

ASPHALT & CONCRETE PAVEMENT COATINGS



this is asphalt?



extend pavement life



transform with

color



Bentley University Waltham, MA



Intersection & Crosswalks Padova, Italy

StreetBond® Coatings are for

parking lots

community areas schools / playgrounds

crosswalks / sidewalks

decorative streetscapes

cycle lanes / bus lanes

pedestrian areas

parks / plazas

sport courts

driveways

_

medians

entryways

roads

traffic flow

revitalize and rejuvenate





Elementary School Playground San Pablo, CA

Transformational properties - what can StreetBond® Coatings do?

- change the look & feel of a community with a coat of color
- keep cyclists safe by visually alerting drivers to the presence of a cycle lane
- enhance the open area or entrance of a campus, civic center, or park
- · transform a driveway
- create a more welcoming store entrance



potential to transform



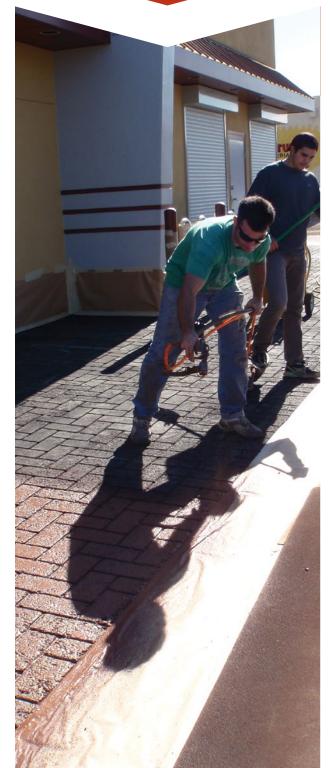






why choose asphalt?

monolithic recyclable cost effective



asphalt is recyclable

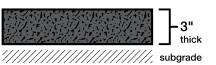


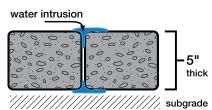
95%

of reclaimed asphalt is recycled or reused.

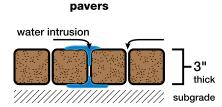
Asphalt pavements are America's most recycled product.¹

asphalt





concrete



asphalt is monolithic

Asphalt is a flexible pavement material that can be placed as a continuous, monolithic surface without the expansion joints common with concrete or the joints associated with placing multiple units in a paver system.

Since it is a continuous unit, asphalt surfaces reduce trip hazards that can result from shifting pavers or concrete due to freeze/thaw cycles, base movement, or shear forces from vehicles turning, braking, or accelerating.

The seamless surface also minimizes the risk of base damage from water intrusion and does not support biological growth that can compromise the pavement's integrity.

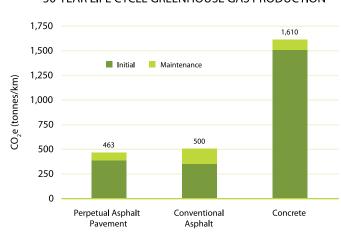
asphalt is cost effective

Asphalt is a flexible pavement material that conforms to base irregularities and can be applied thinner than concrete, saving material cost.

Additionally, asphalt doesn't require forming, is fast to install, and easy to maintain.

_____ Carbon Footprint

50-YEAR LIFE CYCLE GREENHOUSE GAS PRODUCTION



asphalt is recyclable

Asphalt is 100% recyclable and is recycled for its own use.

"Currently in North America, at least 95 percent of the asphalt pavement removed from the road is either reused in new asphalt pavements or recycled as base or shoulder material."

Asphalt has a lower carbon footprint than concrete; "the asphalt pavement options only produce about 30% of the greenhouse gas emissions of comparable concrete pavements."

¹2010 Asphalt Pavement Alliance white paper, entitled: *Carbon Footprint: How Does Asphalt Stack Up?*

asphalt is better

than traditional decorative pavers

Pavers have limited style options and are expensive to buy, install, and maintain.

Pavers can cause:

heaving

because of freeze/thaw and expansion/ contraction, corners can create trip hazards



cracking

concrete and large slabs of stone will crack because they lack the flexibility of asphalt



growth

asphalt's seamless surface does not support biological growth that can compromise a pavement's integrity



why apply a coating?

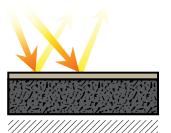
protects cools beautifies





coatings preserve & protect





Bonded asphalt is better

Bonded asphalt is conventional asphalt with a renewable top layer of high-quality coating that reinforces the surface, binding the aggregate fines, resisting water penetration, and protecting the asphalt from the effects of UV degradation and chemicals.

Bonded asphalt can also provide solar reflectivity to cool the surface; it has a longer useful life than conventional asphalt, thereby reducing life cycle cost.

StreetBond® Coatings protect asphalt from:

- UV damageWater damage
- Chemical damage
- Loss of aggregates

UV and water exposure cause asphalt to prematurely age, causing a loss in flexibility and resulting in cracking and raveling (loss of aggregates). Cracked asphalt exposes the base to water, which can result in structural failure.

solar reflective pavement

StreetBond® Coatings beautify

Adding color and design to paved surfaces improves the aesthetics of urban environments. The project shown to the right was initiated by the NYC **Transportation Commission** and the Times Square Alliance to make the area more pedestrian friendly. To convert asphalt streets into pedestrian areas, they simply changed the color of the surface and added a design using StreetBond® SB150 Pavement Coating.







(Above and Far Left) Research In Motion, the makers of Blackberry cell phones, converted their parking lot to cool pavement that qualified for LEED® points using StreetBond® SB150 Pavement Coating with SR Slate Colorant. The SR Colorant uses special technology to provide solar reflectivity even though it is a darker slate color.

StreetBond® Coatings cool

Extreme heat is currently the leading cause of weatherrelated deaths in the United States. According to the Arizona Department of Health Services, a 5°F (2.7°C) reduction in the ambient temperature can result in a 14°F to 23°F (8-13°C) reduction in the heat index (depending on humidity levels).

Asphalt surfaces coated with a solar reflective coating are significantly cooler. StreetBond® SB150 Pavement Coating with a SR (solar reflective) Colorant keeps asphalt cool, delaying the aging and degradation process and creating a safer, more comfortable environment.

Urban Heat Island Effect

Urban heat islands are urban areas where the temperature is higher than the surrounding rural areas. Why? Typical darkcolored pavements and rooftops absorb more heat than they emit during the day. The increased energy requirement and cost for air conditioning can directly affect the temperature difference between the building's interior and exterior.

33%

Dependent on several factors, an average of 33% of the cooling portion of an energy bill may be saved if the external temperature can be reduced by 10°F (6°C).

premium coating characteristics

why do **StreetBond®** Coatings fit in your environment?

safer for the environment solar reflective skid resistant renews & repairs





StreetBond® is solar reflective

StreetBond® Coatings combined with SR (solar reflective)

Colorants reduce the temperature of asphalt surfaces. With

cooler hardscape surfaces, surrounding buildings typically

see lower air conditioning costs and improved air quality.

environments, keeping the asphalt cooler extends the life

of the asphalt itself and reduces the possibility of rutting or

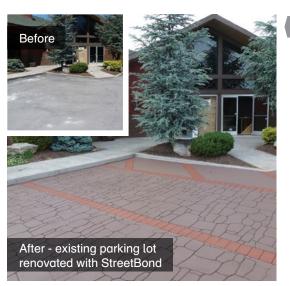
In addition to providing more comfortable urban

With an SRI value of 29+, the coated asphalt parking lot produces less CO, and typically costs 25% less than concrete to install.



Unlike some coatings that rely on polishing for their durability, StreetBond® Coatings incorporate carefully selected aggregates to provide superior slip and skid resistance, both initially and over time, making StreetBond®-coated surfaces safer for foot and vehicle traffic. StreetBond® Coatings are also fully compliant with the Americans with Disabilities Act (ADA).

(above) a "locked-wheel test" in progress, testing friction coefficients for products to be used in roadways.



StreetBond® renews & repairs

StreetBond® Coatings are designed with renewability in mind.

They can be applied to new asphalt, or can be used to renew

An existing parking lot was revitalized at **Bucket Head** Tavern in Knoxville, TN.

Worker friendly

Ecologically friendly





As water-based acrylics, StreetBond® Coatings products have very low VOC levels, which are safer for the environment than solvent-based coatings or coatings



Producing no foul odors and no toxic residue, and creating minimal neighborhood disruption.

StreetBond® is skid resistant



ravelina.

StreetBond® SR Colorants can contribute to LEED® points

SRI (Solar Reflective Index) The measure of a material's ability to reflect solar heat

SRI 29 (Black) (Minimum for LEED® point)

SRI 100 (White)



existing asphalt areas.

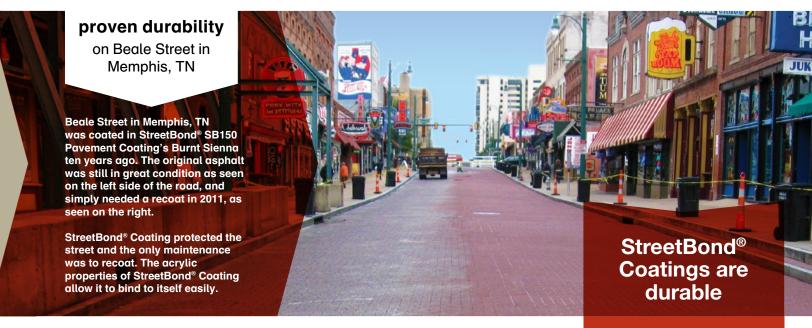
LEED® is a rating program developed by the United States Green Building Council (USGBC)

USGBC® and the related logo are trademarks owned by the U.S. Green Building Council and are used with permission

premium coating characteristics

what makes
StreetBond®
Coatings
last?

durable
color stable
flexible
recoatable





StreetBond® is color stable

StreetBond®'s advanced acrylic polymer technology provides superior color stability compared with other technologies such as epoxies. Acrylics are non-yellowing and have good self-cleaning characteristics.

StreetBond® Coatings use the highest-quality pigments to inhibit fading caused by the sun's ultraviolet rays. Cheaper organic pigments can provide acceptable initial color but may fade, resulting in color change and loss of vibrancy.



StreetBond® is flexible

Unlike many coatings, especially coatings that derive their durability from hardness, StreetBond® Coatings are designed to conform to the normal expansion and contraction of asphalt surfaces and will not peel, delaminate, shrink, or crack. Harder, less flexible coatings that crack are unsightly and may accelerate asphalt damage.



StreetBond® is recoatable

StreetBond® Coatings are designed with renewability in mind. Acrylic-based products are breathable, which inhibits delamination and helps the coating retain excellent adhesion. As a result, wear happens from the top down, keeping the base layer intact.

Combined with excellent self-adhesion properties, StreetBond® Coatings can be reapplied to renew and refresh the surface and re-establish the protective weather barrier.





Performance achieved through layers



Premium StreetBond® Coatings are built from an epoxy-modified acrylic formula that is specifically designed to meet traffic demands, even in wet conditions, by limiting the softening effect that water has on traditional water-based coatings.



StreetBond® Coatings are resistant to damage and deterioration when exposed to fuel, engine oil, and deicing agents.



Long-term, durable performance is achieved through layers; where extra durability is required, additional layers of StreetBond® Coating can be applied.

10

our products

premium coatings parking lot protection substrate preparation



best-in-class products





(above) Completed Premium System applied to an imprinted asphalt surface

Coating Selection Guide

Purpose	Application	Asphalt Substrate	Concrete Substrate
Protective Coating	Vehicular & Pedestrian	StreetBond® SB150 Pavement Coating	StreetBond® SB150 Pavement Coating
	Heavier Vehicular Traffic	StreetBond® Premium System	StreetBond® Premium System
	Pedestrian & Light Vehicular Traffic	StreetBond® SB150 Pavement Coating	StreetBond® SB150 Pavement Coating
	Pedestrian Traffic	StreetBond® SB120 Pavement Coating	StreetBond® SB120 Pavement Coating
	Asphalt Preservation & Protection	StreetBond® DuraShield Pavement Coating	•
Substrate Preparation	New Concrete*, Spalled Concrete, Exposed Aggregate Concrete (Polished Stone)	•	StreetBond® QS or WB Concrete Primer
	Exposed Aggregate Polished Asphalt	StreetBond® Adhesion Promoter Concentrate	

Note: No primer is required with newly installed stable asphalt.

*It is required that new concrete be etched prior to primer application for adhesion and it is highly recommended that aged concrete is also etched prior to primer application.

DuraShield:

revolutionary parking lot protection

StreetBond® DuraShield Pavement Coating is designed to enhance the appearance of asphalt surfaces and to protect the asphalt from degradation due to oxidation from exposure to UV rays and water. It also covers minor surface cracks and imperfections.

StreetBond® DuraShield Pavement Coating contains 100% acrylic polymer as opposed to traditional seal coat products, which are mostly coal-tar emulsions. Therefore, the wear properties of StreetBond® DuraShield are far superior to traditional asphalt emulsion seal coat products.

StreetBond® DuraShield Pavement Coating resists wear yet remains flexible to movement with an asphalt substrate without cracking. StreetBond® DuraShield can be combined with StreetBond® SB150 Pavement Coating to provide a comprehensive parking lot solution that satisfies the variety of performance requirements found in parking lots.



why choose GAF?



innovative & experienced





ISO standards

are internationally

recognized

quality management systems with the

basic philosophy of providing a consistent

product while

monitoring its

performance

and striving

for continual

improvement.

GAF is one

of the few

manufacturers in our industry

to possess both ISO 9001 and 14001 certifications.

GAF's

technology GAF technology and experience is broad, reaching beyond a narrow focus on one particular industry or application. Our expertise and the lessons we learn in the lab are shared across brands, resulting in leadership products, primers, and innovation you won't get from a company that only deals with pavement coatings.



GAF's support doesn't end when you're awarded the job. With a worldwide team of sales and technical representatives, GAF is one GAF'S of the only companies in the industry that offers in-field support.

support In addition, we offer international technical support. We have team technical representatives located worldwide to help on the job site and to provide hands-on training.

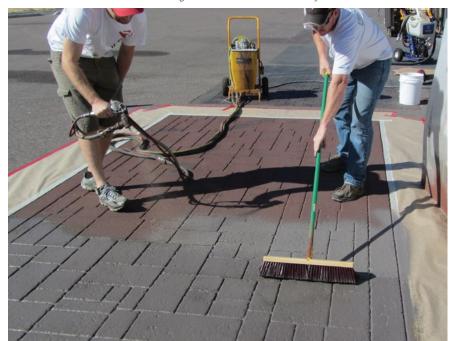
only warranty of its **kind**



We stand behind our products and ensure they are of the highest quality. When applied by Accredited StreetBond® Applicators, GAF is guarantees are available up to 5 years*.

reliable Founded in 1886, GAF is proud to be North America's largest roofing manufacturer. As the industry leader with over \$3 billion in sales, GAF proudly offers a comprehensive portfolio of award-winning, innovative roofing products. GAF stands behind its products, its people, and its warranties. We have extensive facilities conveniently located across the United States to serve you better—so you can expect quick order fulfillment and a reliable supply.

*See gaf.com for StreetBond® warranty information





manufacturing

ISO 9001:2008 ISO 14001:2004

support certifications warranties





gaf.com is a powerful tool

We offer case studies to provide real life examples of companies and communities that have used StreetBond® Coatings with success. We also publish all of our technical data sheets, specifications, SDS, and marketing materials online in downloadable PDF format.

Visit gaf.com today for complete information on StreetBond® Coatings and all our innovative commercial roofing products.



parking lot solutions

right product, right place

