Slab



California Gold



Rustic Gold

TRAVERTINE



Mariposa Slate



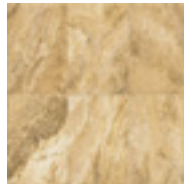
Cross Cut Silver



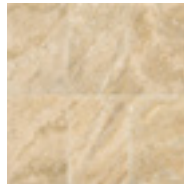
Cross Cut Cream



Cross Cut White



Cross Cut Scabas



Cross Cut Philadelphia



Cross Cut Country Classic



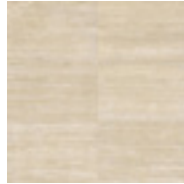
Cross Cut Pearl



Cross Cut Beige



Vein Cut Grey



Vein Cut Beige



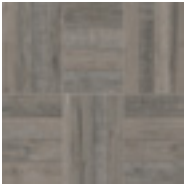
Michelangelo Extra White

MARBLE

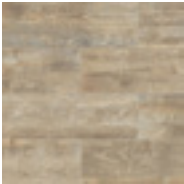
WOOD



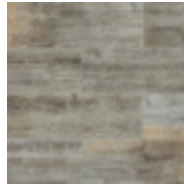
Walnut



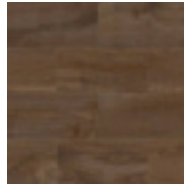
Pepper



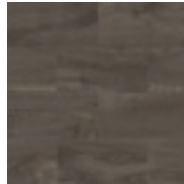
Soul Walnut



Soul Grey

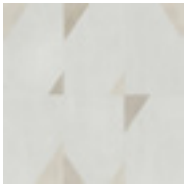


Essence Brown



Essence Grey

PATCHWORK



Patchwork White



Patchwork Ash



Patchwork Mix

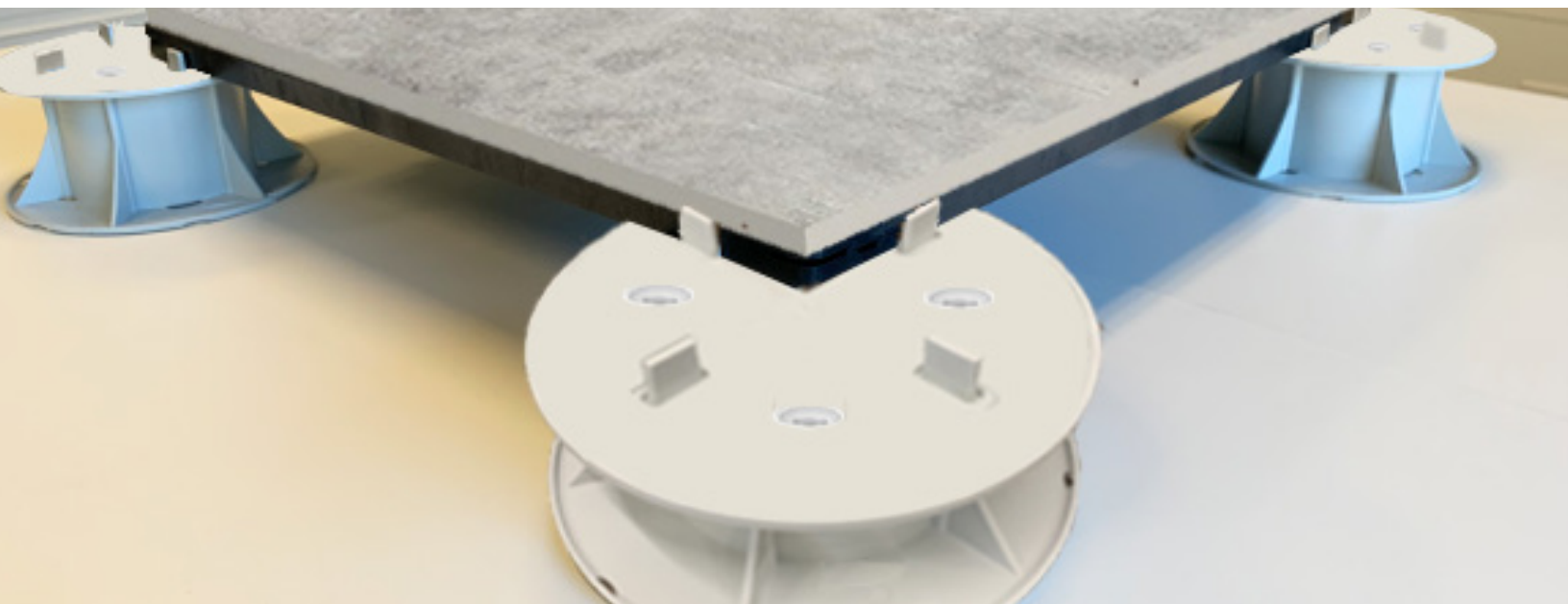
Porcelain Pavers

PAVER GRATE



GRT PAVER GRATE

GRT Paver Grate enhances impact resistance for porcelain pavers in pedestal applications. It also provides a structural surface for loose laid pavers on deck pedestals. Engineered to attach to the pedestals, the GRT Paver Grate creates a stable and secure foundation and mitigates wind uplift resistance. Multiple options are available for adhesion to porcelain pavers.



MATERIAL	A blend of Nylon, Glass, and Stabilizer
DIMENSIONS	23.5" x 23.5" x 0.44" 11.75" x 23.5" x 0.44"
WEIGHT	23.5" x 23.5" x 0.44" = 3.5lb/grate 11.75" x 23.5" x 0.44" = 1.75lb/grate
YIELD STRENGTH	Average yield strength: >15,000 psi Passed standards for both: ASCE 7 and AMCA/FGMC Grating Manual – FG01-17
ULTIMATE STRENGTH	Ultimate strength: >20,000 psi* Passed standards for both: ASCE 7 and AMCA/FGMC Grating Manual – FG01-17

*Strength and deflection results are derived from Solidworks Simulation 2020 structural modeling software



PAVER GRATE FASTENING KIT

GRT PAVER GRATE FASTENING KIT

GRT Paver Grate Fastening Kit for use with GRT Paver Grates provides a secure connection between pedestals and the pavers on a finished deck surface. The weight of the grates and pavers creates a monolithic system to hold the system in place and mitigate against wind uplift.*



SCREW & WASHER



For pedestal heights > 2.5"
Easily removable for repairs and maintenance

GRT Paver Grates are engineered with a slot cut in each corner enabling a special washer and finishing screw to be inserted. Once all grates are in place, the washer and screw are invisibly screwed into the reinforced pilot hole in the top of the pedestal to "lock down" the grates, ensuring a safe, secure, and level surface. Our fastening kit makes removal of a centrally-located grate simple, and eliminates the need to remove all grates from the perimeter up to that point.

PLASTIC PINS



For pedestal heights < 2.5"
More permanent connection

When height is limited, GRT Structural Grates can be used and have a connection hole in the bottom of the grate to secure a plastic pin, which provides a connection to the pedestals. Once all grates are in place, the plastic pins are invisible, and ensure a safe, secure, and level surface. With the plastic pin fastening kit, this connection is more permanent, so if removal is required, the pins must be broken and replaced as needed.

*1.15" Structural Grate should be utilized with this system for Florida and other high wind uplift projects.

Deck Pavers & Pedestal Systems

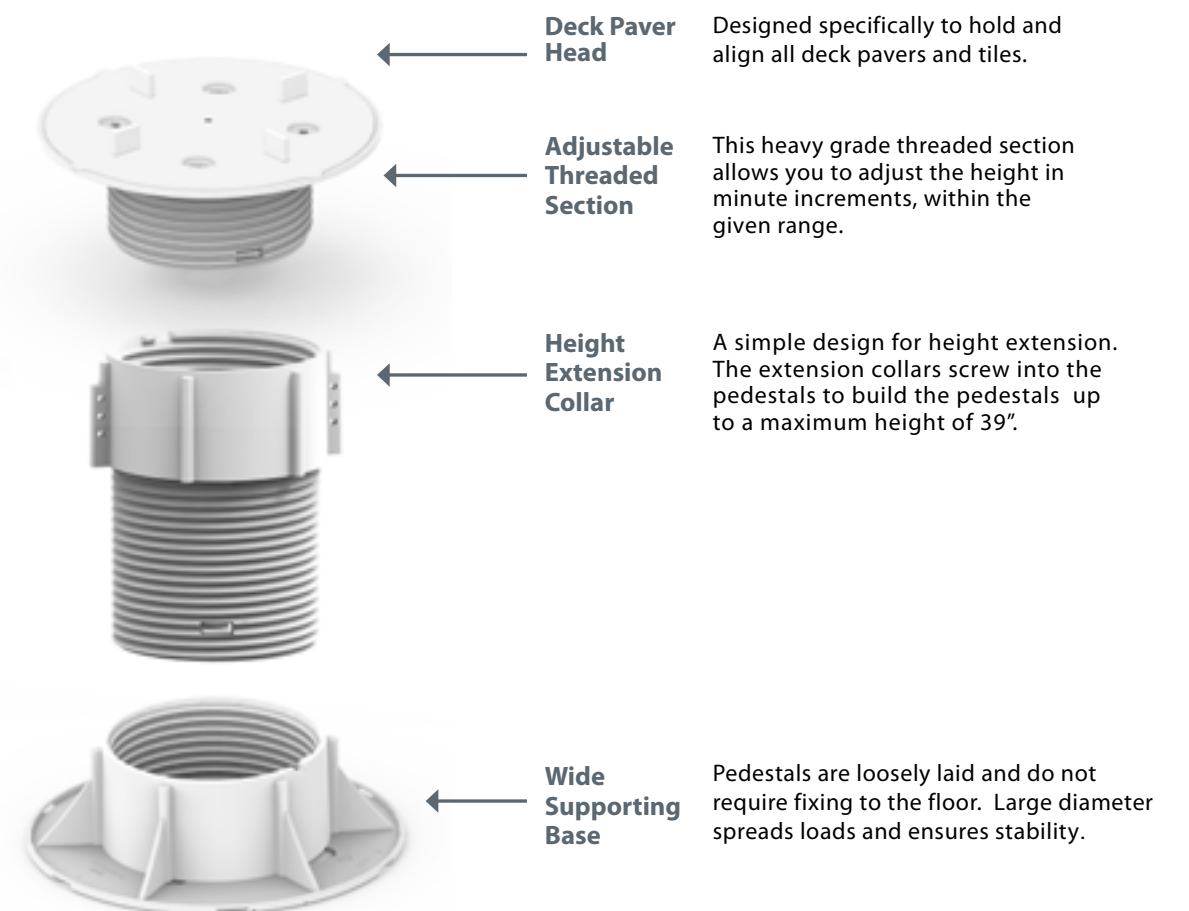
PEDESTALS



GRT FIXED HEAD PEDESTALS

GRT Fixed Head Pedestals work perfectly with all deck pavers; including wood, porcelain, and concrete. They provide rigid support for pavers and can hold thousands of pounds each. The pedestals help conceal roof extrusions, like anchor points and pipes. GRT Fixed Head Pedestals allow our fastening kit to secure wood and porcelain pavers down to mitigate movement and wind uplift.

Heavy Duty Fixed Head



Artificial Turf

ARTIFICIAL TURF



GRT ARTIFICIAL TURF

Artificial Turf is a low maintenance environmentally safe-solution for creating natural looking play and gathering spaces for patios, terraces, and roof top areas. It resists staining, mold and mildew, and is quick drying. Because Artificial Turf doesn't require treatment with potentially harmful pesticides and fertilizers and has impact-absorbing qualities, it is an ideal surface for playground and pet areas. A MADE IN THE USA product.

	PLUSH SPRING 6 colors & 2 fibers for a lush landscape Pile Height: 2 inches Total Weight: 106 oz./yd ² Face Weight: 80 oz./yd ² Color: Field, Apple, Emerald, Tan Thatching: Green, Tan		PLUSH FALL 6 colors & 3 fibers for a realistic feel Pile Height: 2 inches Total Weight: 106 oz./yd ² Face Weight: 80 oz./yd ² Color: Field, Olive, Emerald, Tan Thatching: Green, Tan
	ALL PLAY "U" shaped fibers for playgrounds & heavy activity Pile Height: 1.125 inches Total Weight: 81 oz./yd ² Face Weight: 55 oz./yd ² Color: Field, Apple Thatching: Green, Tan		CLASSIC PRO "W" shaped fibers for a natural manicured look Pile Height: 1.625 inches Total Weight: 116 oz./yd ² Face Weight: 90 oz./yd ² Color: Field, Emerald Thatching: Green, Tan
	PUTTING TURF Putting greens, bocce courts, & sport applications Pile Height: 0.625 inches Total Weight: 60 oz./yd ² Face Weight: 46 oz./yd ² Color: Two tone green		PET TURF Vibrant greenery for pets with maximum permeability Pile Height: 1.125 inches Total Weight: 71 oz./yd ² Face Weight: 55 oz./yd ² Color: Field, Apple Thatching: Green, Tan

MATERIAL	Polypropylene thermoplastic (PP) blended with Polyethylene (PE) thatching
USES	Rooftop amenity spaces, playgrounds, pet areas, sports fields, putting greens, balconies, decks, and lawns
CHARACTERISTICS	Durable - designed for heavy traffic and wear and tear Weatherproof, impact absorbing, mold and fade resistant LEED certified by US Green Building Council ADA accessible * ASTM D2859: Flammability (Pill Burn) Test: Pass
ACCOMPANYING GRT PRODUCTS	GRT PEDESTALS GRT STRUCTURAL GRATE

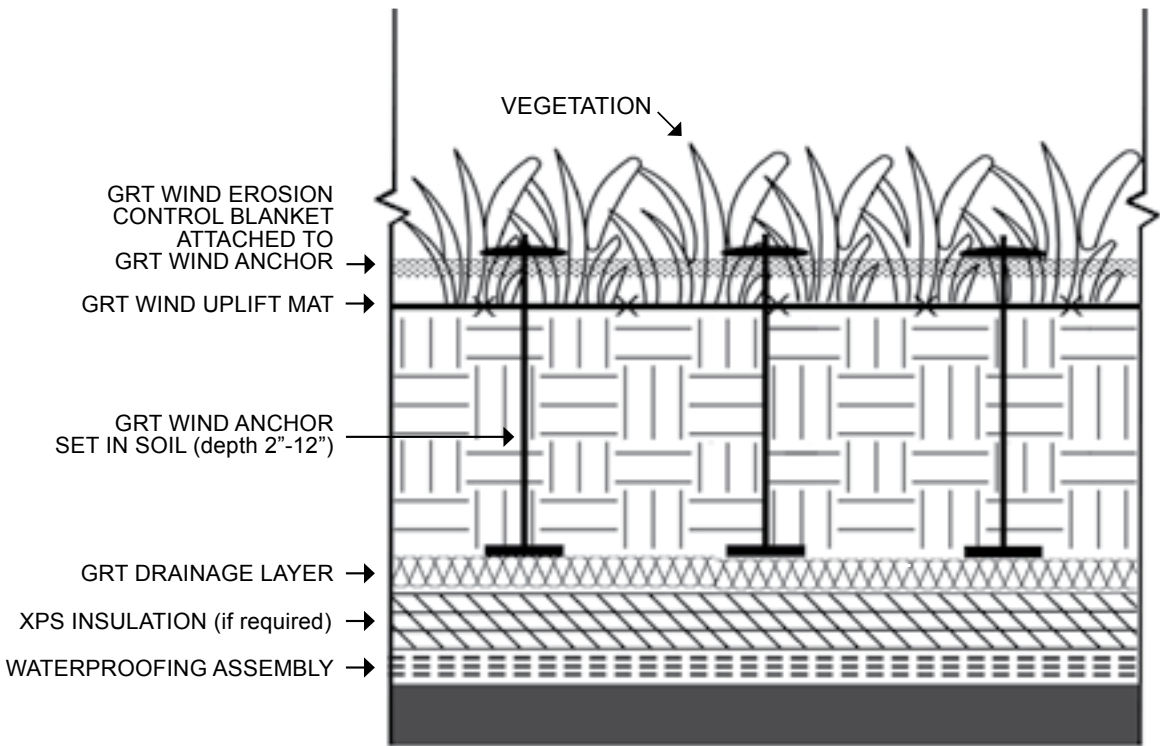
Wind Uplift & Erosion Control



WIND KIT

GRT VEGETATED WIND UPLIFT & EROSION CONTROL KIT

GRT Vegetated Wind Uplift & Erosion Control Kits include a synthetic wind uplift mat, jute erosion blanket, and wind anchors to stabilize and hold in place growing media and plant material on windy rooftops. GRT Wind Anchors are made of recycled polypropylene base disks, retention disks, and connecting shafts. They are easy to install and lightweight. A MADE IN THE USA product.



WIND ANCHOR

MATERIAL	Recycled Polypropylene
DIMENSIONS	Shaft height = 12"; Adjustable from 2" - 12"
WIND RESISTANCE	Retention discs resist pulling from shaft up to 60-100 N of direct force

Wind Uplift & Erosion Control



EROSION BLANKET & WIND UPLIFT MAT



GRT WIND EROSION CONTROL BLANKET

GRT Wind Erosion Blanket provides support for green roof plants, protecting them against wind scour as they become established, and stabilizing growing media on windy roof decks. Made of rolled natural jute material, it is an environmentally friendly, biodegradable blanket that allows plants to root through the material into the growing media. Ideally suited for use in conjunction with GRT Wind Anchors and GRT Wind Uplift Mat.

MESH SIZE	1 1/16" x 3/4"
THICKNESS	1/4"
WATER ABSORPTION	> 450% of fabric weight
RECOMMENDED FLOW & SLOPE	6 fps (flow) and 3:1 (slope)



GRT WIND UPLIFT MAT

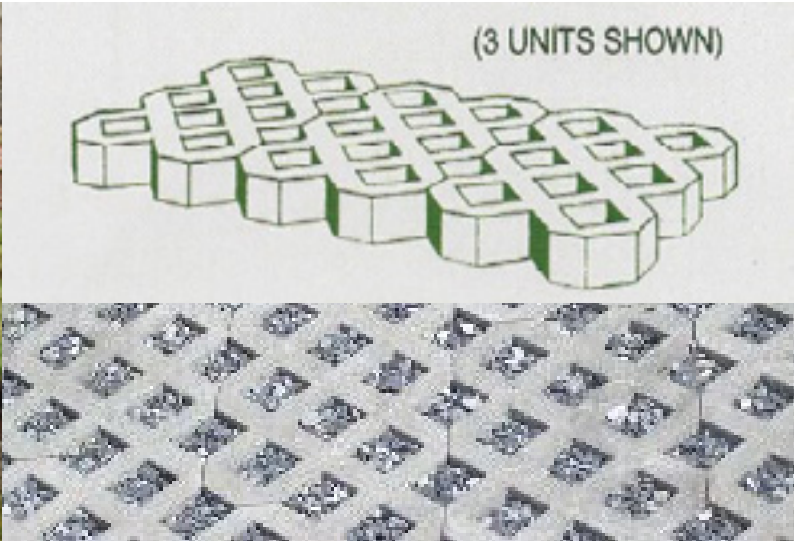
GRT Wind Uplift Mat is a high tenacity polyester woven and PVC coated geogrid used to reinforce green roof vegetation and growing media on windy rooftops. It is not susceptible to biological degradation and is resistant to naturally occurring chemicals, alkalis, and acids.

MATERIAL	Multifilament Polyester Yarns coated with PVC
TENSILE ULTIMATE STRENGTH	2,025 lbs/ft (ASTM D6637)
TENSILE CREEP LIMITED STRENGTH	1,341 lbs/ft (ASTM D5262)
LONG TERM DESIGN STRENGTH	1,161 lbs/ft (NCMA 97)
APERTURE SIZE	1" x 7/8" (measured)

BALLAST GRID

GRT BALLAST GRID

GRT Ballast Grid is a concrete permeable paver grid that provides a strong, yet breathable foundation. It offers excellent erosion control and can be used to mitigate wind uplift in wind zones on roofs. The voids within the grid can be filled with a variety of material; including gravel, soil, turf, and/or plants, depending on the application, to create functional and attractive permeable spaces. It also can be used at ground level as a surface for both pedestrian and low-use vehicular areas. A MADE IN THE USA product.



DIMENSIONS (H x W x D)	15 5/8" x 23 7/8" x 3 1/8"
WEIGHT	60 lbs each
APERTURE SIZE	3 5/8" x 3 5/8"
COMPRESSION STRENGTH	5,000 psi
USES	Rooftops, Walkways, and Parking Areas

Wind Uplift & Erosion Control



STRUCTURAL GRATE

GRT STRUCTURAL GRATE

GRT Structural Grates create a stable and secure foundation on pedestals or joists for: artificial turf assemblies, porcelain pavers, modular green roof systems, and planters. They are engineered to attach to the pedestals for stability and wind uplift resistance. Multiple options are available for adhesion to porcelain pavers and these grates provide a solid surface area to support artificial turf installations.



Grate on GRT Pedestals



Grate on GRT Pedestals with Artificial Turf



Grate on GRT Pedestals with GRT Porcelain Paver with GRT Planter



Grate on GRT Pedestals with GRT Vista 4" Module

MATERIAL	A blend of Nylon 66/6 with approx. 33% glass
DIMENSIONS	23.5" x 23.5" x 1.1"
WEIGHT	5.2 lbs per grate
AVERAGE BREAKING STRENGTH	>1,000 psf Per ASCE-7 standards

*Strength and deflection results are derived from Solidworks Simulation 2020 structural modeling software

STRUCTURAL GRATE FASTENING KIT

GRT STRUCTURAL GRATE FASTENING KIT

GRT Structural Grate Fastening Kit for use with GRT Structural Grates provides a secure connection between pedestals and the finished deck surface. The weight of the grates and the finished deck surface, whether it is artificial turf, a green roof system, planters, or pavers, creates a monolithic system to hold the system in place and mitigate against wind uplift.


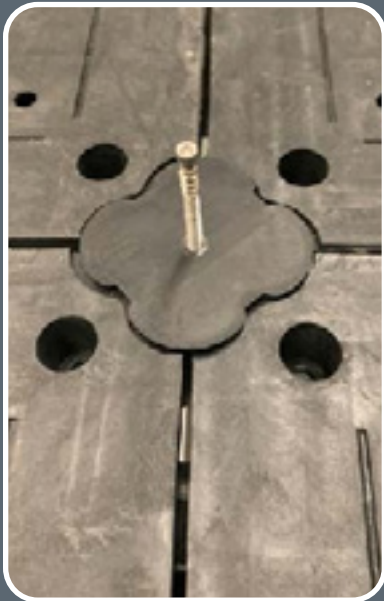

GRT STRUCTURAL GRATE FASTENING KIT INSTALLATION

Four GRT Structural Grates are placed on a pedestal. The clover shaped fastener is placed so the bottom protruding nubs fit into the corresponding holes in the corners of the structural grates. The provided screw is secured into the pedestal through the center hole of the fastener.

GRT FLORIDA FASTENING KIT

For Florida projects and other high wind scenarios that require wind uplift solutions, we offer a 2.5" diameter washer with screw kit that meets regulatory standards.

STRUCTURAL GRATE FASTENING KIT (Clover + Screw)



Green Walls & Fences



LIVING WALLS



GRT LIVING WALL

GRT Living Wall is a living green wall system that creates a naturally lush environment, acts as a natural air filter, reduces energy needs for heating and cooling, and mitigates noise levels. The GRT Living Wall system can be free standing or wall mounted for use in either indoor or outdoor spaces. The GRT design team can consult with you to choose which one of our systems works best for your application and budget. A GRT Living Wall system makes an aesthetically stunning statement, qualifies for LEED points, and provides health, economic, and environmental benefits.



MATERIAL	Live plants
DIMENSIONS	Custom-sized per project specifications
DESIGN	Panels are customizable and easy to install
IRRIGATION	Built-in to each system; Highly efficient and effective
CHARACTERISTICS	Improved air quality; Reduces energy consumption Promotes healthy climate; Blocks ambient noise Adds value to property; Increased worker productivity Stormwater mitigation; Encourages biodiversity (outdoor)

Green Walls & Fences



ARTIFICIAL WALLS



GRT ARTIFICIAL WALL

GRT Artificial Wall, our artificial green wall system, is the most realistic and highest-quality artificial green wall solution on the market. Designed to mimic the growing patterns and movement of living plants, the effect is natural, seamless, and random, just like real plant foliage, but with no maintenance required! Our artificial green wall panels are easy to install and can be used in either indoor or outdoor spaces. A GRT Artificial Wall is an affordable solution for creating the look of a beautiful vertical garden in the most challenging environments.



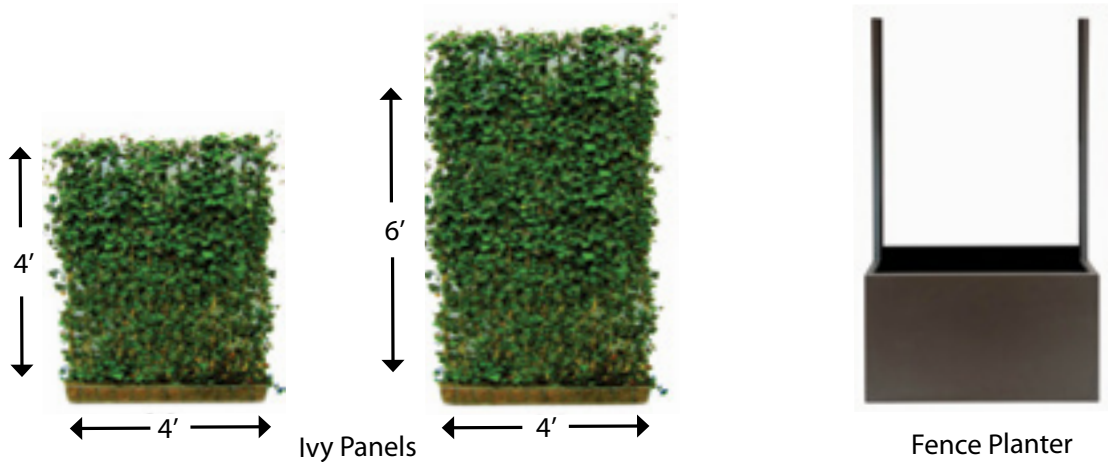
MATERIAL	Artificial greenery
DIMENSIONS	32" x 32" panels
WEIGHT	14 lbs per panel
CHARACTERISTICS	Improved air quality; Reduces energy consumption Promotes healthy climate; Blocks ambient noise Adds value to property; Increased worker productivity Stormwater mitigation



LIVING FENCES

GRT LIVING FENCES

GRT Fences are pre-grown English or Spanish Canary ivy steel fence trellises that arrive ready to install. They are a natural and instant way to create privacy and intimacy in urban and/or commercial environments. GRT Fences can be planted in or above the ground, or between/against buildings, using GRT Fence Planter boxes.



MATERIAL	English or Spanish Canary Ivy with Galvanized High Carbon Steel Security Fencing
DIMENSIONS & WEIGHT	4' x 4" x 4' = 33 lbs. 4' x 4" x 6' = 50 lbs. Custom sizes available
CHARACTERISTICS	Simple and quick to install Low maintenance Big impact on small and/or urban spaces
FENCE PLANTER MATERIAL	Aluminum - (Stainless Steel and Corten Steel available upon request)
SIZE, WEIGHT, & CAPACITY	54"L x 15"W x 15" H; Alum. 43 lbs. / Steel 119 lbs.; 53 Gal. Capacity 54"L x 24"W x 24" H; Alum. 71 lbs. / Steel 197 lbs.; 135 Gal. Capacity

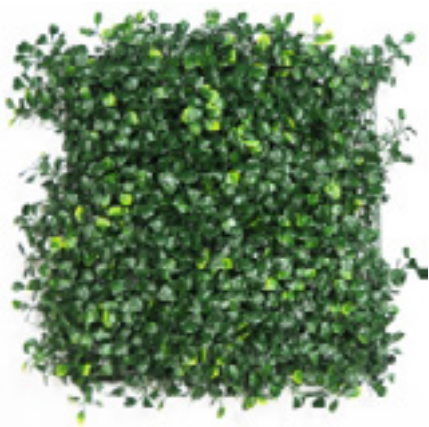
Green Walls & Fences



ARTIFICIAL BOXWOOD PANELS

GRT ARTIFICIAL BOXWOOD PANELS

GRT Artificial Boxwood Panels create lush and natural-looking green walls and/or hedges while remaining 100% eco-friendly and requiring almost no maintenance. They are extremely durable and UV resistant, and retain a vibrant, evergreen look year after year. As a modular system, GRT Artificial Boxwood Panels are easy to install and can be adhered to many types of surfaces including drywall, concrete, and fencing. With strong yet malleable backing grips, the panels can bend easily, cut to fit any shape and size, and configured in various ways. A beautiful solution for adding privacy and screening, or a vibrant backdrop or focal point on rooftop entrances, patios, balconies, and other design projects.



MATERIAL	Polyethylene
COLORS	Dark green highlighted with yellow Light green highlighted with dark green
SIZE	20" x 20" per panel
LEAF SIZE	Small ($1\frac{1}{2}$ " x $\frac{3}{8}$ " - $\frac{5}{16}$ ")
APPLICATIONS	Green walls, Privacy hedges, Backdrops, Screening
CHARACTERISTICS	Lush and realistic foliage Durable, weatherproof, fade resistant Low-to-no maintenance, Interior/Exterior use



FIBERGLASS

GRT FIBERGLASS PLANTERS

GRT Fiberglass Planters add style, interest, and gardening spaces to rooftop patios, decks, and green roofs. These planters are extremely durable and require no additional maintenance. Because they are lighter than concrete and stone planters, GRT Fiberglass Planters are easier to install and are ideal for larger plants, shrubs, and screening vegetation. Available in a variety of aesthetic colors, styles, and sizes.

Matte Charcoal	Matte Dark Brown	Gloss/Matte Black	Matte Bronze	Matte Colbalt Blue	Satin Beige
Satin Sea Foam	Satin Green	Gloss/Matte White	Gloss Pink Violet	Gloss Eggplant	Gloss Red
Gloss Tangerine	Gloss Saffron	Metallic Bronze	Metallic Silver	Metallic Gunmetal	Metallic Gold

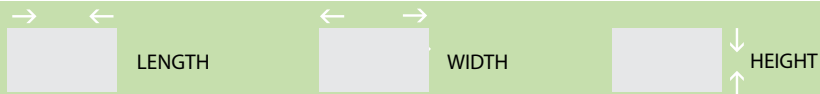
SIZES	Variety of standard and custom sizes
SHAPES	Squares, rectangles, rounds, and cylinders
COLORS	Available in all RAL and custom colors
CHARACTERISTICS	High quality finish Lightweight Weatherproof UV protection

Planters

FIBERGLASS: RECTANGLES, SQUARES, & CUBES



RECTANGLES
8" - 42" HEIGHT



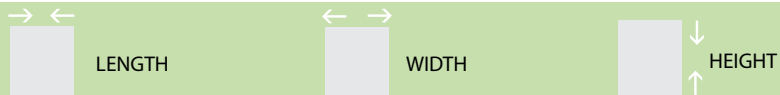
LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
42"	8"	8"	1.75"	9
65"	14"	12"	1.25"	35
84"	36"	18"	1.5"	82
54"	8"	18"	2.0"	23
24"	10"	24"	1.25"	18
60"	16"	24"	1.5"	47
100"	18"	28"	1.5"	97
36"	24"	32"	1.5"	85
72"	16"	32"	1.5"	73
36"	16"	42"	1.5"	50

CUBES
16" - 40" HEIGHT



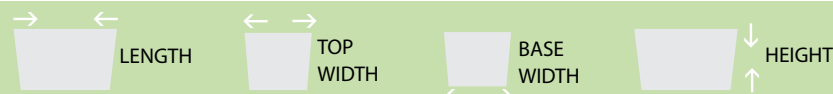
LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
16"	16"	16"	1.5"	12
22"	22"	22"	1.5"	20.5
28"	28"	28"	1.5"	46
32"	32"	32"	1.5"	54
36"	36"	36"	1.5"	68.5
40"	40"	40"	1.5"	88.5

TALL SQUARES
24" - 60" HEIGHT



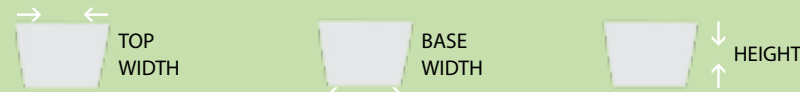
LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
12"	12"	24"	1.25"	11
16"	16"	32"	1.25"	22
20"	20"	42"	1.25"	45
12"	12"	51"	1"	23.5
16"	16"	60"	1"	40.8

TAPERED RECTANGLES
18" - 24" HEIGHT



LENGTH	TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
36"	12"	10"	18"	1.625"	21
60"	16"	15.5"	24"	1.25"	47.5

TAPERED CUBES
12" - 24" HEIGHT



TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
9.5"	5.5"	12"	1.5"	5.5
13.5"	8"	16"	1.5"	8.5
16.5"	10"	20"	1.5"	13
21"	12"	24"	1.5"	17

TAPERED SQUARES
22" - 60" HEIGHT



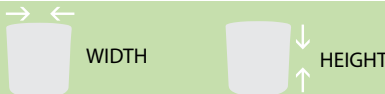
TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
12"	9"	22"	1"	10
16"	12"	30"	1"	19.5
18"	14.5"	36"	1"	25.5
20"	19.25"	42"	1"	32
23"	19.25"	48"	1"	26.5
28"	23.5"	60"	1"	68.5

Planters



FIBERGLASS: CYLINDERS & ROUNDS

CYLINDERS
20" - 36" HEIGHT



WIDTH	HEIGHT	LIP	WEIGHT (LBS)
10"	20"	1"	6
18"	20"	1"	11.5
22"	22"	1"	16
10"	30"	1"	8
30"	32"	1"	31
12"	36"	1"	11

TAPERED CYLINDERS
26" - 30" HEIGHT



TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
18"	14"	26"	2"	9
22"	18"	30"	1.25"	17.5
25.5"	22"	30"	3"	16

ROUND BOWL
18" - 34" HEIGHT



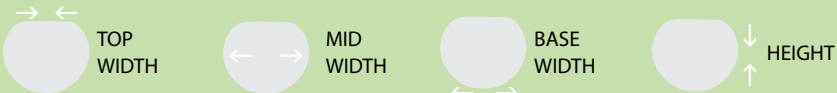
TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
15"	9"	17.5"	1"	6.6
30"	12"	20"	3"	21
23"	10"	22"	2"	14.5
20"	13.5"	23"	1.75"	11
36"	15.5"	34"	2"	36
18"	16"	29"	2"	12
27"	17.75"	31"	2"	18

TAPERED ROUNDS
25" - 63" HEIGHT



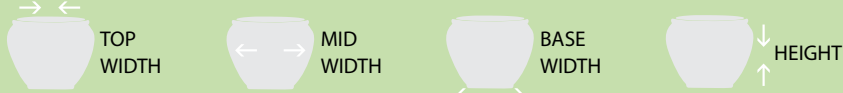
TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
14"	11.375"	25"	1"	9.7
33"	18"	29"	2"	28.6
12"	9"	32"	1"	7
18"	14.75"	32"	1"	16.5
39"	23"	34"	2"	40
24"	18.625"	36"	1.5"	15
16"	11.75"	38"	1"	15
44"	26"	39"	2"	48.5
20"	14.25"	43"	1"	24
30"	25"	63"	1.5"	42

GLOBE
19" - 31" HEIGHT



TOP WIDTH	MID WIDTH	BASE WIDTH	HEIGHT	WEIGHT (LBS)
13"	24"	16"	18.75"	12.5
17"	36"	20"	30.5"	29.5

FISHBOWL
15" - 19" HEIGHT



TOP WIDTH	MID WIDTH	BASE WIDTH	HEIGHT	WEIGHT (LBS)
16"	16"	11.25"	15"	6
20.5"	21.5"	15"	19"	17



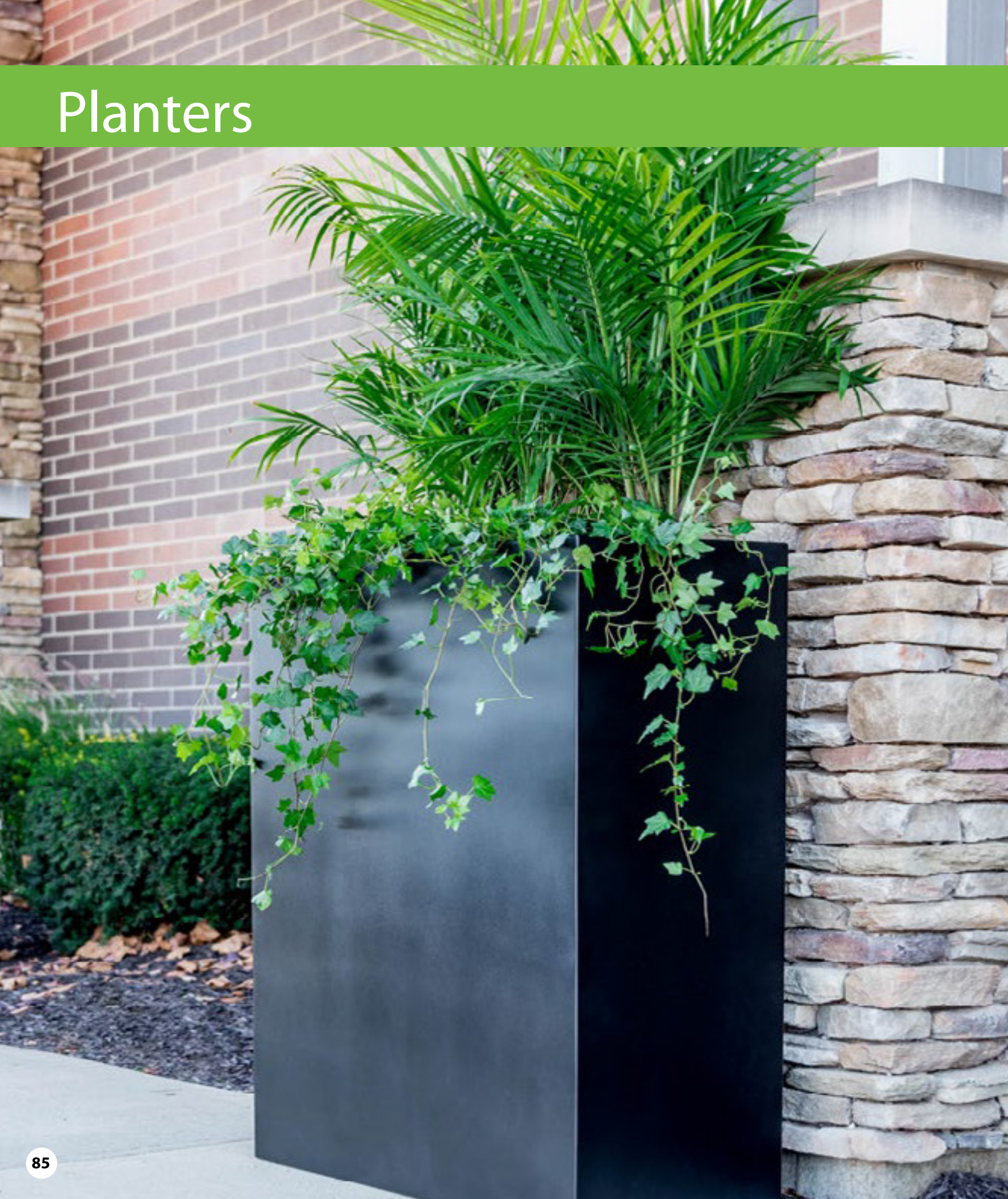
GRT METAL PLANTERS

GRT Metal Planters add contemporary style to rooftop patios, decks, and green roofs. These planters are extremely durable and non-corrosive, and their UV-resistant construction makes them fade and chip resistant, even in extreme weather conditions. GRT Metal Planters are crafted with continuous welds, making them leak-proof and safe to place on marble, wood, and other surfaces. Available in variety of aesthetic colors, styles, and sizes to provide a beautiful, contemporary, and luxurious look to outdoor spaces.



Available colors for aluminum and stainless steel

MATERIAL	Aluminum (marine grade, recycled 5052 alloy) Stainless Steel (304 or 316) and Corten steel
SIZES	All planters custom made to any size
SHAPES	Rectangle, cube, tall square, and cylinder
COLORS	Aluminum finishes: brushed, metallic, gloss, matte Custom colors also available
CHARACTERISTICS	Weather and Fade Resistant UV Protected

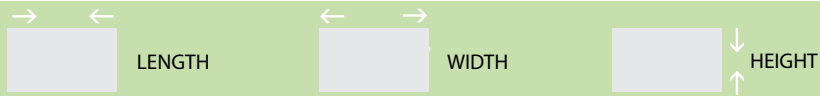


Planters

METAL: COMMON SIZES SHOWN | CUSTOM SIZES

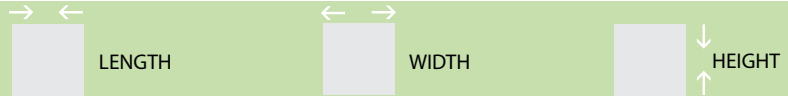


RECTANGLES 14" - 42" HEIGHT



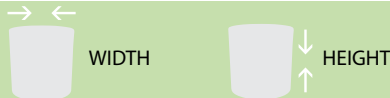
LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
25"	14"	14"	1.5"	26
42"	14"	14"	1.5"	35
60"	14"	14"	1.5"	50
42"	18"	18"	1.5"	42
60"	18"	18"	1.5"	58
25"	20"	24"	1.5"	41
42"	20"	24"	1.5"	58
60"	30"	24"	1.5"	72
36"	16"	32"	1.5"	51
46"	16"	42"	1.5"	75

CUBES 17" - 28" HEIGHT



LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
17"	17"	17"	1.5"	21
20"	20"	20"	1.5"	28
28"	28"	28"	1.5"	55

CYLINDERS 18" - 24" HEIGHT



WIDTH	HEIGHT	LIP	WEIGHT (LBS)
18"	18"	Straight Edge	19
24"	24"	Straight Edge	34

TALL SQUARES 24" - 48" HEIGHT



LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
12"	12"	24"	1"	16
12"	12"	32"	1"	24
12"	12"	40"	1"	28
18"	18"	24"	1.5"	29
18"	18"	36"	1.5"	40
18"	18"	48"	1.5"	49

TRIANGLES 24" - 48" HEIGHT



LENGTH	WIDTH	HEIGHT	LIP	WEIGHT (LBS)
36"	36"	24"	1.5"	42
36"	36"	36"	1.5"	57
36"	36"	48"	1.5"	71

TAPERED SQUARES 24" - 40" HEIGHT



TOP WIDTH	BASE WIDTH	HEIGHT	LIP	WEIGHT (LBS)
15"	12"	24"	1.5"	20
16"	12"	32"	1.5"	26
17"	12"	40"	1.5"	32

* Weights shown are for aluminum material. Stainless steel and Corten weight available upon request



CONCRETE



GRT CONCRETE PLANTERS

GRT Concrete Planters, designed for durability, add style to rooftop patios, decks, streetscapes, and green roofs. Scratch and moisture resistant, GRT Concrete Planters are a great option for high traffic areas. Planters are available in a variety of aesthetic colors, styles, and sizes for use in both commercial and residential outdoor spaces.



MATERIAL	Cast in Place Concrete
SIZES	Variety available
SHAPES	Rectangle, square, round, and custom shapes available
COLORS	Variety of standard colors / Custom colors also available
CHARACTERISTICS	Durable and Low Maintenance Weather Resistant and Cost Effective

Planters

CONCRETE



HEIGHT 26"
DIAMETER 36"
WEIGHT (LBS) 675



HEIGHT 22"
DIAMETER 42"
WEIGHT (LBS) 980



HEIGHT 30"
DIAMETER 36"
WEIGHT (LBS) 1050



HEIGHT 24"
LENGTH 48"
WIDTH 20"
WEIGHT (LBS) 770



HEIGHT 24"
DIAMETER 31"
WEIGHT (LBS) 390



HEIGHT 18"
DIAMETER 48"
WEIGHT (LBS) 725



HEIGHT 24"
DIAMETER 36"
WEIGHT (LBS) 807



HEIGHT 34"
DIAMETER 54"
WEIGHT (LBS) 1975



HEIGHT 24"
DIAMETER 16.25"
WEIGHT (LBS) 210



HEIGHT 22"
DIAMETER 36"
WEIGHT (LBS) 650



HEIGHT 25"
SQUARE 35"
WEIGHT (LBS) 677



HEIGHT 18"
LENGTH 48"
WIDTH 24"
WEIGHT (LBS) 620



HEIGHT 24"
DIAMETER 36"
WEIGHT (LBS) 775



HEIGHT 25"
DIAMETER 29"
WEIGHT (LBS) 683



HEIGHT 36"
DIAMETER 48"
WEIGHT (LBS) 2445



HEIGHT 36"
DIAMETER 48"
WEIGHT (LBS) 1250



HEIGHT 30"
DIAMETER 48"
WEIGHT (LBS) 1420



HEIGHT 30"
DIAMETER 48"
WEIGHT (LBS) 1430



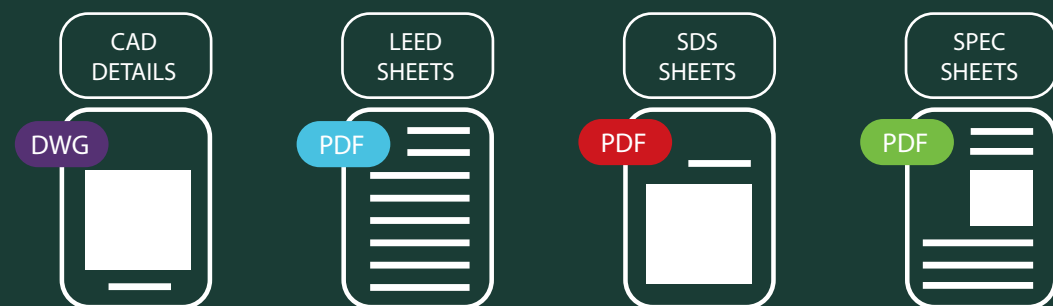
HEIGHT 30"
LENGTH 52"
WIDTH 24"
WEIGHT (LBS) 1290



HEIGHT 25"
SQUARE 38"
WEIGHT (LBS) 640



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