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Version 1.0

# STREETBOND® PAVEMENT COATING SYSTEMS

## Application & Specifications Manual



# StreetBond® Pavement Coating Systems

## Application & Specifications Manual

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Thank you for consulting Version 1.0 of the *StreetBond® Pavement Coating Systems Application & Specifications Manual*. This manual contains the latest information relating to the application of GAF's StreetBond® pavement coating systems, and is based on our years of experience in the liquid-applied coatings field. It has been prepared as a general guide to assist contractors and owners in the use of our pavement coating systems. You can find further information at [www.gaf.com](http://www.gaf.com), or contact GAF Technical Services at 1-800-766-3411.

## ABOUT GAF

GAF proudly offers a comprehensive portfolio of award-winning, innovative roofing and coatings products. Supported by an extensive national network of factory-certified contractors, GAF has built its reputation—and its success—on its steadfast commitment to Advanced Quality, Industry Expertise, and Solutions Made Simple.

GAF also offers a variety of pavement coating technologies to meet your needs, including solar reflective and bicycle lane options. StreetBond® pavement coatings have excellent durability and high solar reflectivity to meet the most rigorous industry standards. This helps property owners and designers reduce the urban heat-island effect, creating a safer, more comfortable environment. In addition to providing more comfortable urban environments, keeping the asphalt cooler extends the life of the asphalt by delaying the aging and degradation process.

For more information about GAF, visit us at [www.gaf.com](http://www.gaf.com).

## SERVICES

- Every GAF roofing and coatings product benefits from the substantial resources available only from a multibillion-dollar corporation dedicated to roofing and coatings. Our 31 plants mean manufacturing expertise. Our extensive R&D organization means a constant focus on product and process improvement. GAF is a team of over 3,000 people dedicated to your roofing and coatings satisfaction.
- GAF has a network of sales representatives and distributors to supply and service its quality roofing and coating systems throughout North America.
- Our Technical Services Helpline is a technical assistance service that allows you to contact us directly to speak with a technical representative about specifications, applications, code approvals, and product information. The Technical Services number is 1-800-766-3411.
- Architectural Information Services (AIS) is a specification service that allows you to specify your exact roofing and coatings needs and will send you a general specification that outlines your job summary, application method, product description, and detail drawings. The phone number for AIS is 1-800-522-9224.
- Visit GAF on the web at [www.gaf.com](http://www.gaf.com) for extensive product information, specifications, and technical literature.

## LIMITED WARRANTY

GAF warrants that StreetBond® coatings will be free from manufacturing defects that adversely affect performance for one year following the completion of installation on a sound pavement substrate, in accordance with published application instructions, as long as the StreetBond® coatings were installed during the shelf life set forth on the product label or container. GAF's sole responsibility under the warranty is to provide replacement material for that portion of the StreetBond® coating that peels, delaminates, or shows abnormal wear, or at GAF's sole option, the cost value of said StreetBond® coating.











This Limited Warranty does not cover damages to the StreetBond® coatings resulting from anything other than an inherent manufacturing defect. Exclusions to this warranty include:

- Faulty application or application not in strict accordance with GAF's published application instructions.
- Exposure of StreetBond® coatings to damaging substrates.
- Settlement, movement, cracks, defects or other failures of pavement structure or surface over which the StreetBond® coatings were applied.
- Defects in design of the pavement structure of surface over which the StreetBond® coatings were applied.
- Causes beyond normal wear and tear, such as unusual weather conditions or natural disasters.
- Impact of foreign objects or physical damage caused by any intentional or negligent acts, accidents, misuse, abuse or the like including vandalism, tire scuffing, landscaping, snow removal equipment and studded or traction tires.

# Section 1

# Guides

# Product Guide

Type	Product	Description	VOC (g/L)	Solids By Volume
Pavement Coatings	StreetBond® 150 Pavement Coating 	A two-component water-based epoxy-modified acrylic coating for both pedestrian and vehicular pavement surfaces. Developed for use over imprinted or flat pavement surfaces, StreetBond® 150 Pavement Coating bonds to pavement surfaces to provide both an enduring, aesthetic finish and a low-maintenance surface that helps protect and extend the life of the pavement.	<25	59%
	StreetBond® 120 Pavement Coating 	A two-component water-based epoxy-modified acrylic coating for pedestrian pavement surfaces. Developed for use over imprinted or flat surfaces, StreetBond® 120 Pavement Coating bonds to pavement or concrete surfaces to provide both an enduring, aesthetic finish, and a low maintenance surface that protects and extends the life of the pavement.	<25	57%
	StreetBond® DuraShield Pavement Coating 	A specialty coating formulated using high-quality acrylic polymer technology for asphalt preservation and protection. Designed to enhance the appearance of pavement surfaces, DuraShield also protects the asphalt from degradation due to oxidation from exposure to UV rays and water.	<25	60%
Accessories	StreetBond® Premium System (FrictionCoat) Aggregate System 	A specially formulated aggregate system. In conjunction with StreetBond® 150, StreetBond® FrictionCoat Aggregate System is an integral part of the StreetBond® Premium System which creates a highly durable and skid resistant coating.	N/A	N/A
	StreetBond® StreetPrint® Templates 	A wire rope cable stamping template for textured, imprinted, and stamped asphalt. The templates are constructed of 3/8" (9 mm) swaged wire rope pieces welded together to create a pattern.	N/A	N/A
	StreetBond® Adhesion Promoter Concentrate 	Enhances the adhesion of StreetBond® coatings applied over asphalt pavement surfaces with polished aggregates only.	0	N/A
	StreetBond® CemBase Asphalt Fortifier 	A high-performance cementitious, epoxy-modified acrylic based, waterborne surfacing product designed for application on stamped (textured) asphalt pavements only.	<25	60%
	StreetBond® WB Concrete Primer 	A clear, single-component epoxy primer specifically designed to increase the bond of StreetBond® coatings to concrete surfaces. Used on new, aged, and patched concrete with proper surface preparation.	<90	10.6%
	StreetBond® QS Concrete Primer 	A two-component, epoxy polyamide pretreating primer specifically designed to increase the bond of StreetBond® coatings to concrete surfaces. Its low viscosity allows it to penetrate into the surface, creating a tenacious physical and chemical bond.	<380	53%
	StreetBond® Sealer Concentrate 	A high-quality sealer that creates a semi-gloss finish over StreetBond® Pavement Coatings and reduces dirt and tire pick up in hot climates.	<100	21%

# Warranty Guide

SYSTEM SPECIFICATIONS	StreetBond® DuraShield	StreetBond® 120	StreetBond® 150*
	3 years	3 years	3 years 5 years
<b>Pavement</b>			
<b>Pedestrian</b>		X (3 passes)	X (3 passes) X (4 passes)
<b>Residential Driveways</b>		X (3 passes)	X (3 passes)
<b>Parking lots</b>	X (2 passes)		X (4 passes)
<b>Cycle Lane (CL)</b>			X (4 passes)
<b>Vehicular</b>			X (4 passes)
<b>Dry Film Thickness in mils (DFT)</b>	13 mil DFT (min.)	19 mil DFT (min.)	3 = 19 mil DFT (min.) 4 = 26 mil DFT (min.) 26 mil DFT (min.)
<b>Who Can Install?</b>			
<b>Authorized Applicator</b>	YES	YES	YES no
<b>Master Applicator**</b>	YES	YES	YES YES
<b>Coverage</b>			
<b>Manufacturing Defects</b>	YES	YES	YES YES
<b>Ordinary Wear Tear (not peel, flake or crack)</b>	YES	YES	YES YES
<b>Workmanship</b>	no	no	no no
<b>Remedy</b>			
<b>Materials</b>	YES	YES	YES YES
<b>Labor</b>	no	no	YES YES

\* Includes CL (Cycle Lane) and SR (Solar Reflective) colors.

\*\* Includes StreetBond® StreetPrint® applications.



# Coating Selection Guide

Purpose	Application	Asphalt Substrate	Concrete Substrate
Protective Coating	Combined Vehicular & Pedestrian	StreetBond® 150 Pavement Coating	StreetBond® 150 Pavement Coating
	Heavier Vehicular Traffic	StreetBond® Premium System (FrictionCoat) Aggregate System	StreetBond® Premium System (FrictionCoat) Aggregate System
	Pedestrian & Light Vehicular Traffic	StreetBond® 150 Pavement Coating	StreetBond® 150 Pavement Coating
	Pedestrian Traffic	StreetBond® 120 Pavement Coating	StreetBond® 120 Pavement Coating
	Asphalt Preservation & Protection	StreetBond® DuraShield Pavement Coating	n/a

# Placement Guide

		PRODUCT							
		StreetBond® 150		StreetBond® 120		StreetBond® 150 over StreetBond® CemBase*		StreetBond® 120 over StreetBond® CemBase*	
		Stamped	Flat	Stamped	Flat	Stamped	Flat	Stamped	Flat
LOCATION	<b>No Vehicular Traffic</b> (pedestrian, cycle paths, sidewalks)	✓	✓	✓	✓	✓	✗	✓	✗
	<b>Very Low Vehicular Traffic</b> (driveways, medians, plazas)	✓	✓	✓	✓	✓	✗	✓	✗
	<b>Medium Vehicular Traffic</b> (med traffic crossings, med traffic entries, cycle paths in traffic)	✓	✓	✗	✗	✓	✗	✗	✗

\*StreetBond® CemBase is an option for locations where scuffing is a concern. Scuffing is a result of two factors: Poor asphalt stability and stationary vehicles turning their tires.

✓: Product is ideal for this location.

✗: Product is not suitable for this location.

## Primer Substrate Guide

Substrate Type (Situation)	Product Needed			
	No Primer	StreetBond® Adhesion Promoter Concentrate	StreetBond® WB Concrete Primer (Water Based)	StreetBond® QS Concrete Primer (QuickSet)
Newly Installed Stable Asphalt	✓			
Stable Aged Polished Asphalt (Vehicle traffic has exposed and polished the high points of the aggregate)		✓		
New Concrete			✓	✓
Spalled Concrete (Spall repair may need to be addressed prior to priming)			✓	✓
Concrete Requiring Primer During Cool Weather Conditions (Cloudy, humid, nighttime applications)				✓
Exposed Aggregate Concrete (Concrete installed with exposed polished aggregate)			✓	✓

### Proper Usage of StreetBond® Primers

- StreetBond® Concrete Primer (WB or QS) **MUST** be used on any concrete work.
- StreetBond® Adhesion Promoter Concentrate is **NOT** to be used over any type of concrete substrate. If StreetBond® Adhesion Promoter Concentrate is used for concrete applications, the StreetBond® coating may not remain adhered over time.
- Primer is not required on newly installed, stable asphalt pavement.
- If StreetBond® Concrete Primers are not used over concrete substrates, the StreetBond® coating may not remain adhered over time.

**NOTE: It is required that new concrete be acid etched prior to primer application for adhesion and it is highly recommended that aged concrete also be acid etched prior to primer application. Refer to the International Concrete Repair Institute (ICRI) for additional guidelines.**

See product data sheets at [www.gaf.com](http://www.gaf.com) for more information on these products and how they are applied. If your situation is unique and does not appear, contact GAF Technical Services at [technicalquestions@gaf.com](mailto:technicalquestions@gaf.com) or call 800-766-3411.

# Coating Coverage Guide

Product	Application	Minimum Number of Layers Required	
		Hot Dry Climate	Temperate/Winter Climate
StreetBond® 120	Pedestrian only	3	3
	Residential driveway	3	3
StreetBond® 150	Vehicular traffic up to 2000 cars per day per lane	4	4
	Vehicular traffic 2000 to 3000 cars per day per lane	4	No warranty is provided for traffic levels above 2000 cars per day per lane.
	Vehicular traffic greater than 3000 cars per day per lane	No warranty is provided for traffic levels above 3000 cars per day per lane	

Product application rate: 600 ft<sup>2</sup> (55.74 m<sup>2</sup>) per 5 gallon unit.

1 unit = a nominal 5 gallon (19 L) pail comprised of Part A, Part B, and Colorant.

- Coverage rates are affected by pattern density and pavement porosity. There will be less coverage with the first layer and higher coverage with subsequent layers.
- Surface build is achieved through layers. A layer of coating is a spray pass, using the textured spray gun, that is allowed to dry before the next pass is applied. Building the coating thickness in layers has proven to provide the best coating performance as the coating can dry and cure more quickly than a single thick pass.
- Additional layers of StreetBond® 150 coating may be used to provide additional build thickness in high wear areas such as vehicle wheel paths and turning areas.
- A maintenance program may be required for applications exposed to:
  - Abrasive materials (such as salt and sand)
  - Abrasive equipment (such as snow removal equipment)
  - Studded winter tires
- Check with GAF in advance to confirm the recommended application for the climate conditions at the project location.

# **Section 2**

# **Substrate Conditions**

## GENERAL

The condition of the asphalt substrate will impact the performance of the StreetBond® coatings. A highly stable asphalt pavement, free of defects, is recommended. A durable and stable asphalt pavement mix design installed according to best practices over a properly prepared and stable substrate is a prerequisite for all long-lasting asphalt pavement surfaces. The application of StreetBond® coatings does not change this requirement.

### KEY ASPHALT SUBSTRATE PROPERTIES

#### Stable Sub-Grade and Base

A stable base and sub-grade underneath the HMA (hot mix asphalt) surface are necessary for proper HMA pavement performance.

**Sub-Grade:** Sub-grade is the layer of natural earth on which the pavement is built. Sub-grade needs to be removed to a stable layer that can be prepped and compacted. Proper moisture content is important for compaction; if the sub-grade is too moist or too dry, it will not compact properly and can result in settlement issues. Settlement can cause cracking in the asphalt, aesthetically lowering the decorative value of the StreetBond® coating.

**Base:** Base refers to the aggregates that are placed on top of the sub-grade to build the pavement to the correct height. Typically made up of crushed aggregates, this layer is graded and compacted to form the foundation for the asphalt layer. Thickness and compaction of the base course is important to avoid settlement.

#### Proper HMA Mix Design (for the intended use)

HMA is engineered/ designed for specific use by modifying ingredients such as aggregate particle size and AC (asphalt cement) content and grade.

- The specific way HMA ingredients are combined may affect the stability, durability, and workability of the pavement. HMA may be designed for specific uses ranging from driveways to highways. Each mix design has been developed for the best performance for the intended use. Since StreetBond® is a topical treatment for asphalt, it is extremely important that the appropriate mix designed for the intended traffic use is installed; otherwise, common asphalt issues like scuffing, shoving, and rutting can affect the StreetBond® coating.
- For example, if a smooth and sandy mix design, engineered for pedestrian use, is used in a traffic environment because a smooth finish is preferred, the mix may be unstable. This can cause the asphalt to rut, shove and/or scuff and can affect the StreetBond® coating.
- Always ensure a stable mix design, engineered for the intended traffic use, is used with the StreetBond® coating.

#### Correct HMA Installation

The proper installation of HMA is important because it can affect aesthetics and performance of the StreetBond® coating if it is installed incorrectly. The key installation factors that most affect StreetBond® coatings are:

**Compaction:** HMA needs to be compacted at a specified temperature, using a specified weight. The appropriate temperature will vary with mix design. Generally, if the asphalt is compacted at too low of a temperature, the AC is too tacky and resists compaction. If the temperature at compaction is too hot, the AC will shove during compaction. In the correct temperature range, the AC acts as a lubricant and allows all materials to compact together. If the asphalt is not properly compacted, it may not be stable and can cause adverse effects, such as scuffing/shoving/rutting on the StreetBond® coated surface. Ensure that the HMA is compacted at the proper temperature using the proper compaction equipment.

**Segregation:** Segregation refers to an inconsistent surface texture of the asphalt, usually caused by large aggregates brought to the surface during hand work (raking). These areas can stand out more when coating is applied. Remove large aggregates from the surface when hand working the asphalt (rather than broadcasting them on top of the surface). This will produce a more consistent surface texture.

**Finishing Detail:** The detail of workmanship around things like curbs, manhole covers, and edges can affect how StreetBond® coatings look. Care should be taken to ensure that asphalt finishing into a curb or landscaping is done so in a clean, consistent way. Straight, clean and level finishing should be done with aesthetics in mind.

**NOTE: Generally, all new HMA projects (regardless of mix design) will produce black tire tracking between the new and old surface until the fresh asphalt cement has had time to fully cure. New asphalt tracks will be especially noticeable on lighter colored StreetBond® coatings.**

## SUBSTRATE ASSESSMENT

A StreetBond® coating is only good as the surface that it is placed on. If surfaces are highly contaminated, or if surfaces are to be subjected to unusual service conditions, consult GAF Technical Services for recommendations at [technicalquestions@gaf.com](mailto:technicalquestions@gaf.com) or 800-766-3411.

### ASSESSING AN EXISTING ASPHALT SUBSTRATE

- 1. Age of Asphalt:** If the pavement is more than 5 years old, it may not be suitable to print. UV rays oxidize the AC found in asphalt. Those asphalts may be difficult to print and may inhibit adhesion of StreetBond® coatings. Asphalt pavement over 5 years in age should be carefully considered. Extra products and steps may be required for StreetBond® coating installations on asphalt pavement older than 5 years.
- 2. Finishing Detail:** If asphalt installation is sloppy around walls, edges, curbs, and manholes, it will affect the aesthetics of the finished product.
- 3. Polishing of Aggregates:** Polishing occurs when traffic volumes cause the aggregates in the asphalt to wear smooth or polish. Aggregate polishing may suggest that traffic volumes may be too great for StreetBond® coating and that more layers or a different type of coating will be required. Use StreetBond® Adhesion Promoter Concentrate on polished surfaces before application of the StreetBond® coating.
- 4. Surface Texture:** Patch repairs, segregation, and raveling can all affect the finished look of the StreetBond® coating as they can create inconsistent textures in the surface. Surface texture may also affect coating coverage rates.
- 5. Rutting and Shoving:** Rutting and shoving is a depression or ripple of the pavement in the wheel path. It is a structural failure due to excessive loading of that pavement. Rutting and shoving is a sign of an unstable asphalt pavement experiencing plastic flow. The pavement's internal structure is not strong enough to bear the weight of vehicle tires.
- 6. Raveling and Potholes:** Raveling is a loss of aggregate from the surface as a result of poor installation and/or lack of AC in the mix. It will appear as a different texture on the pavement surface. StreetBond® coating can reduce the amount of raveling and further degradation. Severe pavement fatigue cracking, which results in a total loss of asphalt pavement in a localized area, can create a pothole in the road. Asphalt will need to be replaced or refilled in the pothole.
- 7. Bleeding/Flushing:** Consistent impact of vehicle tires on asphalt can cause heat and migration of excessive AC to the surface. If surface texture of asphalt becomes filled with liquid AC, it can create a weakened bond for the StreetBond® coating.
- 8. Utility Repairs:** Asphalt is often patched after repair of underground utilities. Most repairs are not installed to meet the asphalt stability requirements needed for their traffic conditions. This can lead to distortion and cracking of StreetBond® coating along saw cuts. Ensure that utility repairs are carefully done with aesthetics and performance in mind.
- 9. Surface Contaminants:** There are many types of surface contaminants that may affect the performance and aesthetics of StreetBond® coating. Contaminants can prevent the coatings from adhering to the asphalt, which may affect adhesion. The most common surface contaminants are:
  - **Vehicle Fluids:** Oil, fuel, and grease can affect the bond of StreetBond® coating to the asphalt. These contaminants need to be removed using an environmentally friendly degreaser and power washing. If the fluids have soaked in to the surface and cannot be washed away, then the pavement must be removed and replaced.

- **Traffic Markings:** Areas that have traffic markings should be avoided. Traffic markings like road paint and thermoplastic may remain visible through the coating and possibly cause adhesion issues. Removing traffic markings creates a different surface texture that will be noticeable after application of the StreetBond® coating.
- **Asphalt Sealant:** Asphalt surfaces treated with asphalt sealant should be avoided. If StreetBond® coatings have been applied on top of the sealant, the sealant will have to bond the StreetBond® coating to the asphalt surface. If the sealant fails, the StreetBond® coatings will fail along with it.

**10. Settlement and Cracking:** Cracking occurs due to shrinkage of the sub-grade or asphalt pavement, or excessive bending of the pavement surface. Cracks need to be addressed before coating to avoid further water penetration.

#### ASSESSING AN EXISTING CONCRETE SUBSTRATE

- 1. Age of the Concrete:** Newly placed concrete is designed to develop its full design strength in approximately 28 days, at which time topical coatings can be applied. The StreetBond® coating application cannot be applied before the concrete has cured and proper preparation has been undertaken.
- 2. Surface Contaminants:** There are a variety of compounds which can penetrate into the concrete surface, including free form release agents, surface hardeners, greases, oils, food by-products, chemicals, chalking (carbonation), previously applied coatings, or dust and dirt. If any of these contaminants are present, they **MUST** be removed so that they do not impede the adhesion of StreetBond® coating to the concrete substrate.
- 3. Surface Texture:** Concrete that has been troweled smooth may inhibit adhesion of the StreetBond® coating. These surfaces must be etched with 10% muriatic acid solution and washed generously with water.
- 4. Laitance and Spalling:** Laitance is a residue of weak and non-durable material consisting of cement, aggregate, fines, and impurities brought to the surface of wet concrete by overworking and over-manipulating concrete at the surface while finishing. Spalling occurs when this weak surface layer releases from the main body of concrete. The concrete must be repaired or re-poured before applying the StreetBond® coating.



## SUBSTRATE PREPARATION

The preparation of the substrate is the responsibility of the installer, who shall address and correct all of the conditions listed in this section. StreetBond® coatings are meant to adhere to the oils in the asphalt pavement. The condition of the substrate will impact the performance of the StreetBond® coating. If there is a contaminant on the surface, it may affect adhesion. If surfaces are highly contaminated, or if surfaces are to be subjected to unusual service conditions, consult GAF Technical Services for recommendations at [technicalquestions@gaf.com](mailto:technicalquestions@gaf.com) or 800-766-3411.

### CLEANING ASPHALT SUBSTRATES

- Dirt, debris, water, and contaminants sitting on the surface will affect adhesion of the StreetBond® coating. Thoroughly clean the surface using a broom and backpack blower/compressed air. Where dirt and debris is severe, a power washer may be required.
- Areas containing chemical contaminants such as vehicle fluids need to be treated using a United Cleaning Concentrate (UCC) or an environmentally friendly degreasing solution. Proper removal of contaminants and degreasing solution is required prior to applying the StreetBond® coating.
- Care should be taken to ensure that the asphalt substrate is dry before applying StreetBond® coatings.

### CLEANING CONCRETE SUBSTRATES

- All concrete surfaces must be clean and free of any dirt, oil, grease, soapy films, surface chemicals, or other foreign contaminants. New concrete should be water-cured in lieu of using a curing compound. Any form of curing compound or release agent must be completely removed, along with any laitance. If concrete is badly spalled, restore surface to a reasonable condition using cementitious patching or resurfacing compound. New concrete that has been previously cured with a curing compound, or concrete that has been smooth troweled, must be cleaned and etched with a 10% muriatic acid solution. In areas where acid etching is not preferred, shot blasting or abrasive blasting may be performed as an approved alternative method for cleaning concrete surfaces. Wash with a biodegradable cleaner and follow with a generous rinse of clean water.
- Prior to applying StreetBond® WB or QS Concrete Primers, all loose material, dirt, and dust must be removed by using a power vacuum, stiff-bristled broom or compressed air. Existing stable concrete must be cleaned with a United Cleaning Concentrate (UCC) or a biodegradable chemical cleaner and water. Rinse thoroughly with fresh water to remove all traces of the chemical cleaner. If general cleaning is not adequate, then surfaces should be cleaned and etched as recommended for new concrete.
- Care should be taken to ensure that the concrete substrate is dry before applying StreetBond® coatings.

## MASKING

1. Masking is done to ensure sharp, aesthetically pleasing edges, and reduce the risk of overspraying.
2. Use duct tape, painter's tape, masking tape, or comparable tape, to mark edges of the area to be sprayed.
3. Mask off areas where coating or overspray is not wanted using plastic sheeting, tarps, coating shield, paper, or other suitable products as shown in Figure 1 below:

Figure 1: Typical masking



# **Section 3**

# **Application**

## Equipment

The following equipment has been designed specifically for optimal application of StreetBond® coatings. Other equipment may not be suitable and could compromise the performance of the StreetBond® coatings and/or reduce crew productivity.

**NOTE: Airless Sprayers CANNOT be used due to StreetBond® coating's high aggregate content.**

### Texture Spray Equipment:

- Texture Sprayer
- Hand Held Spray Hopper (for small jobs and accents)

### Mixing Equipment

- Jiffler mixing paddle with drill

### Air Compressor

- Capable of supplying (minimum) 12-14 cfm / 0.3 cubic meters / minimum of continuous air at 60-80 psi (4.0 – 5.5 atm)

### 8000 Watt Generator (For Mixer and/or Texture Sprayer)

- Capable of supplying 7500 watts
- Smaller RTX sprayers need less power, refer to sprayer manual

### Masking Materials

- Duct tape
- Plastic/paper/masking board

### Coating Distribution Tools

- Soft Bristle Broom
- Quickie 18" (457 mm) Bulldozer Push Broom
- Handles
- Thick nap rollers (can be used to provide texture to non-stamped surfaces)

### StreetBond® StreetPrint® Genuine Stamped Asphalt (optional)

- StreetHeat® reciprocating heater
- StreetBond® StreetPrint® templates 3/8" (9 mm) wire rope cable patterns
- Plate compactor

**NOTE: Contact your local Technical Sales Representative (TSR) or Territory Manager (TM) for specific equipment information.**

## Mixing Instructions

Before mixing, refer to the Product Data Sheet for specific mixing instructions for the StreetBond® products you are working with.

1. **Shake** StreetBond® Colorant (sold separately) and Part B to mix pigments and additives that may have separated during shipping and storage.
2. **Add contents** of StreetBond® Colorant and Part B to the 5 gallon (19 L) pail of Part A.
3. **Add water** using the empty colorant container. If the colorant container is a pint, fill 2 times with water; if the colorant container is a quart, fill halfway once (2 pints [0.95L]). Add to Part A. Dependent on temperature, +/- 1 pint (0.47 L) can be used. For more information, refer to the Cool and Hot Weather Caution sections within this Manual.

**TIP: Transfer some water to the colorant can and Part B and shake both cans to wash out remaining colorant and Part B.**

**WARNING: It is crucial to add no more than the recommended 2 pints (0.95 L) of water. Too much water will result in coating failure, insufficient asphalt hide, and/or reduced coating life. Too little water will result in thick coating, which is difficult to apply.**

4. **Mix** thoroughly using a Jiffler Mixing Paddle and high powered drill for 3 minutes. Properly mixed coating will have no signs of color separation and very small amounts of aggregate settling.
5. **Strain** coating to remove unmixed clumps of material before applying.

**IMPORTANT: Mixed coating containing Part A and Part B must be used within the 24 hours. The Part B for StreetBond® 150 and StreetBond® 120 are formulated differently. Using Part B with the wrong products can result in premature wear on the finished product.**

# StreetBond® DuraShield Pavement Coating

## General

- A. The Applicator should apply the StreetBond® DuraShield pavement coating only when the air temperature is 50°F (10°C) and rising and will not drop below 50°F (10°C) within 24 hours. No precipitation should be expected within 24 hours.
- B. Before spraying, make sure you understand your equipment. Operation Manuals are included with your equipment and overview videos are available online.
- C. The Applicator must use the texture spray system or suitable texture coatings sprayers to apply the StreetBond® coatings. Squeegee application is also acceptable in thin passes.
- D. The asphalt pavement surface must be completely dry and thoroughly cleaned prior to application of the coatings. Refer to the Substrate Cleaning section within this Manual.
- E. The coating application should proceed as soon as practicable upon completion of the imprinting of the asphalt pavement where applicable.

## Primer Application

- A. StreetBond® primers are specifically designed to enhance the adhesion between the coating and the substrate to which it is applied.
  1. Polished Asphalt: StreetBond® Adhesion Promoter should be applied directly to asphalt at a rate of one mixed unit per 500 ft<sup>2</sup> (46.5 m<sup>2</sup>). Best practices for applying the diluted Adhesion Promoter include using a garden sprayer can or backpack sprayer and misting the Adhesion Promoter onto the surface creating a continuous, thin, wet layer. Avoid over-application or pooling liquid. Spills should be brushed out to a thin layer before being allowed to dry. Adhesion Promoter dries clear with a slight sheen, which aids in locating application areas once dry. Allow to dry completely prior to the application of the StreetBond® DuraShield pavement coating.
  2. Stamped Asphalt: A primer is not required.
  3. Concrete Surfaces: Not a recommended substrate.

## DuraShield Application

- A. The StreetBond® DuraShield Pavement Coating should be applied in two coats by squeegee or spray application method using Table 1 within this Section.
  1. Squeegee Application: Pour the contents of the bucket on the surface and evenly distribute the coating at the proper coverage rate. The second coat should be applied once the first coat has dried.
  2. Spray Application: Hold the spray gun between 24" and 32" (610-813 mm) above the asphalt surface and apply the coating at the proper coverage rate. The second coat should be applied once the first coat has dried. Back-rolling using a large nap roller is recommended to ensure proper thickness of all areas and uniform coverage rates.
- B. Actual coverage may be affected by the texture, age, and application method of the asphalt pavement substrate. There will be less coverage with the first layer and higher coverage with subsequent layers. Areas of high traffic, such as drive lanes, entrances, and exits may need additional coats to maintain durability and performance.

C. Properly applied StreetBond® DuraShield coatings should have a uniform texture, color, and appearance with no visible working lines.

Table 1

<b>DURASHIELD COATING COVERAGE AND RATE GUIDE (approx.)</b>		
2 Coat Application	NON-TEXTURED	
	Coat #1	Coat #2
Application Rate	1 gal/100 ft <sup>2</sup> (4.1 L/m <sup>2</sup> )	1 gal/100 ft <sup>2</sup> (4.1 L/m <sup>2</sup> )

# StreetBond® 120 Pavement Coatings

## General

- A. The Applicator should apply the StreetBond® coatings only when the air temperature is 50°F / (10°C) and rising and will not drop below 50°F / (10°C) within 24 hours. No precipitation should be expected within 24 hours.
- B. Before spraying, make sure you understand your equipment. Operation Manuals are included with your equipment and overview videos are available online.
- C. The Applicator must use the texture spray system or suitable texture coatings sprayers to apply the StreetBond® coatings. Refer to the Equipment section within this Manual.
- D. The asphalt pavement surface must be completely dry and thoroughly cleaned prior to application of the coatings. Refer to the Substrate Cleaning section within this Manual.
- E. The coating application should proceed as soon as practicable upon completion of the imprinting of the asphalt pavement where applicable. Refer to the StreetBond® StreetPrint® Genuine Stamped Asphalt section within this Manual.
- F. Coating drying time increases when temperatures are lower. Environmental factors such as sunlight and wind play a major role in drying. StreetBond® coatings get harder with age. The longer you wait to introduce traffic, the better it will perform.

## Primer Application

- A. StreetBond® primers are specifically designed to enhance the adhesion between the coating and the substrate to which it is applied.
  1. Polished Asphalt: StreetBond® Adhesion Promoter should be applied directly to asphalt at a rate of one mixed unit per 500 ft<sup>2</sup> (46.5 m<sup>2</sup>). Best practices for applying the diluted Adhesion Promoter include using a garden sprayer can or backpack sprayer and misting the Adhesion Promoter onto the surface creating a continuous, thin, wet layer. Avoid over-application or pooling liquid. Spills should be brushed out to a thin layer before being allowed to dry. Adhesion Promoter dries clear with a slight sheen, which aids in locating application areas once dry. Allow to dry completely prior to the application of the StreetBond® 120 coating.
  2. Stamped Asphalt: StreetBond® CemBase Asphalt Fortifier can be used to help resist scuffing. StreetBond® CemBase Asphalt Fortifier is applied in two layers at a rate of 300 ft<sup>2</sup> (27.9 m<sup>2</sup>)/1 mixed unit as a base coat and must always be covered with at least one layer of StreetBond® 120. For example, if a project would typically require four layers of StreetBond® 120 on a stamped asphalt surface, a project needing fortification would have two layers of StreetBond® CemBase Asphalt Fortifier applied, followed by two layers of StreetBond® 120.
  3. Concrete Surfaces: StreetBond® WB Concrete Primer or StreetBond® QS Concrete Primer should be applied and allowed to dry completely prior to the application of the foundation coat layer. StreetBond® WB Concrete Primer must be applied at a rate of 0.2-0.25 gal/sq (0.82-1.02 L/10 m<sup>2</sup>). StreetBond® QS Concrete Primer must be applied at a rate of 0.33-0.5 gal/sq (1.36-2.04 L/10 m<sup>2</sup>).

## StreetBond® 120 Application

- A. The first layer of coating must be spray-applied and then broomed to work the coating material into the pavement surface. Hold the spray gun between 24" and 32" (610-813 mm) above the asphalt surface and apply the coating using a circular movement. When applying the next transverse pass, allow for 2" (51 mm) overlap onto wet edge.
- B. Every additional layer of coating sprayed should be broomed or rolled. Each application of coating material must be allowed to dry to the touch before applying the next layer.



- C. Once dry to the touch, the next layers (2, 3 & 4) should be sprayed perpendicular to the previous layer using the same procedure. Changing spray direction for every layer will help with coating uniformity. A roller can be used to create a consistent texture and a more uniform texture on flat work.
- D. Coating coverage and thickness should be applied using the rates outlined in Table 2 within this Section. Actual coverage may be affected by the texture of the asphalt pavement substrate and the imprint pattern selected. There will be less coverage with the first layer and higher coverage with subsequent layers.
- E. StreetBond® Coatings can be combined with SR (solar reflective) Colorants to reduce the temperature of asphalt surfaces. With cooler hardscape surfaces, surrounding buildings typically see lower air conditioning costs and improved air quality. In addition to providing more comfortable urban environments, keeping the asphalt cooler extends the life of the asphalt itself and reduces the possibility of rutting or raveling.
- F. Properly applied StreetBond® coatings should have a uniform texture, color, and appearance with no visible working lines. Grout lines should be well defined with no excess coating.

### Coating Sealer Application (Optional)

- A. StreetBond® Sealer Concentrate can be applied to the surface of newly completed projects to reduce dirt and tire pick up. Using a low pressure handheld or backpack sprayer, spray sealer onto desired area at a rate of 0.33 gal/sq (1.36 L/10 m<sup>2</sup>).
- B. Use a soft bristle broom or roller to even out the surface coverage. On textured surfaces, be sure to remove excess Sealer from the grout lines and distribute coating evenly to ensure a continuous membrane is formed. StreetBond® Sealer Concentrate is milky white when sprayed, but dries clear with a semi-gloss sheen.

Table 2

STREETBOND® 120 COATING & COVERAGE RATE GUIDE				
# OF LAYERS	THICKNESS (approx.)			
	WET		DRY	
	mm	mil	mm	mil
3	0.84	33	0.48	19
4	1.12	44	0.66	26
5	1.40	55	0.81	32
6	1.68	66	0.97	38

Product application rate: 600 ft<sup>2</sup> (55.74 m<sup>2</sup>) per unit per layer  
 1 unit = a nominal 5 gallon (19 L) pail comprising Part A, Part B, and Colorant

**IMPORTANT NOTE:** Exceeding this application rate can lead to cracking and improper curing of the product.

# StreetBond® 150 Pavement Coatings

## General

- A. The Applicator should apply the StreetBond® coatings only when the air temperature is 50°F / (10°C) and rising and will not drop below 50°F / (10°C) within 24 hours. No precipitation should be expected within 24 hours.
- B. Before spraying, make sure you understand your equipment. Operation Manuals are included with your equipment and overview videos are available online.
- C. The Applicator must use the texture spray system or suitable texture coatings sprayers to apply the StreetBond® coatings. Refer to the Equipment section within this Manual.
- D. The asphalt pavement surface must be completely dry and thoroughly cleaned prior to application of the coatings. Refer to the Substrate Cleaning section within this Manual.
- E. The coating application should proceed as soon as practicable upon completion of the imprinting of the asphalt pavement where applicable. Refer to the StreetBond® StreetPrint® Genuine Stamped Asphalt section within this Manual.
- F. Coating drying time increases when temperatures are lower. Environmental factors such as sunlight and wind play a major role in drying. StreetBond® coatings get harder with age. The longer you wait to introduce traffic, the better it will perform.

## Primer Application

- A. StreetBond® primers are specifically designed to enhance the adhesion between the coating and the substrate to which it is applied.
  1. Polished Asphalt: StreetBond® Adhesion Promoter should be applied directly to asphalt at a rate of one mixed unit per 500 ft<sup>2</sup> (46.5 m<sup>2</sup>). Best practices for applying the diluted Adhesion Promoter include using a garden sprayer can or backpack sprayer and misting the Adhesion Promoter onto the surface creating a continuous, thin, wet layer. Avoid over-application or pooling liquid. Spills should be brushed out to a thin layer before being allowed to dry. Adhesion Promoter dries clear with a slight sheen, which aids in locating application areas once dry. Allow to dry completely prior to the application of the StreetBond® 150 coating.
  2. Stamped Asphalt: StreetBond® CemBase Asphalt Fortifier can be used to help resist scuffing. StreetBond® CemBase Asphalt Fortifier is applied in two layers at a rate of 300 ft<sup>2</sup> (27.9 m<sup>2</sup>) / 1 mixed unit as a base coat and must always be covered with at least one layer of StreetBond® 150. For example, if a project would typically require four layers of StreetBond® 150 on a stamped asphalt surface, a project needing fortification would have two layers of StreetBond® CemBase Asphalt Fortifier applied, followed by two layers of StreetBond® 150.
  3. Concrete Surfaces: StreetBond® WB Concrete Primer or StreetBond® QS Concrete Primer should be applied and allowed to dry completely prior to the application of the foundation coat layer. StreetBond® WB Concrete Primer must be applied at a rate of 0.2-0.25 gal/sq (0.82-1.02 L/10 m<sup>2</sup>). StreetBond® QS Concrete Primer must be applied at a rate of 0.33-0.5 gal/sq (1.36-2.04 L/10 m<sup>2</sup>).

## StreetBond® 150 Application

- A. The first layer of coating must be spray-applied and then broomed to work the coating material into the pavement surface. Hold the spray gun between 24" and 32" (610-813 mm) above the asphalt surface and apply the coating using a circular movement. When applying the next transverse pass, allow for 2" (51 mm) overlap onto wet edge.
- B. Every additional layer of coating sprayed should be broomed or rolled. Each application of coating material must be allowed to dry to the touch before applying the next layer.

- C. Once dry to the touch, the next layers (2, 3 & 4) should be sprayed perpendicular to the previous layer using the same procedure. Changing spray direction for every layer will help with coating uniformity. A roller can be used to create a consistent texture which may create a more uniform texture on flat work.
- D. Coating coverage and thickness should be applied using the rates outlined in Table 3 within this Section. Actual coverage may be affected by the texture of the asphalt pavement substrate and the imprint pattern selected. There will be less coverage with the first layer and higher coverage with subsequent layers.
- E. StreetBond® Coatings can be combined with SR (solar reflective) Colorants to reduce the temperature of asphalt surfaces. With cooler hardscape surfaces, surrounding buildings typically see lower air conditioning costs and improved air quality. In addition to providing more comfortable urban environments, keeping the asphalt cooler extends the life of the asphalt itself and reduces the possibility of rutting or raveling.
- F. Properly applied StreetBond® coatings should have a uniform texture, color, and appearance with no visible working lines. Grout lines should be well defined with no excess coating.

### Coating Sealer Application (Optional)

- A. StreetBond® Sealer Concentrate can be applied to the surface of newly completed projects to reduce dirt and tire pick up. Using a low pressure handheld or backpack sprayer, spray sealer onto desired area at a rate of 0.33 gal/sq (1.36 L/10 m<sup>2</sup>).
- B. Use a soft bristle broom or roller to even out the surface coverage. On textured surfaces, be sure to remove excess Sealer from the grout lines and distribute coating evenly to ensure a continuous membrane is formed. StreetBond® Sealer Concentrate is milky white when sprayed, but dries clear with a semi-gloss sheen.

Table 3

STREETBOND® 150 COATING & COVERAGE RATE GUIDE				
# OF LAYERS	THICKNESS (approx.)			
	WET		DRY	
	mm	mil	mm	mil
3	0.84	33	0.48	19
4	1.12	44	0.66	26
5	1.40	55	0.81	32
6	1.68	66	0.97	38

Product application rate: 600 ft<sup>2</sup> (55.74 m<sup>2</sup>) per unit per layer  
 1 unit = a nominal 5 gallon (19 L) pail comprising Part A, Part B, and Colorant

**IMPORTANT NOTE:** Exceeding this application rate can lead to cracking and improper curing of the product.

# StreetBond® Premium System (FrictionCoat) Aggregate System

## General

- A. The Applicator should apply the StreetBond® coatings only when the air temperature is 50°F (10°C) and rising and will not drop below 50°F (10°C) within 24 hours. No precipitation should be expected within 24 hours.
- B. Before spraying, make sure you understand your equipment. Operation manuals are included with your equipment and overview videos are available online.
- C. The Applicator must use the texture spray system or suitable texture coatings sprayers to apply the StreetBond® coatings. Refer to the Equipment section within this Manual.
- D. The asphalt pavement surface must be completely dry and thoroughly cleaned prior to application of the coatings. Refer to the Substrate Cleaning section within this Manual.
- E. The coating application should proceed as soon as practicable upon completion of the imprinting of the asphalt pavement where applicable. Refer to the StreetBond® StreetPrint® Genuine Stamped Asphalt section within this Manual.
- F. Coating drying time increases when temperatures are lower. Environmental factors such as sunlight and wind play a major role in drying. StreetBond® coatings get harder with age. The longer you wait to introduce traffic, the better it will perform.

## Primer Application

- A. StreetBond® primers are specifically designed to enhance the adhesion between the coating and the substrate to which it is applied.
  1. Polished Asphalt, StreetBond® Adhesion Promoter should be applied directly to asphalt at the rate of one mixed unit per 500 ft<sup>2</sup> (46.5 m<sup>2</sup>). Best practices for applying the diluted Adhesion Promoter include using a garden sprayer can or backpack sprayer and misting the Adhesion Promoter onto the surface creating a continuous, thin, wet layer. Avoid over-application or pooling liquid. Spills should be brushed out to a thin layer before being allowed to dry. Adhesion Promoter dries clear with a slight sheen, which aids in locating application areas once dry. Allow to dry completely prior to the application of the foundation coat layer.
  2. Stamped Asphalt: StreetBond® CemBase Asphalt Fortifier can be used to help resist scuffing. StreetBond® CemBase Asphalt Fortifier is applied in two layers at a rate of 300 ft<sup>2</sup> (27.9 m<sup>2</sup>) / 1 mixed unit as a base coat and must always be covered with at least one layer of StreetBond® 150. For example, if a project would typically require four layers of StreetBond® 150 on a stamped asphalt surface, a project needing fortification would have two layers of StreetBond® CemBase Asphalt Fortifier applied, followed by two layers of StreetBond® 150.
  3. Concrete Surfaces: StreetBond® WB Concrete Primer or StreetBond® QS Concrete Primer should be applied and allowed to dry completely prior to the application of the foundation coat layer. StreetBond® WB Concrete Primer must be applied at a rate of 0.2-0.25 gal/sq (0.82-1.02 L/10 m<sup>2</sup>). StreetBond® QS Concrete Primer must be applied at a rate of 0.33-0.5 gal/sq (1.36-2.04 L/10 m<sup>2</sup>).

## StreetBond Premium System Application

- A. The Foundation Coat layer of StreetBond® 150 Pavement Coating should be applied at a slightly thicker than normal application rate. This will ensure full coverage of the asphalt (textured or non-textured) or concrete to provide a proper binder surface for the FrictionCoat layer. On textured surfaces, pay close attention to the grout lines to ensure full coverage.
- B. Hold the spray gun between 24" and 32" (610-813 mm) above the asphalt or concrete surface and apply the coating using a circular movement. The Foundation Coat layer should then be broomed or rolled to ensure uniform thickness. Each application of coating material shall be allowed to dry to the touch before applying the next layer.

- C. Once the Foundation Coat is dry to the touch, the StreetBond® FrictionCoat Aggregate System layer should be applied with consistent splatter effect using an approved hand-held hopper. The FrictionCoat layer may take longer to dry due to its thickness.
- D. Once the FrictionCoat is dry to the touch, the first Finish Coat layer of StreetBond® 150 Pavement Coating can be applied. The Finish Coat layer should be spray-applied, then back-rolled (recommended) or lightly broomed to even out the coating without disturbing the FrictionCoat layer.
- E. Coating coverage and thickness should be applied using the rates outlined in Table 4 within this Section. Actual coverage may be affected by the texture of the asphalt pavement substrate and the imprint pattern selected. There will be less coverage with the first layer and higher coverage with subsequent layers.
- F. After the first Finish Coat layer is dry, the second Finish Coat layer of StreetBond® 150 Pavement Coating can be applied in the same manner. Coating must be allowed to cure before introducing the project to traffic. Cure times vary based on climate conditions but, due to the thicker FrictionCoat layer, at least 24 hours is recommended.
- G. StreetBond® Coatings can be combined with SR (solar reflective) Colorants to reduce the temperature of asphalt surfaces. With cooler hardscape surfaces, surrounding buildings typically see lower air conditioning costs and improved air quality. In addition to providing more comfortable urban environments, keeping the asphalt cooler extends the life of the asphalt itself and reduces the possibility of rutting or raveling.
- H. Properly applied StreetBond® Premium System should have a uniform texture, color, and appearance with no visible working lines. Grout lines should be well defined with no excess coating.

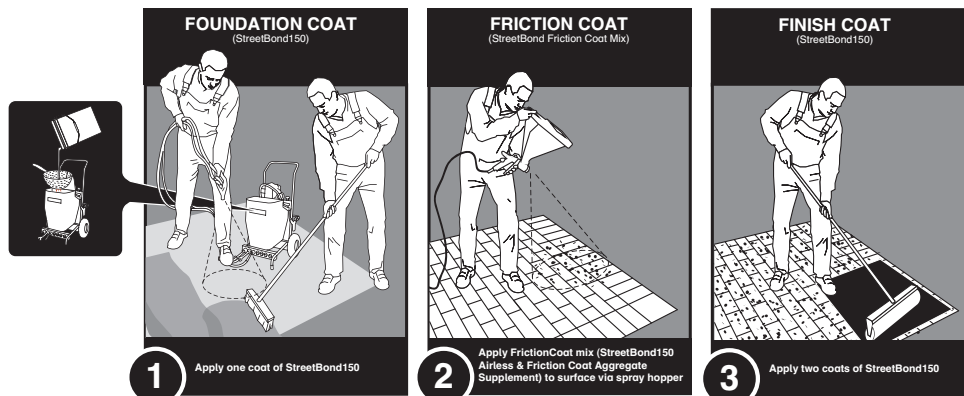
**Coating Sealer Application (Optional)**

- A. StreetBond® Sealer Concentrate can be applied to the surface of newly completed projects to reduce dirt and tire pick up. Using a low pressure handheld or backpack sprayer, spray sealer onto desired area at a rate of 33 gal/sq (1.36 L/10 m<sup>2</sup>).
- B. Use a soft bristle broom or roller to even out the surface coverage. On textured surfaces, be sure to remove excess Sealer from the grout lines and distribute coating evenly to ensure a continuous membrane is formed. StreetBond® Sealer Concentrate is milky white when sprayed, but dries clear with a semi-gloss sheen.

Table 4

STREETBOND® PREMIUM SYSTEM (FRICTIONCOAT) AGGREGATE SYSTEM COATING & COVERAGE RATE GUIDE			
Application Order	Layer	Coverage Rate Per Unit*	
		ft <sup>2</sup>	m <sup>2</sup>
1	Foundation Coat	300-400	27.8-37.1
2	FrictionCoat	300	27.8
3	Finish Coat - Layer 1	600	55.74
	Finish Coat - Layer 2	600	55.74

\*Approximations based on flat and textured surfaces. Porosity of mix design affects coverage rates.



# StreetBond® StreetPrint® Genuine Stamped Asphalt

## General

- A. StreetBond® StreetPrint® Genuine Stamped Asphalt is a highly suitable solution for a wide variety of decorative pavement applications. Paved entranceways, parking lots, residential driveways, sidewalks, plazas, medians, and cross-walks are just some examples of StreetPrint® applications.
- B. StreetBond® StreetPrint® Templates are designed to texture, imprint, and stamp asphalt pavement. The templates are constructed of 3/8" (9.5 mm) swaged wire rope cable pieces welded together to create a pattern.
- C. StreetPrint® Genuine Stamped Asphalt works by elevating the temperature of an asphalt pavement surface and then pressing a StreetPrint® wire rope stamping template into the surface to replicate, in relief, the grout depressions common to hand-laid brick or cobblestone, or any other design as shown on the drawings or described in the specifications. The imprinted asphalt pavement surface is then coated with a coating or system of coatings specifically formulated for asphalt pavement.
- D. StreetPrint® Genuine Stamped Asphalt is a highly specialized process that requires the skill of a qualified applicator working with the proper StreetHeat® asphalt heating equipment and applying highly specialized coating(s) designed specifically for application to asphalt pavement.

## Pre-Conditions: Asphalt Pavement

- A. A highly stable asphalt pavement free of defects is a prerequisite for the installation of StreetPrint® Genuine Stamped Asphalt.
- B. Do not install StreetPrint® Genuine Stamped Asphalt on poor quality asphalt pavement.

## Prerequisites for New Asphalt Pavement

- A. A durable and stable asphalt pavement mix design installed according to best practices over a properly prepared and stable substrate is a prerequisite for all long-lasting asphalt pavement surfaces. The application of StreetPrint® Genuine Stamped Asphalt does not change this requirement.
- C. Generally, the asphalt pavement mix design for roadways as prescribed by the local jurisdiction will be sufficient for the application of a pavement texturing system.

## Prerequisites for Existing Asphalt Pavement

- A. Depending upon condition and age, existing asphalt pavement may not be suitable for the successful application of StreetPrint® Genuine Stamped Asphalt.
- B. Minimally, the asphalt pavement must be in excellent condition and not have any defects including cracks, ruts or potholes, nor demonstrate any flushing, raveling, or similar deficiencies.

## Pavement Marking Removal: Recommended Guidelines

- A. Pavement markings may be removed by sandblasting, water-blasting, grinding, or other approved mechanical methods.
- B. The removal methods should, to the fullest extent possible, cause no significant damage to the pavement surface.
- C. The Owner must determine if the removal of the markings is satisfactory for the application of StreetPrint® Genuine Stamped Asphalt. Work should not proceed until this approval is granted.

## Surface Preparation

- A. The asphalt pavement surface must be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

## Layout

- A. Layout of the pattern for imprinting into the surface of the asphalt pavement should comply with pattern drawings and specifications.
- B. Template designs can range from traditional brick patterns to customized motifs and logos. The wide variety of brick, cobblestone, and slate stamped asphalt patterns used to create the impressions are made from a specially woven and swaged steel wire rope that is flexible, yet durable enough to withstand the rigors of the compaction equipment used to drive the templates into a hot asphalt surface. Refer to Architectural Detail Drawing SP-01 in this Manual.

## Application of StreetBond® StreetPrint® Genuine Stamped Asphalt

### Step 1: Heating the Asphalt Pavement

- A. The Applicator must use StreetHeat® asphalt heating equipment as described in the Equipment section in this Manual.
- B. The optimal pavement temperature for imprinting the StreetPrint® wire rope stamping template is dependent upon mix design, modifiers used in the mix, age of the pavement and weather.
- C. The surface temperature of the pavement should not exceed 325°F (163°C) as determined by an infrared thermometer reading taken after the heat is applied to the asphalt pavement.
- D. In order to achieve the proper depth of imprint, it is important to elevate the asphalt pavement temperature to a minimum depth of 1/2" (12.5 mm) without burning the pavement surface. This can only be accomplished using asphalt reheat equipment that is specifically designed for this work.

### Step 2: Surface Imprinting

- A. The pavement surface must be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.
- B. Once the asphalt pavement has reached imprinting temperature, the StreetPrint® wire rope stamping templates should be placed in position and pressed into the surface using vibratory plate compactors.
- C. The top of the template should be flush with the surrounding asphalt pavement, and can then be removed.
- D. Areas that have an imprint depth less than 3/8" (9.5 mm) should be re-heated and re-stamped prior to applying the coatings. Hand tooling is a permitted method to achieve proper imprint depth in areas difficult to access with the template.

### Step 3: Application of StreetBond® Pavement Coating

- A. After stamping, all imprinted surfaces should be coated with StreetBond® Pavement Coating to preserve and protect the asphalt surface.
- B. The Applicator should refer to Application Guideline Section of this Manual for the particular StreetBond® coating to be used.
- C. The surface coating must be completely dry before traffic is permitted.

## Cool Weather Caution

Application of StreetBond® coatings in cool temperatures will slow the rate of drying and curing which could lead to coating failures. Moisture must evaporate from the coatings in order to dry. Only after the coatings dry will they start to cure. Dry time and performance can be dramatically affected by shorter days, wind, shaded areas, direct sunlight, cooler temperatures, morning dew, and humidity.

### COOL WEATHER TIPS:

- Air temperature must be 50°F / 10°C and RISING or not drop below 40°F / 4°C for 24 hours.
- Substrate temperature must be 50°F / 10°C and RISING.
- Keep traffic off coating until it is completely dry.
- There should be no rain/moisture in forecast for at least 24 hours.
- Do not apply late in day. Application of coating in the morning will allow more time to dry throughout the day.
- Pre-heated asphalt can improve dry times.
- Air flow and gentle heat can improve dry times.
- Add the minimum amount of water, as outlined in the mixing instructions.

**If StreetBond® coatings are applied when moisture cannot evaporate, then the coating will not dry. The drying and curing of StreetBond® coatings have a direct impact on performance.**

## Hot Weather Caution

StreetBond® coatings need moisture evaporation to dry and cure. In hot temperatures, this may happen very quickly and can lead to a number of installation challenges if the proper steps are not taken. High temperatures will shorten handling time of coatings.

### HOT WEATHER TIPS:

- Be aware of surface temperatures. Surface temperatures over 120°F / 49°C can cause coating to flash dry and will shorten working time.
- Use ice water to increase the working time of StreetBond® coatings and help prevent blockages in the pump and hoses.
- Prime the sprayer by running ice cold water through it first. This will help the coatings to flow through the system without clogging.
- Apply coating early in the morning while it is cooler and sun is less intense.
- Keep the coating out of direct sunlight before and during mixing.
- Mix only what you can use within the following 15 minutes.
- Do not over broom coating as it will cause the coating to ball up. To prevent balling, broom only wet coating immediately behind spray pass.
- Add the maximum amount of water as outlined in the mixing instructions.

**If StreetBond® coatings are applied in hot temperatures, they can cure extremely quickly and it may be difficult to apply the coatings evenly. Take precautionary measures like those above for the best, even application and to prevent possible equipment plugs for cured coating.**



# **Section 4**

# **Care, Maintenance & Repair**

## Care

StreetBond® coatings protect asphalt from aging and weathering, providing a sustainable, renewable surface. Caring for the project will not only preserve the look of the project, but also lengthen its overall lifespan.

### KEEP THE SURFACE CLEAN

**Dirt, Sand, and Gravel:** If dirt, sand, or gravel are present at the interface between vehicle tires and the StreetBond® coated surface, a grinding action will occur. This will result in premature wear of the coating and can chip the impressed pattern in the asphalt.

**Oil Stains:** Mild oil leaks do not damage the StreetBond® coated surface other than being unsightly. To remove oil stains, use a mild degreaser or detergent such as United Cleaning Concentrate (UCC) or Simple Green-All Purpose Cleaner.

**Leaves:** In certain climates, some types of leaves can stain the StreetBond® coated surface. Light colored leaves tend to cause stains more readily than darker ones. In areas where leaf staining may be a problem, regular leaf cleaning is recommended.

**Chewing Gum:** Removal of chewing gum from asphalt surfaces can be difficult. Use ice to freeze the gum, and then chip off the gum with a small paint scraper. Use care not to damage the StreetBond® coating.

**NOTE:** Pressure washing StreetBond® coated surfaces is acceptable, but exercise caution when using extremely high pressure commercial pressure washers. Extremely powerful water jets can cause the asphalt to delaminate below the StreetBond® coating. GAF recommends 2000 psi or less when directly cleaning the surface.

Alternatively, use road sweeper vehicles that are equipped with nylon rotating brushes and water sprayer/jet nozzles to remove dirt from the surface. Do not use rotating brushes with steel bristles, as that may cause damage and premature wearing of the coating.

## Maintenance

### RECOATING

StreetBond® coatings provide a sustainable, renewable surface. Generally, the only maintenance required is recoating the surface. However, if the original stamped impression has worn away, re-stamping will also be required. Recoating a worn area requires the same climate conditions and installation methods as a new application.

StreetBond® coating projects can be recoated at any time to make an old project look brand new. When doing maintenance, apply more coating to the areas that have experienced more focused wear. Targeting the areas that receive more traffic by applying more coating will allow for longer wear and more cost effective maintenance cycles.



**Please contact your local Applicator to receive a quote for recoating your existing project. If you require assistance locating an Applicator, contact GAF Technical Services at [technicalquestions@gaf.com](mailto:technicalquestions@gaf.com) or 800-766-3411.**

## Repair

Although StreetBond® coatings are highly durable and long lasting, they are subject to the quality of the asphalt on which they are applied. Occasionally, asphalt repair may be required. The following key factors should always be considered when performing asphalt repairs to optimize the final look.

### 1. ASPHALT REMOVAL

For repairs that require asphalt removal, always use a saw to make cuts within the grout lines if possible, as cuts outside of the grout lines may be visible when the project is finished.

### 2. DIGGING BELOW ASPHALT

If repairs will involve digging below the removed asphalt, always replace any base material that was removed and ensure proper compaction to avoid uneven settlement of new asphalt.

### 3. ASPHALT REPLACEMENT

When replacing removed asphalt, ensure the new asphalt is properly compacted using a roller or plate compactor so it sits flush with the existing asphalt.

**Before:**

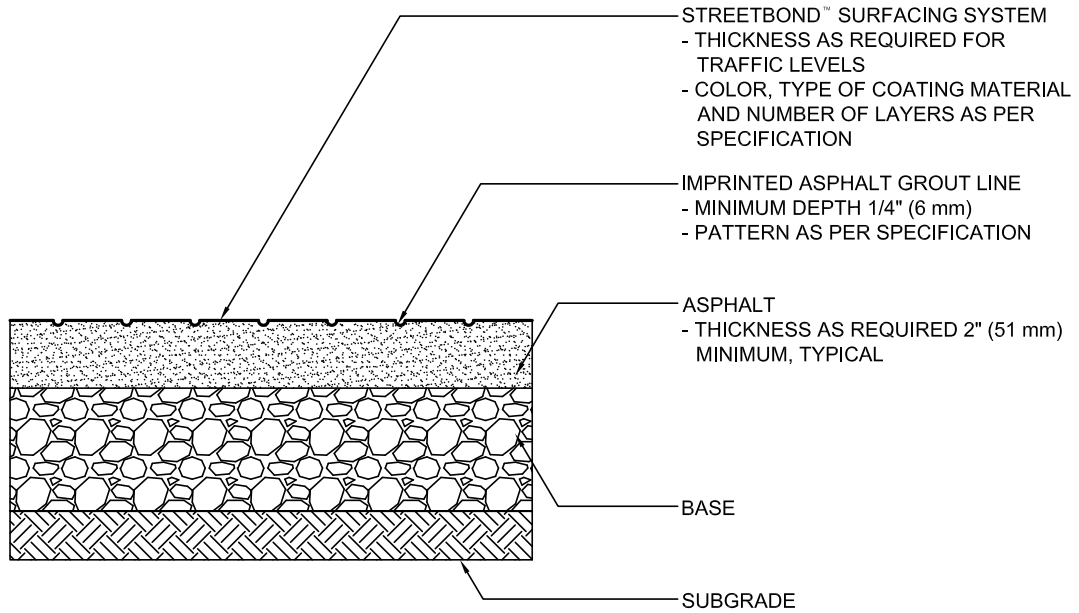


**After:**





# **Section 5**

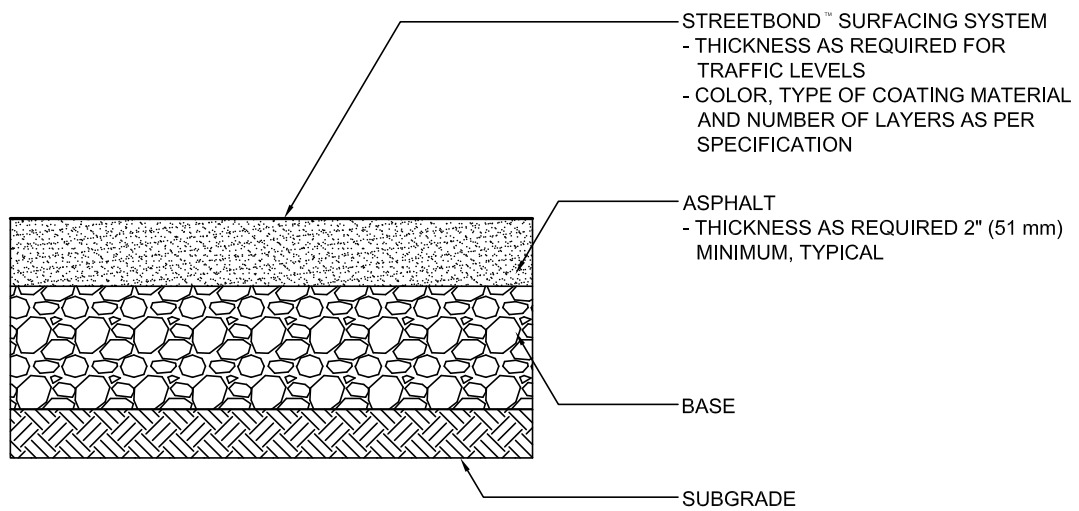
# **Architectural Detail Drawings**



**NOTE:**

1. ACTUAL BASE AND PAVEMENT LAYER THICKNESSES SHOULD BE PROPERLY DESIGNED BY A QUALIFIED PROFESSIONAL.
2. PRIMER FOR NEW ASPHALT IS NOT REQUIRED. STREETBOND™ ADHESION PROMOTER CONCENTRATE IS NOT TO BE USED WITH CONCRETE SUBSTRATES.

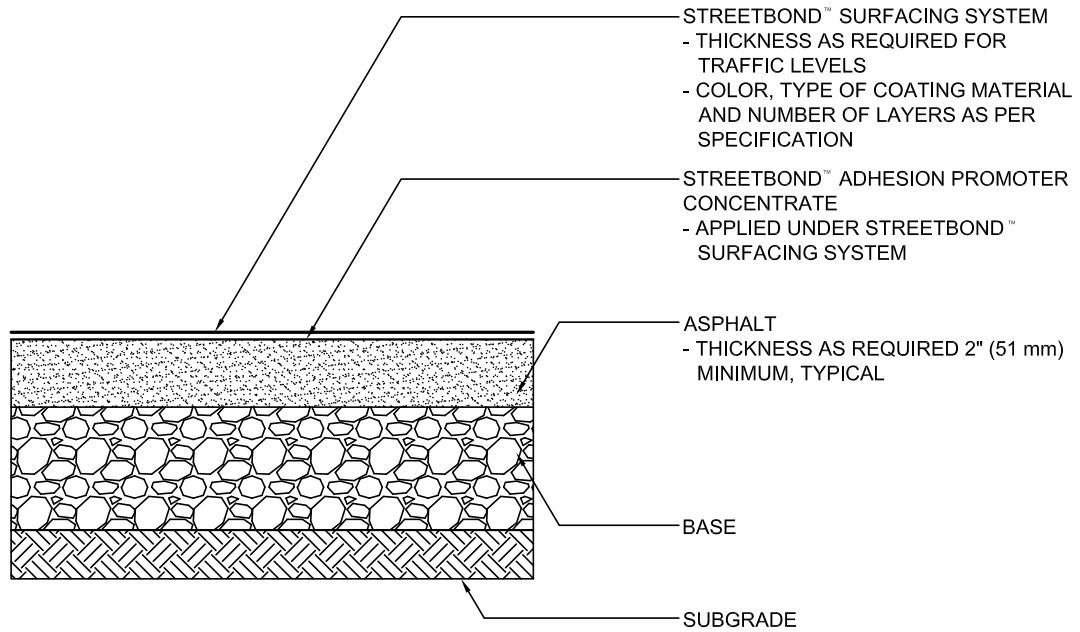
  <small>www.gaf.com 1 Campus Drive Parsippany, NJ 07054</small>	<b>TYPICAL PAVEMENT CROSS-SECTION FOR NEW ASPHALT (IMPRINTED)</b>	SYSTEM	DRAWING #
		<b>SB</b>	<b>101</b>
		SCALE	ISSUE/ REVISION DATE
		N.T.S.	2-16-17



**NOTE:**



1. ACTUAL BASE AND PAVEMENT LAYER THICKNESSES SHOULD BE PROPERLY DESIGNED BY A QUALIFIED PROFESSIONAL.
2. PRIMER FOR NEW ASPHALT IS NOT REQUIRED. STREETBOND™ ADHESION PROMOTER CONCENTRATE IS NOT TO BE USED WITH CONCRETE SUBSTRATES.

 	<p><b>TYPICAL PAVEMENT CROSS-SECTION FOR NEW ASPHALT (FLAT)</b></p>	<p>SYSTEM</p> <p><b>SB</b></p>	<p>DRAWING #</p> <p><b>102</b></p>
		<p>SCALE</p> <p>N.T.S.</p>	<p>ISSUE/ REVISION DATE</p> <p>2-16-17</p>

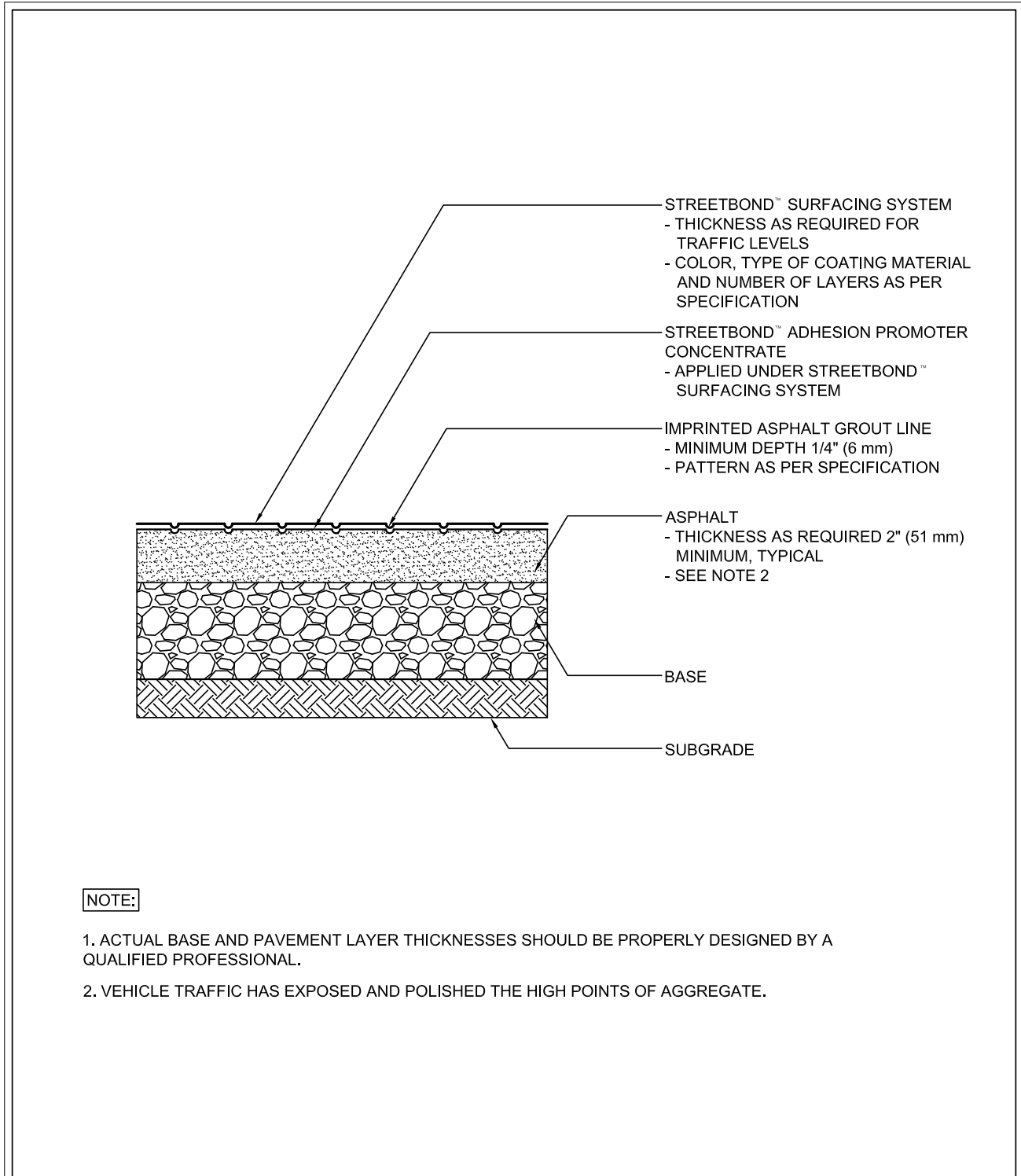


**NOTE:**

1. ACTUAL BASE AND PAVEMENT LAYER THICKNESSES SHOULD BE PROPERLY DESIGNED BY A QUALIFIED PROFESSIONAL.



 www.gaf.com 1 Campus Drive Parsippany, NJ 07054		TYPICAL PAVEMENT CROSS-SECTION FOR STABLE AGED POLISHED ASPHALT (FLAT)	SYSTEM	DRAWING #
			<b>SB</b>	<b>103</b>
			SCALE	ISSUE/ REVISION DATE
			N.T.S.	10-1-16

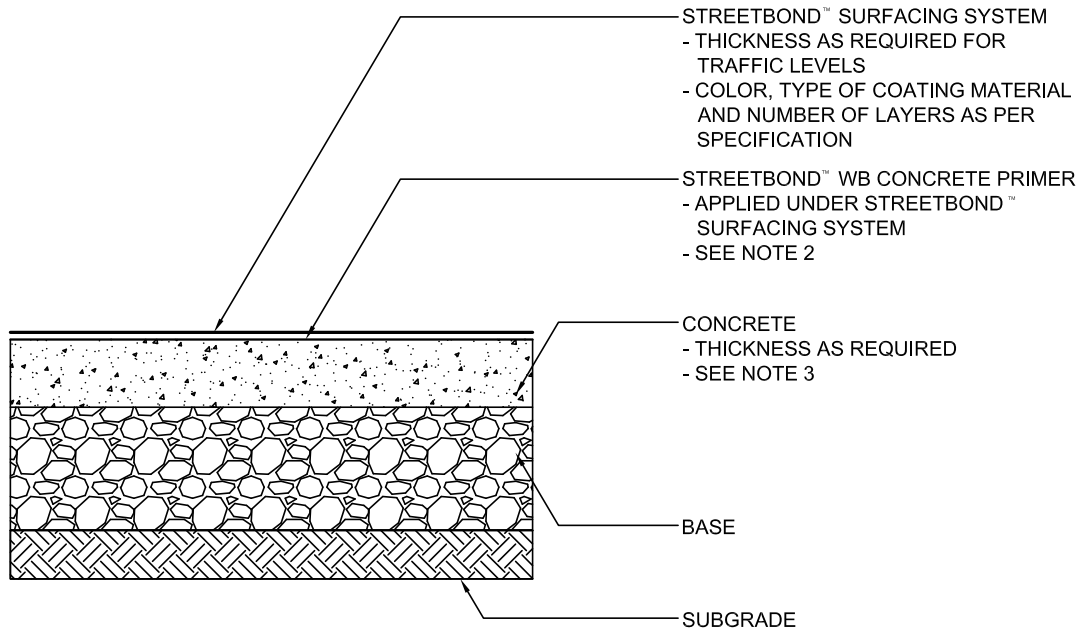




**NOTE:**

1. ACTUAL BASE AND PAVEMENT LAYER THICKNESSES SHOULD BE PROPERLY DESIGNED BY A QUALIFIED PROFESSIONAL.
2. VEHICLE TRAFFIC HAS EXPOSED AND POLISHED THE HIGH POINTS OF AGGREGATE.

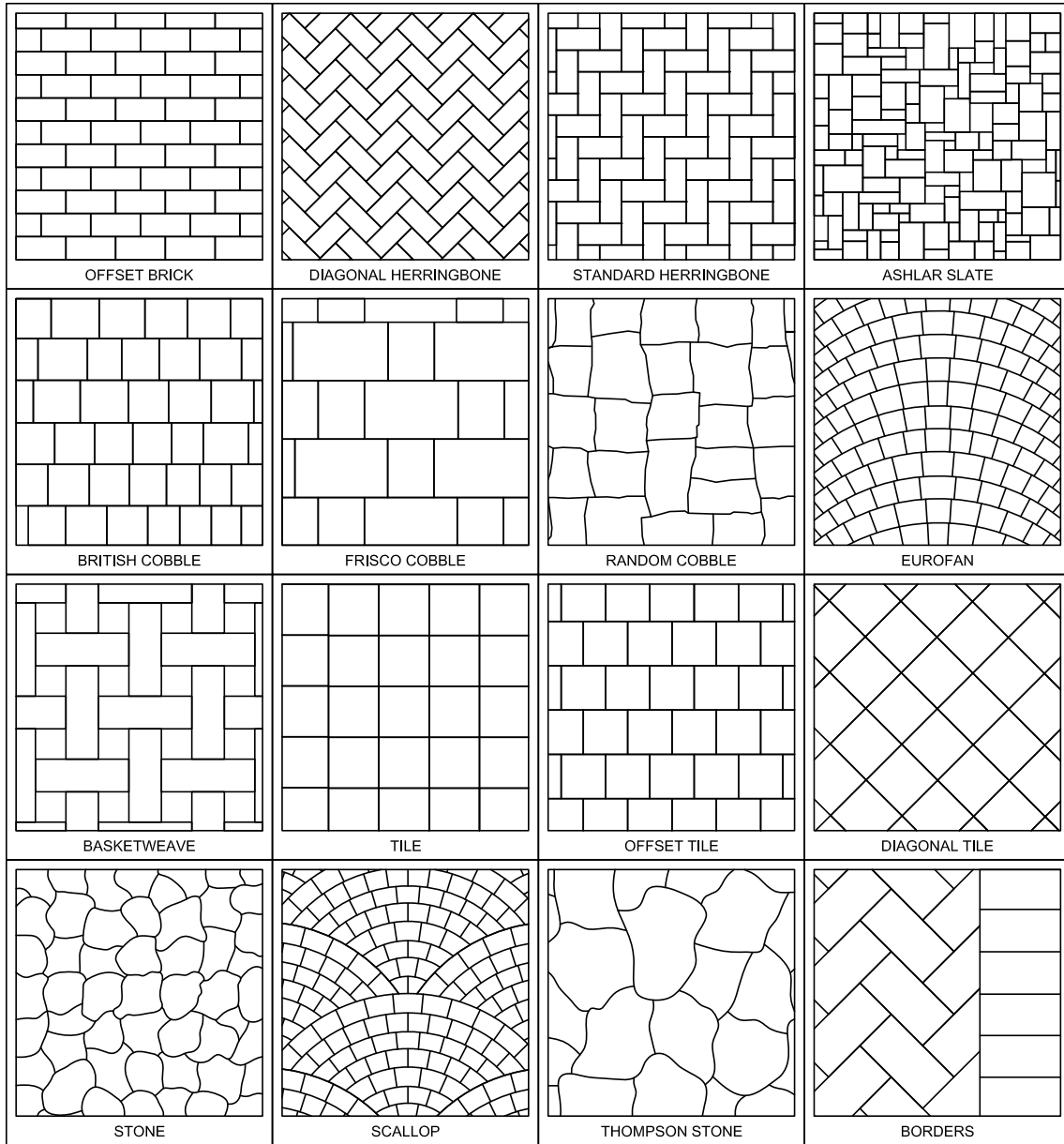
 www.gaf.com 1 Campus Drive Parsippany, NJ 07054		TYPICAL PAVEMENT CROSS-SECTION FOR STABLE AGED POLISHED ASPHALT (IMPRINTED)	SYSTEM <b>SB</b>	DRAWING # <b>104</b>
			SCALE N.T.S.	ISSUE/ REVISION DATE 10-1-16



**NOTE:**


1. ACTUAL BASE AND CONCRETE LAYER THICKNESSES SHOULD BE PROPERLY DESIGNED BY A QUALIFIED PROFESSIONAL.
2. STREETBOND™ QS (QUICKSET) CONCRETE PRIMER CAN BE USED IN LIEU OF STREETBOND™ WB CONCRETE PRIMER AND IS RECOMMENDED FOR CONCRETE REQUIRING PRIMER DURING COOL WEATHER CONDITIONS.
3. CONCRETE CAN BE NEW, SPALLED OR HAVE EXPOSED AGGREGATE.

  <small>www.gaf.com 1 Campus Drive Parsippany, NJ 07054</small>	<b>TYPICAL PAVEMENT CROSS-SECTION FOR CONCRETE (FLAT)</b>	SYSTEM	DRAWING #
		<b>SB</b>	<b>105</b>
		SCALE	ISSUE/ REVISION DATE
		N.T.S.	10-1-16



**NOTE:**

1. FOR CUSTOM TEMPLATES, THE SPACING BETWEEN THE WELDS SHOULD BE A MINIMUM OF 3" (76 mm) APART, AND A MAXIMUM OF 12" (305 mm) APART.

 <small>www.gaf.com</small> 1 Campus Drive Parsippany, NJ 07054	<b>STREETPRINT TEMPLATE DETAILS</b>		SYSTEM <b>SP</b>	DRAWING # <b>01</b>
	DETAILS		SCALE N.T.S.	ISSUE/ REVISION DATE 8/25/16

# NOTES

# NOTES



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