TECHNICAL ADVANTAGES

• Aids stormwater management, reduces runoff and decreases flooding risk
• Reduces pollution in the environment
• Creates pedestrian friendly walkways
• Allows developers to maximize land usage
PERMEABLE PAVER SYSTEM

Permeable pavers are our concrete pavers separated by cutout patterns at the joints. The open area at the joints is then filled with small stones. Rain water run off enters the joints between the solid concrete paver and flows through a base material of crushed stone. The spaces among the crushed stone store water and filter it back into the soil subgrade and ground water.

In Urban developments the necessity for stormwater management has become a reality. Impervious surfaces, such as streets, sidewalks and parking lots have caused excessive runoff of stormwater, carrying with it contaminants that deposit into the drains and even directly into natural waterways.

Under the Clean Water Act, the need to comply with regulations governing water quality has caused loss of valuable land due to the need for large retention ponds.

Features & Benefits

- Widest variety of colors and finishes in the industry.
- Meets or exceeds ASTM requirements for compressive and flexural strength, freeze/thaw and water absorption.
- Qualify for LEED credit through the USGBC guidelines.
- Reduces stormwater runoff and improves water quality.
- Increases building sites and design options.
- Reduces urban heat islands - minimizes impacts on microclimates.
- Total surface is 86.9% impervious.
- Spacing lugs for machine installation (H-Series pavers).
- Installation follows ICPI Guidelines for permeable pavers.
FULL INFILTRATION TO SOIL SUBGRADE

Typ. No 8, 89, or 9 aggregate in openings
Concrete pavers min. 3 1/8" (80 mm) thick for vehicular traffic (aspect ratio ≤ 3)
Curb/edge restraint with cut-outs for overflow drainage (curb shown)
Bedding course 1 1/2'-2’ (40-50 mm) thick (Typ. No 8 aggregate)
4” (100 mm) thick No. 57 stone open-graded base
Geotextile on top and sides of subbase under/beyond curb
Min. 6” (150 mm) thick No. 2 stone subbase
Optional geotextile on subgrade per design engineer
Soil subgrade

Notes:
1. 2 3/8” (60 mm) thick pavers may be used in pedestrian and residential applications.
3. No. 2 stone may be substituted with No. 3 or No. 4 stone.

NO INFILTRATION TO SOIL SUBGRADE

Typ. No 8, 89, or 9 aggregate in openings
Concrete pavers min. 3 1/8” (80 mm) thick for vehicular traffic (aspect ratio ≤ 3)
Curb/edge restraint with cut-outs for overflow drainage (curb shown)
Bedding course 1 1/2'-2’ (40-50 mm) thick (Typ. No 8 aggregate)
4” (100 mm) thick No. 57 stone open-graded base
Geotextile to protect liner
Impermeable liner on bottom and sides of open-graded base
Perforated pipes spaced and sloped to drain all stored water.
Embed pipe in No. 57 stone
Non-perforated outfall pipe(s) sloped sewer or stream.
Embed pipe in No. 57 stone
Soil subgrade sloped to drain

Notes:
1. 2 3/8” (60 mm) thick pavers may be used in residential applications.
3. Perforated pipes may be raised for water storage from large rain events with outlet(s) at liner bottom to drain small rain events.
STANDARD H-SERIES SIZES

Choose the perfect H-Series permeable paver from 8 architectural paver lines, all with various colors and finishes to fit your project needs. With 3 rectangle sizes available, all with a thickness of 3”, our permeable pavers can be placed in any pattern you would like or use multiple sizes to create a truly custom look. Available sizes are rated for pedestrian and vehicular applications.

TECHNICAL INFORMATION

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>ADVANCED TESTING VALUE</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>&gt; 9,500 PSI avg. with no individual unit less than 8,000 PSI</td>
<td>ASTM C 140</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>&lt; 4.5%</td>
<td>ASTM C 140</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>&gt; 1,800 pounds average</td>
<td>ASTM C 140</td>
</tr>
<tr>
<td>Freeze/Thaw</td>
<td>&lt; 1% loss of dry weight (100 cycles)</td>
<td>ASTM C 1262</td>
</tr>
<tr>
<td>Center Load</td>
<td>2,000 lbs.</td>
<td>WTCL 99</td>
</tr>
</tbody>
</table>

*Testing based on 24”x24”x2” pressed paver*

ECOPREMIER

HEP-10 **32
HEP-20 **31
HEP-30 **18
HEP-40 **33
HEP-50 **25
HEP-60 **28
HEP-70 **31

**SRI**
ESTATE

- HRT-15: SRI 75
- HRT-20: SRI 36
- HRT-25: SRI 45
- HRT-27: SRI 42
- HRT-30: SRI 20
- HRT-32: SRI 33
- HRT-34: SRI 25
- HRT-38: SRI 13
- HRT-40: SRI 18
- HRT-50: SRI 23
- HRT-60: SRI 8
- *HCB-15: SRI 85
- *HCB-20: SRI 82

HCB Pavers have a minimum of 78% Solar Reflectance (SRI)

*High Reflective Colors (additional cost)

ESTATE II

- HNBF-15
- HNBF-20
- HNBF-25
- HNBF-30
- HNBF-40
- HNBF-50
- HNBF-60

FRONTIER

- HFT-10: **52
- HFT-12: **37
- HFT-15
- HFT-17
- HFT-20: **65
- HFT-25: **53
- HFT-30
- HFT-35
- HFT-40
- HFT-60: **14.6
- HFT-65: **3.7
- HFT-70
- HFT-80
- HFT-85: **41
- HFT-90: **32
- HFT-95: **42

GALAXY

- HGL-15
- HGL-20
- HGL-30
- HGL-33
- HGL-35
- HGL-40
- HGL-50
- HGL-60

- HGL-65

**SRI
QUATTRO SERIES

RIDGELINE

RIVERSIDE
STANDARD V-SERIES SIZES

Choose the perfect V-Series permeable paver from 12 architectural paver lines, all with various colors and finishes to fit your project needs. With 2 available sizes - 1 rectangle and 1 plank, these permeable pavers have a thickness range of 2"-2 3/4" depending on the chosen paver.

TECHNICAL INFORMATION

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<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>&gt;8,000 PSI avg. with no individual unit less than 7,500 PSI</td>
<td>ASTM C 140</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>&lt; 6%</td>
<td>ASTM C 140</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>&gt; 1,200 pounds average</td>
<td>ASTM C 140</td>
</tr>
<tr>
<td>Freeze/Thaw</td>
<td>&lt; 1% loss of dry weight (100 cycles)</td>
<td>ASTM C 1262</td>
</tr>
<tr>
<td>Center Load</td>
<td>1,850 lbs.</td>
<td>WTCL 99</td>
</tr>
</tbody>
</table>

*Testing based on 24"x24"x2" pressed paver*
**SRI BLASTED GLASS**

- BG-10 **64**
- BG-20 **53**
- BG-30 **58**
- BG-40 **37**
- BG-50

**ECOPREMIER**

- EP-10 **32**
- EP-20 **31**
- EP-30 **18**
- EP-40 **33**
- EP-50 **25**
- EP-60 **28**
- EP-70 **31**

**EXPRESSIONS**

- XP-10 **58**
- XP-20 **65**
- XP-30 **72**
- XP-40 **42**
- XP-50 **46**
- XP-60 **48**
- XP-70 **52**
- XP-80 **46**
- XP-90
- XP-100 **40**
- XP-110
- XP-120

**EXTERIOR TERRAZZO**

- *ET-10 **40**
- *ET-20 **38**
- *ET-30 **41**
- *ET-40
- *ET-50

*Sealed

Pavers available in thickness ranging from 2" - 2 7/8" depending on the size.
OCEAN VIEW

SAND SERIES

SERIES SESTO™

STONEY CREEK

*SEA-10 **56
*SEA-20 **53
*SEA-30
*SEA-40
*SEA-50

Unsealed Pavers available in thickness ranging from 2” - 2 7/8” depending on the size.

*Sealed

SS-10 **34
SS-20 **25
SS-30 **25
SS-40
SS-50

*SSP-510 **70
*SSP-520 **70
*SSP-530 **63
*SSP-540 **60
*SSP-550 **48
*SSP-560 **40
*SSP-570 **42
*SSP-580 **26

*Unsealed Pavers available in thickness ranging from 2” - 2 7/8” depending on the size.

SSP-590 **33

SC-10 **50
SC-20 **35
SC-30 **38
SC-35
SC-40
SC-45
SC-50
SC-60

*SC-65

*Sealed

**SRI

WausauTile.com | 800.388.8728
TEXTURED GRANITE

UG-10  **39
UG-20  **30
UG-30  **20
UG-40  **44
UG-50  **25
UG-60  **12

TIMBER

TB-10
TB-15
TB-30
TB-40
TB-45
TB-50

ULTRAFACE

UF-15  **78
UF-20  **43
UF-25  **56
UF-30  **27
UF-35  **29
UF-40  **27
UF-50  **25
UF-60  **13

**SRI
Maintaining Wausau Pavers

Wausau Tile pavers can be maintained to retain the attractive appearance and prolong the life of the pavers. When using maintenance materials, please follow the product manufacturer’s instructions regarding the use of any equipment or cleaning materials described here. Be sure to angle the spray and limit the pressure to 2,000 PSI, as not to damage the surface of the paver when using a pressure washer. For specific or unusual problems, please call us at 800-388-8728.

**Weekly Maintenance:**
Sweep or pressure wash deck. In areas of high traffic, such as doorways, daily cleaning may be required.

**Semiannual Maintenance (Spring and Fall):**
Power sweep, then pressure wash total deck surface. Spot clean any stained areas using procedures described in “Cleaning Heavily Soiled Areas.”

Remove pavers located over drains on open joint systems. Clean Debris from all drain covers to prevent plugging of drains and replace pavers.

Check pavers for rocking, low or high edges, joint spacing, alignment and broken or chipped pavers. If minor settling or movement has occurred, pavers can be leveled and adjusted with shims. Chipped or broken pavers should be replaced.

**Cleaning Heavily Soiled Areas:**
Soiled areas should be cleaned as soon as possible to avoid staining. The type of material causing the soiling determines the correct procedures.

A. Oil or Petroleum Products
   Remove as much of the material as possible with hot water high pressure washer. Apply degreaser cleaner directly to the soiled area. With a stiff nylon brush or broom, scrub the area. Rinse the area with hot water high pressure washer. In some cases, a second cleaning may be required.

B. Rust Stains
   Soak area with water. Scrub rust stains with masonry cleaner products per manufacturer’s recommendations. (Be extremely careful around any metal surfaces). Rinse area thoroughly.

C. Soiling from Normal Foot Traffic, Road Salts, Everyday Use
   Wash area thoroughly with hot water high pressure washer. On heavily soiled areas, spray the area with a commercial grade cleaner and scrub with a nylon brush. Rinse thoroughly.

D. Gum or Tar
   Apply dry ice directly on top of the gum or tar. After freezing, use a putty knife or scraper to remove the gum or tar from the surface.
E. Tobacco Stains on Light Colored Pavers
   After pressure washing with hot water, saturate a paper towel with household bleach. Apply
towel directly to stain and cover with minimum 3 mil poly. Tape poly to surface to hold in place.
Leave stain covered for 24 to 48 hours. Remove to see if stain is gone or lightened. Repeat if
necessary.

Cleaner Recommendations (Follow all manufacturer instructions):
   • Techniseal - Paver Prep (HD) Heavy Duty Efflorescence Cleaner
   • Prosoco - Sure Klean 600 (New Masonry Cleaner)
   • Rain Guard Restore-N-Prep

Snow Removal:
Snow can be cleaned from the deck using shovels, walk-behind snow blowers or power brushes.
A four wheeled garden tractor, weight not exceeding 1,700 lbs. manned, can also be used. Nylon
or rubber scrapers are recommended to avoid scratching of pavers. Tire chains can cause minor
scratching and extra care should be taken with chains.

The use of snow melt materials should be minimal and in accordance with manufacturer's
recommendations. Some types of snow melt are not recommended for use on new concrete and can
cause surface damage to the paver.

De-Icer Recommendations (Follow all manufacturer instructions):
   • Melt-Off - Ice Melter
   • Premier - Ice Melter
   • Road Runner - Ice Melt

Open Joint Installations:
Open joint installation is unique in that the pavers are elevated to allow water and air to flow through
the joints of the pavers. It is essential that all the joints and all drains stay open, clean and free of dirt
and debris. Failure to maintain clean joints may result in performance issues.

Efflorescence in Colored Pavers:
Efflorescence is a condition which appears as a white stain on some colored concrete and masonry
products. It is a common occurrence in new concrete, created by sodium and sulfate compounds
of several hydroxides, minerals, chlorides and nitrates which deposit on the surface and pores. It is
the result of moisture evaporation and is most common on darker colored pavers and fabricated
surfaces.

Water (rain, humidity, or ground water which “wicks”) penetrates the pavers and dissolves latent
salt. Sun draws the salt in solution to the surface and as moisture evaporates it is deposited on the
surface. Efflorescence clears up as paver’s age and eventually dissipates. The length of time varies
with weather conditions and wear. Efflorescence can also be caused when salts in the sub-base
material wick up around and through the pavers and joints and deposit on the paver surface and
sides.
Efflorescence Cleaner Recommendations (Follow all manufacturer instructions):
• Techniseal - Paver Prep (HD) Heavy Duty Efflorescence Cleaner
• Quickrete - Efflorescence & Rust Remover
• Techniseal - Paver Prep & Efflo Cleaner

Wausau Tile Warranty:
Wausau Tile products are warranted to be free from defect in material and workmanship during manufacturing based on applicable industry standards. Warranty periods begin on delivery date of the warranted product and extend for the period listed below:
• Precast terrazzo products are warranted for two years.
• Terrazzo tile, plastic and metal pieces are warranted for one year.
• Framing and aluminum products are warranted for two years.
• Powder coating is warranted for two years.
• Thermo-plastic coating is warranted for five years.
• Concrete site furnishings are warranted for two years.
• Pavers are warranted for three years if properly installed according to both project specifications and Wausau Tile installation recommendations. Placing pavers on non-Wausau Tile pedestals voids this LIMITED WARRANTY.