

USGBC LEED Rating System
How Each Invisible Structures, Inc. Product Can be Used
for
Different Credits

MPR = Minimum Project Requirements

WE= Water Efficiency

SS = Sustainable Sites

MR = Materials and Resources
Grasspave2

Grasspave2

MPR #1: Must Comply with Environmental Laws

Use of Grasspave2 can help sites comply with NPDES Phase 2 Regulations regarding the amount of stormwater off-site post development. The porous pavement will allow a greater percentage of water to infiltrate on-site reducing the calculated post-development flow rate.

- SS Credit 5.1: Site Development - Protect or Restore Habitat (1 Point):

To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

- o Case 1: use of Grasspave2 extends the boundary of allowable site disturbance from 10 feet to 25 feet, allowing for more room to work during construction.
- o Case 2:
 - Installing Grasspave2 in areas previously developed with asphalt or concrete, and seeding with native plants, would contribute to the percent of area restored.
 - Installing Grasspave2 on a vegetated roof and seeding it with native plants would contribute to the percent area restored if the site were also earning SS Credit 2: Development Density and Community Connectivity.

- SS Credit 5.2: Site Development - Maximize Open Space (1 Point):

To promote biodiversity by providing a high ratio of open space to development footprint.

- o For All 3 Cases:
 - Using Grasspave2 as a parking area, fire lane, grass drive, or similar will count toward the vegetated open space necessary to achieve this credit.
 - Installing Grasspave2 on a vegetated roof would contribute to the percent area vegetated if the site were also earning SS Credit 2: Development Density and Community Connectivity.

- SS Credit 6.1: Stormwater Design - Quantity Control (1 Point):

To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.

o All Cases:

- Using Grasspave2 as a parking area, fire lane, grass drive, or similar will minimize the impervious surface on-site and increase infiltration. Using Grasspave2 on a vegetated roof will minimize impervious surface on-site.

• SS Credit 6.2: Stormwater Design - Quality Control (1 Point):

To limit disruption and pollution of natural water flows by managing stormwater runoff.

o All Cases:

- Using Grasspave2 minimizes impervious surfaces, increases infiltration, and reduces pollutant loads.
- Using Grasspave2 on a vegetated roof will minimize impervious surface on-site.

• SS Credit 7.1: Heat Island Effect - Nonroof (1 Point)

To reduce heat islands to minimize impacts on microclimates and human and wildlife habitats.

o Option 1:

- Use of Grasspave2 will qualify as "open grid pavements system" and can be computed toward area calculation

o Option 2:

- Grasspave2 can be used on a vegetated roof to cover a parking area to reduce heat absorption.

• S Credit 7.2: Heat Island Effect - Roof (1 Point)

To reduce heat islands to minimize impacts on microclimates and human and wildlife habitat.

o Option 2 and 3:

- Grasspave2 can be used on a vegetated roof to reduce heat absorption.

• WE Credit 1: Water Efficient Landscaping (2-4 Points)

To limit or eliminate the use of potable water or other natural surface or subsurface water resources available on or near the project site for landscape

irrigation.

- o For Both Options: Option 1. Reduce by 50% (2 Points) or Option 2. Non- Potable Water Use or Irrigation (4 Points).
 - Grasspave2 can be used on a vegetated roof to collect stormwater and convey it to Rainstore3 or similar device to store for irrigation use.

- MR Credit 4: Recycled Content (1 Point)

To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

- o Grasspave2 counts as 100% Pre-consumer Recycled Material

- MR Credit 5: Regional Materials 0-2 Points)

To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

- o Grasspave2 can qualify as long as the project is within 500 miles of Aurora, CO.

Gravelpave2

- MPR #1 Must Comply with Environmental Laws

Use of Gravelpave 2 can help a site comply with NPDES Phase 2 regulations regarding the amount of stormwater allowed off site post-development.

- o The porous pavement will allow a greater percentage of water to infiltrate on-site reducing the calculated post-development flow rate.

- SS Credit 5.1: Site Development - Protect or Restore Habitat (1 Point)

To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

- o Case 1: Use of extends the boundary of allowable site disturbance from 10 feet to 25 feet, allowing for more room to work construction.

- SS Credit 6.1: Stormwater Design - Quantity Control (1 Point)

To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.

- o All Cases:
 - Using Gravelpave2 as a parking area, fire lane, or similar will

minimize the impervious surface on-site and increase infiltration.

- SS Credit 6.2: Stormwater Design - Quality Control (1 Point)

To limit disruption and pollution of natural water flows by managing stormwater runoff.

- o All Cases:

- Using Gravelpave2 minimizes impervious surfaces, increases infiltration, and reduces pollutant loads.

- SS Credit 7.1: Heat Island Effect (Non-Roof)

To reduce heat islands to minimize impacts on microclimates and human and wildlife habitats.

- o Option 1:

- Use of Gravelpave 2 will qualify when filled with gravel material with an SRI of at least 29.

- MR Credit 4: Recycled Content 0-2 Points)

To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

- o Gravelpave2 counts as 100% Pre-consumer Recycled Material

- MR Credit 5: Regional Materials (1-2 Points)

To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

- o Gravelpave2 can qualify as long as the project is within 500 miles of Aurora, CO.

Draincore2

- MPR #1: Must Comply with Environmental Laws

Use of Draincore2 can help a site comply with NPDES Phase 2 regulations regarding the amount of stormwater allowed off site post-development.

- o Collecting and conveying water elsewhere for irrigation purposes with Draincore2 will reduce post-development flow rate.

- SS Credit 5.1: Site Development Protect or Restore Habitat (1 Point)

To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

o Case 2:

- Installing Draincore2 on a vegetated roof and seeding it with native plants would contribute to the percentage area restored if the site were also earning **SS Credit 2: Development Density and Community Connectivity.**

- SS Credit 5.2: Site Development - Maximize Open Space (1 Point)

To promote biodiversity by providing a high ratio of open space to development footprint.

o For All 3 Cases:

- Installing Draincore2 on a vegetated roof would contribute to the percent area vegetated if the site were also earning SS Credit 2: Development Density and Community Connectivity.

- SS Credit 6.1: Stormwater Design - Quantity Control (1 Point)

To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.

o All Cases:

- Using Draincore2 on a vegetated roof will minimize impervious surface on-site.

- SS Credit 6.2: Stormwater Design - Quality Control (1 Point)

To limit disruption and pollution of natural water flows by managing stormwater runoff.

o All Cases:

- Using Draincore2 on a vegetated roof will minimize impervious surface on-site.

- SS Credit 7.1: Heat Island Effect - Non-Roof – (1 Point)

To reduce heat islands to minimize impact on microclimates and human and wildlife habitats.

o Option 2:

- Draincore2 can be used on a vegetated roof to cover a parking area to reduce heat absorption.

- SS Credit 7.2: Heat Island Effect - Roof (1 Point)

To reduce heat islands to minimize impact on microclimates and human and wildlife habits.

o Option 2 and 3:

- Draincore2 can be used on a vegetated roof to reduce heat

absorption.

- WE Credit 1: Water Efficient Landscaping (2-4 Points)

To limit or eliminate the use of potable water or other natural surface or subsurface water resources available on or near the project site for landscape irrigation.

- o For Both Options: Option 1. Reduce by 50% (2 Points) or Option 2. Non- Potable Water Use or Irrigation (4 Points)
 - Draincore2 can be used on a vegetated roof to collect stormwater and convey it to Rainstore3 or similar device to store for irrigation use.

- MR Credit 4: Recycled Content (1-2 Points)

To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

- o Draincore2 counts as 100% Pre-consumer Recycled Material.

- MR Credit 5: Regional Materials (1-2 Points)

To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

- o Draincore2 can qualify as long as the project is within 500 miles of Aurora, CO.

Rainstore3

- MPR #1: Must Comply with Environmental Laws

Use of Rainstore3 can help a site comply with NPDES Phase 2 regulations regarding the amount of stormwater allowed off site post-development.

- o Using Rainstore3 wrapped in a non-woven geotextile will allow collected stormwater to infiltrate back into the ground, thus reducing post development flow rate.
- o Using Rainstore3 wrapped in an impermeable liner will collect stormwater making it available for non-potable reuse, thus reducing non-potable post development flow rate

- SS Credit 5.1: Site Development - Protect or Restore Habitat (1 Point)

To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

- o Case 1: use of Rainstore3 with permeable cover extends the boundary of

allowable site disturbance from 10 feet to 25 feet, allowing for more room to work during construction.

- o Case2:
 - Installing Rainstore3 in areas previously developed with asphalt or concrete, and seeding the system over with native plants, would contribute to the percent of area restored.

- SS Credit 6.1: Stormwater Design – Quality Control (1 Point)

To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.

- o All Cases:
 - Use of Rainstore3, when installed with an impermeable liner, allows for short or long-term underground water storage for non potable uses.
 - Use of Rainstore3, when installed with a non-woven geotextile, increases infiltration and groundwater recharge.

- SS Credit 6.2: Stormwater Design - Quality Control (1 Point)

To limit disruption and pollution of natural water flows by managing stormwater runoff.

- o All Cases:
 - Use of Rainstore3, when installed with an impermeable liner, allows for short or long-term underground water storage for non- potable uses.
 - Use of Rainstore3, when installed with a non-woven geotextile, increases infiltration and groundwater recharge.

- WE Prerequisite 1: Water Use Reduction (REQUIRED):

To increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

- o Use of Rainstore3, when installed with an impermeable liner, allows for short or long-term underground water storage for non-potable water sewage conveyance.

- WE Credit 1: Water Efficient Landscaping (2-4 Points)

To limit or eliminate the use of potable water or other natural surface or subsurface water resources available on or near the project site for landscape irrigation.

- o For Both Options: Option 1. Reduce by 50% (2 Points) or Option 2. Non-Potable Water Use or Irrigation (4 Points)
 - Use of Rainstore3, when installed with an impermeable liner, allows for short or long-term underground water storage for irrigation use.

- WE Credit 2: Innovative Wastewater Technologies (2 Points) To reduce wastewater generation and potable water demand while increasing the

local aquifer recharge.

- o Option 1:
 - Use of Rainstore3, when installed with an impermeable liner, allows for short or long-term underground water storage for non-potable water sewage conveyance.
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- WE Credit 3: Water Use Reduction: To further increase water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.
 - o Use of Rainstore3, when installed with an impermeable liner, allows for short or long-term underground water storage for non-potable water sewage conveyance
- MR Credit 4: Recycled Content 0-2 Points): To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.
 - o Rainstore3 counts as 100% Post-consumer Recycled Material
- MR Credit 5: Regional Materials (1-2 Points): To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.
 - o Rainstore3 can qualify as long as the project is within 500 miles of Aurora, CO

Slopetame3

- MPR #1: Must Comply with Environmental Laws - use of Slopetame2 can help a site comply with NPDES Phase 2 regulations regarding the amount of stormwater allowed off-site post-development.
 - o Slopetame2 can reduce erosion and soil migration, allow for biofiltration of stormwater runoff, and recharge the ground water reducing the post development flow rate.
- SS Credit 5.1: Site Development - Protect or Restore Habitat (1 Point)

To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

- o Case2:
 - Installing Slopetame2 in areas previously developed with asphalt or concrete, and seeding with native plants, would contribute to the percent of area restored.
- SS Credit 5.2: Site Development - Maximize Open Space (1 Point)

To promote biodiversity by providing a high ratio of open space to development footprint.

- o For All 3 Cases:
 - Use of Slopetame2 will increase the vegetated open space necessary to achieve this credit.
- SS Credit 6.1: Stormwater Design- Quantity Control (1 Point)

To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.

o All Cases:

- Use of Slopetame2 will protect stream channel from excessive erosion

• SS Credit 6.2: Stormwater Design - Quality Control (1 Point)

To limit disruption and pollution of natural water flows by managing stormwater runoff.

o All Cases:

- Use of Slopetame2 can be used in vegetated swales to reduce imperviousness and promote infiltration and thereby reduce pollutant load.

• MR Credit 4: Recycled Content (1 Point)

To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

o Slopetame2 counts as 100% Pre-consumer Recycled Material

• MR Credit 5: Regional Materials 0-2 Points)

To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

o Slopetame2 can qualify as long as the project is within 500 miles of Aurora, CO.

Beachrings2

• SS Credit 5.1: Site Development - Protect or Restore Habitat (1 Point)

To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

o Case 1:

- Use of Beachrings2 anywhere on site would not classify as site disturbance. Great for use as walkway or ADA accessible surface.

• MR Credit 5: Regional Materials 0 -2 Points): To increase demand for building materials and products that are extracted and manufactured within the region,

thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

- o Beachrings2 can qualify as long as the project is within 500 miles of Aurora, CO.