



**NEW 2011**  
across North America

*Available from your local  
LiveRoof® grower.*

# Roof Stone®

LiveRoof® Brand Integrated Paver  
for Rooftop Patios and Walkways  
PATENT PENDING

With Crack Resisting NanoTech MicroBubble™ Technology



# Roof Stone<sup>®</sup>



Since introducing LiveRoof<sup>®</sup>, we have been asked to develop a LiveRoof-integrated paver to facilitate design and installation. Well, here it is. RoofStone<sup>®</sup>.

We focused on ease of handling and installation, aesthetics, recycled components, and high quality, high value, long lasting materials.

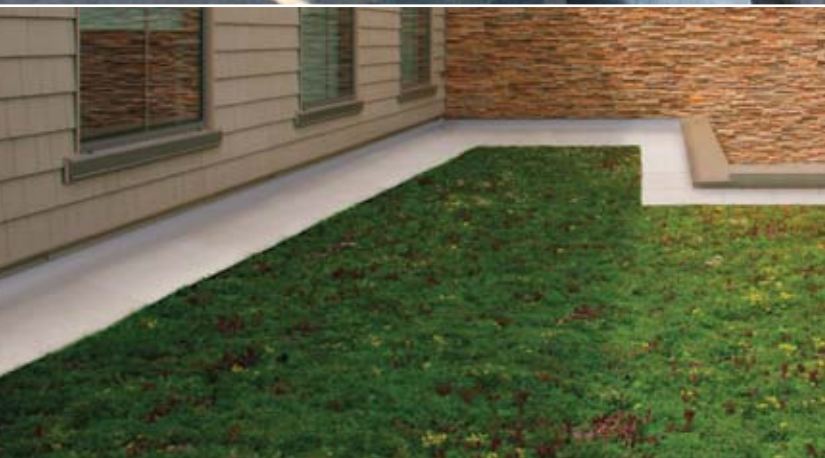
We hope you will enjoy using RoofStone and find it to be an effective, practical, sensible accessory to your LiveRoof applications.





# Features

- ❖ Integrates with weight, height and dimensions of LiveRoof® Standard and Deep modules.
- ❖ Built-in handgrips and pedestals for fast, efficient installation.
- ❖ No edging needed between RoofStone paver and LiveRoof.
- ❖ Follows roof contour.
- ❖ Suitable for pathways/landings and patios.
- ❖ Recycled plastic base.
- ❖ Strong and effective, resists impact and cracking with NanoTech MicroBubble™ technology.
- ❖ Ample water channels.



# Installer Benefits

	Roof Stone® Paver	Conventional Paver
<b>Pedestal</b>	Built-In	Bought Separately
<b>Edging</b>	Not required at green roof interface	Required
<b>Cost on Install</b>	Fast, easy, inexpensive, labor saving	Can be cumbersome and costly

# Roof Stone<sup>®</sup> System Specifications

- ❖ **Size:** 1' wide x 2' long x 4" tall
- ❖ **Weight:** 54 lbs
- ❖ **Finish:** Beautiful artisan surface, top edge chamfered, sides with chip preventing water-conducting standoffs.
- ❖ **Edging:** Only required if paver abuts open space (LiveRoof Standard System). **Required** with LiveRoof Deep System.
- ❖ **LEED Interface:** Base of 100% post-industrial polypropylene. Concrete recycled content varies with color of paver.

## ❖ Water Conductant:

in gal./lineal ft./minute

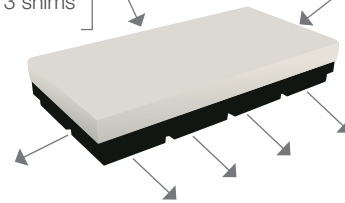
Water Flow Under Long Side

5 1/2 gpm/ft/min	no shims
8.0 gpm/ft/min	1 shim
10.0 gpm/ft/min	2 shims
12.0 gpm/ft/min	3 shims

in gal./lineal ft./minute

Water Flow Under Short Side

5.0 gpm/ft/min	no shims
5 1/2 gpm/ft/min	1 shim
6.0 gpm/ft/min	2 shims
6 1/2 gpm/ft/min	3 shims



Content Tentative and Intended

# Roof Stone<sup>®</sup> System Specifications

- ❖ **Shims:** 1/10 inch stackable disks, easiest shims on the market.
- ❖ **Compressive Strength:** 4500+ psi at 28 days exceeds SPRI 3000 psi standard by 50%.
- ❖ **Flexural Strength:** 650+ psi at 28 days ASTM test method C140.
- ❖ **Water Absorption:** Less than 5% by cold water method at 28 days ASTM test method C140.
- ❖ **Air content:** 4 to 8% maximum
- ❖ **Linear Shrinkage:** Not to exceed .065%
- ❖ **ASR:** (Alkaline Silica Reactivity) >80
- ❖ **Solar Reflectance:** Consult LiveRoof staff for reflectivity data.
- ❖ **Limited 10 Year Warranty**

*Available from your local LiveRoof<sup>®</sup> grower.*



Roof Stone<sup>®</sup>  
comes in six versatile colors:



*Notice: Colors subject to change without prior notice. Minor color variations may occur during manufacturing.*

**Specifications Tentative and Intended**

# RoofStone® Specifications

## Part 1: Products

### 1.01 LIVEROOF

P.O. Box 533  
Spring Lake, MI 49456  
(616) 842-1392  
LiveRoof.com

### 1.02 PAVER APPLICATIONS

Designed to follow roof contour.

### 1.03 ROOFSTONE PAVERS

- A. Available in standard size and texture. Simply select color or colors

### 1.04 GREEN ROOF INTERFACE

- A. Edging (LiveRoof RoofEdge) not required with LiveRoof Standard or Deep System when paver abuts LiveRoof or parapet.
- B. Edging required for LiveRoof Lite and Deep Systems.

### 1.05 ACCESSORIES

- A. Select quantity of corner shims based upon roof slope design. Each shim adds  $\frac{1}{10}$  inch height to corner pedestal that it is applied to. Ratio of 1 shim per pavers suggested for typical roof.

## Part 2: Installation

### 2.01 EXAMINATION

- A. Confirm that roof deck is built in accord with roof system manufacturer's specifications.
- B. Verify roof deck will carry the weight of RoofStone system.
- C. Examine roof deck to verify surfaces are free of irregularities.
- D. Do not begin installation until unsatisfactory conditions are corrected.
- E. Verify that waterproofing-manufacturer-approved slip sheet "protective sheeting" is in place.

### 2.02 PREPARATION

- A. Sweep slip sheet protective sheeting clean of gravel, grit, soil or any other debris.
- B. Do not apply RoofStone pavers to unclean surface.

### 2.03 INSTALLATION

- A. Determine efficient starting point based upon design and logistics.
- B. Apply chalk line if appropriate for the design.
- C. Install RoofStone pavers tightly against LiveRoof modules or RoofEdge restraint.
- D. Using hands or feet check each RoofStone paver at time of paver placement, to confirm that it fits solidly on the roof deck. If paver rocks due to uneven grade, apply RoofStone shim(s) as needed to remove any rocking movement.
- E. Do not place the next paver until certain there is no rocking motion/play in the previously placed module.
- F. The plastic base is connected to the concrete top in multiple locations, and therefore may be custom cut as needed.

### 2.04 IRRIGATION PIPE INTERFACE

- A. The plastic base of the RoofStone paver may be notched with appropriate saw. Make the notch as small as possible to accommodate the width of irrigation pipe. **Elevate the irrigation pipe above roof deck with drainboard of  $\frac{1}{2}$ " or taller height. Or other permanent shim so that irrigation pipe does not block the flow of water across the roof deck.**

## Part 3: Maintenance

### 3.01 CLEANING

- A. During the course of the installation, immediately sweep away any soil, dust, stone chips, grit or debris created or imported during installation.
- B. After installation, clean only with water using scrub brush. Do not apply chemical cleaners.

### 3.02 SEALING

- A. Prior to installation, a non-silicone, 90% breathable concrete sealer may be applied to the top surface of the paver, however it is not required. Sealer recommended for applications where stain-inducing liquids, berries or fruit are likely to be problematic.
- B. Avoid getting sealer on roof surface as it may damage integrity of waterproofing system.

### 3.03 SNOW AND ICE REMOVAL

- A. The use of de-icing agents including but not limited to Sodium Chloride (Salt), Calcium Chloride, Ammonium Nitrate, and Ammonium Sulfate, is prohibited; these chemicals will damage RoofStone pavers. Snow should be removed manually and sand or clay used as non slip agents.

## Part 4: Warranty

### 4.01 LIMITED 10 YEAR WARRANTY

LiveRoof®  
BRAND

PO Box 533 (616) 842-1392  
Spring Lake, MI 49456 fax (616) 842-3273

[www.LiveRoof.com](http://www.LiveRoof.com)

Notices: Colors subject to change without prior notice. Slight variations in color may occur during manufacturing.

# Product Warranty

## RoofStone Paver by LiveRoof, Inc.

LiveRoof Inc. warrants the RoofStone paver for 10 years from the date of purchase. Warranty is limited to the structural integrity of the paver and for the purposes of this warranty, "defects" or "defective" shall refer only to any paver(s), which as a result of freeze-thaw, cracks or delaminates, where such crack or delamination is greater than 1½% loss in dry weight rendering the paver(s) unsuitable for its intended use. This warranty does not include the following:

- ◆ Common imperfections found in concrete products, such as small chips, exposed aggregates, bubble holes or cracks and varying surface textures.
- ◆ Damage caused by handling, unpacking or chipping during process of installation.
- ◆ Damage caused by abuse.
- ◆ Normal wear and tear, such as abrasion from foot traffic, surface stains from berries, fruit, birds, food, etc.
- ◆ Erosion from water or acid rain.
- ◆ Damage from equipment.
- ◆ Scratches and damage caused by snow shovels or other snow removal equipment.
- ◆ Shade or color blend variations between the paver units.
- ◆ Shade variations between products and samples or photographs.
- ◆ Efflorescence or its removal. Efflorescence is a natural occurrence in concrete products and usually washes or wears off over time.
- ◆ Freight of replacement pavers.
- ◆ Chemical exposure including but not limited to salt and other deicing compounds.
- ◆ Damage resulting from acts of God, vandalism, structural movement, building design defects, failure of any component not manufactured by LiveRoof, LLC, negligence of purchaser, installer or any user, unapproved chemicals, product misuse, faulty installation, faulty maintenance practices, or any other non approved use or application of the pavers.
- ◆ Vehicular traffic including but not limited to washing equipment, snow removal equipment, hand trucks, dollies, etc.

**REMEDIES:** In the event that within 10 years of the date of its delivery, and paver(s) exhibit defects, LiveRoof, LLC shall at its own cost and expense, either repair the defects or supply replacement pavers only, and does not include any other costs including the cost of transportation, or labor for removal or replacement. LiveRoof, LLC does not guarantee that the shape or color will be available in the future and will provide an alternate shape and/or color from its current product line or alternate product as determined by LiveRoof, LLC at its sole and absolute discretion at the time of an accepted warranty claim.

All claims against defective newly purchased products must be made within 10 days from date of shipment from LiveRoof, LLC. LiveRoof, LLC will replace product or, if unavailable, an alternate product as determined by LiveRoof, LLC in its sole and absolute discretion, at no charge. LiveRoof will replace uninstalled pavers at site if more than 5 % of product is defective.

THERE ARE NO WARRANTIES BEYOND THIS EXPRESSED WARRANTY. LIVEROOF, LLC EXCLUDES ANY LIABILITY FOR LOST PROFIT OR ANY OTHER INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES. LIVEROOF, LLC EXCLUDES ANY LIABILITY OR WARRANTY FOR MISUSES OR MISAPPLICATION OF PRODUCTS OR DAMAGES CAUSED IN THE TRANSPORT OF ROOFSTONE PRODUCTS. THE REMEDIES CONTAINED HEREIN ARE THE ONLY REMEDIES AVAILABLE FOR BREACH OF THIS WARRANTY. THIS WARRANTY EXTENDS ONLY TO THE ORIGINAL END USER AND IS NOT TRANSFERABLE.

This warranty is effective at time of installation. The laws of the State of Michigan govern this agreement.

LiveRoof, LLC RoofStone PRODUCTS

Owner Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

By: \_\_\_\_\_ (Installer Representative)

Title: \_\_\_\_\_

Date of Installation/Warranty Effectiveness: \_\_\_\_\_

To be valid, warranty must be mailed to LiveRoof within 10 days of installation. Mail to: Warranty Registration  
LiveRoof LLC  
P.O. Box 533  
Spring Lake, MI 49456



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PATENT PENDING

P.O. Box 533  
Spring Lake, MI 49456

1.800.875.1392  
fax 616.842.3273

[www.liveroof.com](http://www.liveroof.com)



Photo a depiction.