

• this is **asphalt?**

What's inside: • potential to transform • asphalt is sustainable • coatings preserve & protect • premium coating characteristics • StreetBond: best-in-class products • Quest: innovative & experienced



- crosswalks / sidewalks
- decorative streetscapes



Transformational properties - what can StreetBond **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
- Elementary School Playground San Pablo, CA



Bentley University Waltham, MA



transform with color

extend pavement

life







revitalize and rejuvenate



this is asphalt?



potential to transform

StreetBond is for

parking lots community areas schools / playgrounds cycle lanes / bus lanes pedestrian areas parks / plazas sport courts driveways entryways medians roads

traffic calming











why choose asphalt?

monolithic sustainable cost effective





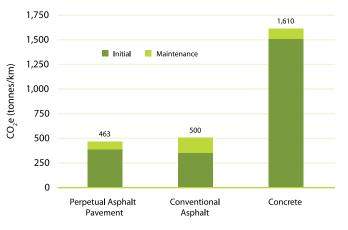
asphalt is cost effective

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.

LOW Carbon Footprint

50-YEAR LIFE CYCLE GREENHOUSE GAS PRODUCTION



asphalt is better

than traditional decorative pavers

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

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

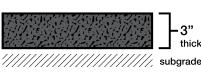


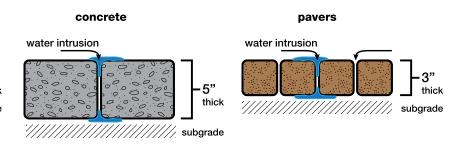
cracking concrete and large slabs of stone will crack because they lack the flexibility that asphalt has



asphalt is sustainable

asphalt





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.

of reclaimed asphalt is recycled or reused. Asphalt pavements are America's most recycled product.¹

Since it is a continuous unit, asphalt surfaces reduce trip hazards that can result from shifting pavers or concrete resulting from 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 sustainable

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."

¹ 2010 Asphalt Pavement Alliance white paper, entitled: *Carbon* Footprint: How Does Asphalt Stack Up?





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



why apply a coating?

protects cools beautifies





StreetBond

beautifies

Adding color and design to paved

surfaces improves the aesthetics

Transportation Commission and

make the area more pedestrian friendly. To convert asphalt

streets into pedestrian areas,

using StreetBond150.

Times Square, New York City

they simply changed the color of

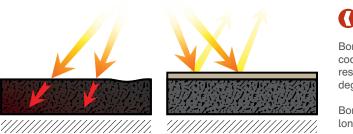
the surface and added a design

the Times Square Alliance to

of urban environments. The project shown to the right

was initiated by the NYC

coatings preserve & protect



• StreetBond protects

StreetBond protects asphalt from:

UV damageWater damage

Chemical damage
Loss of aggregate

base to water,





(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 with SR Slate Colorant. StreetBond SR Slate uses special technology to provide solar reflectivity even though it is a darker Slate color.

StreetBond cools

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

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

() Bonded asphalt is better

Bonded asphalt is conventional asphalt with a renewable high quality coating top layer 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.

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

Urban Heat Island Effect

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



33% of an energy bill can be saved if the external temperature can be reduced by 10°F (6°C).

why does **StreetBond** fit in your environment?

environmentally friendly

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.

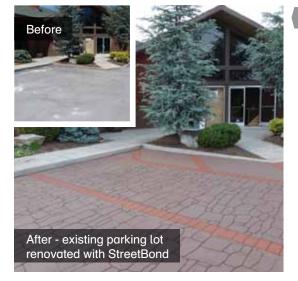
In addition to providing more comfortable urban environments, keeping the asphalt cooler extends the life of the asphalt itself and reduces the possibility of rutting or ravelina.



StreetBond is skid-resistant

Unlike some coatings that rely on polishing for their durability, StreetBond incorporates 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 is 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.



asphalt parking lot was

StreetBond renews & repairs

StreetBond is designed with renewability in mind. StreetBond can be applied to new asphalt, or can be used to renew existing asphalt areas.

StreetBond uses acrylic-based technology which has excellent self-adhesion properties, meaning that it can be reapplied to renew and refresh the surface and re-establish the protective weather barrier.



StreetBondSR can contribute to LEED[®] credits

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

With an SRI value of 29+,

the coated

asphalt parking

lot produces

less CO₂ and

typically costs

25% less than concrete to

install.

SRI 0 SRI 29 (Black) (Minimum for LEED credit) SRI 100 (White)



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

coating characteristics

An existing revitalized at Bucket Head Tavern in Knoxville, TN.





StreetBond uses water-based technology that is safe and easy for workers doing the application and requires no special safety gear



As water-based acrylics, StreetBond products have very low VOC levels, which are safer for the environment than solvent-based coatings or coatings that require solvents for cleanup.



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



Neighborhood friendly



what makes **StreetBond** last?

durable color stable flexible renewable

proven durability on Beale Street in

Memphis, TN

Beale Street in Memphis, TN was coated in StreetBond150's Burnt Sienna ten years ago. The original asphalt was still in great condition as seen on the left side of the road, and simply needed a recoat in 2011, as seen on the right.

StreetBond protected the street and the only maintenance was to recoat. The acrylic properties of StreetBond allow it to bind to itself easily.



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 uses 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 is 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 both unsightly and may accelerate asphalt damage.



StreetBond is renewable

StreetBond is 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 in-tact.

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

coating characteristics







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.

> MEK immersion test (L) typical coating dissolved; (R) StreetBond remains intact

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 can be applied.

Coating Selection Guide

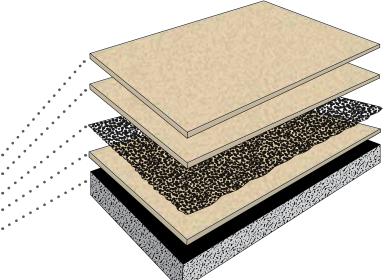
Purpose	Application	Asphalt Substrate	Concrete Substrate
Protective Coating	Vehicular & Pedestrian	StreetBond150	StreetBond150
	Heavier Vehicular Traffic	StreetBond Premium System	StreetBond Premium System
	Pedestrian & Light Vehicular Traffic	StreetBond120	StreetBond120
	Asphalt Preservation & Protection	DuraShield	•
	Cycle Lanes	StreetBondCL	StreetBondCL

Substrate Preparation	Polished stone	Adhesion Promoter Concentrate	Adhesion Promoter Concentrate
	New Concrete	•	Concrete Primer WB Concrete Primer QS

Ω What is the StreetBond **Premium System?**

The StreetBond Premium System is composed of several layers of coating; each layer contributing to the overall performance of the System.

> Premium System: StreetBond150 • StreetBond150 • FrictionCoat layer • StreetBond150 · * asphalt surface • *





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

our products

premium coatings parking lot protection substrate preparation



best-in-class products

DuraShield:

revolutionary parking lot protection

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, DuraShield also covers minor surface cracks and imperfections.

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

DuraShield resists wear yet remains flexible to move with an asphalt substrate without cracking.

DuraShield can be combined with StreetBond150 to provide a comprehensive parking lot solution that satisfies the variety of performance requirements found in parking lots.



why choose **Quest?**









quest-cp.com is a powerful tool

Online you will find an interactive map of our network of Accredited Applicators, Representatives and Distributors.

We also offer case studies to provide real life examples of companies and communities that have used StreetBond with success.

We publish all of our technical data sheets, specifications, MSDS and marketing materials online in downloadable PDF format

Quest's

technology Quest 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 asphalt coatings.

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

only warranty

guaranteed

We stand behind our products and ensure they are of the highest quality. When applied by Accredited StreetBond Applicators Quest is (ASA), we offer a performance warranty on select products and applications; the only warranty of its kind in our industry.

> Quest Construction Products (QCP) is a part of Quest Specialty Chemicals, Inc., a large, financially stable company with a diverse portfolio of advanced products. QCP will always stand behind its products, its people, and its warranties. With multiple manufacturing plants located across the country, you can expect quick order fulfillment and a reliable supply.









Quest's support doesn't end when you're awarded the job. With over 60 sales and technical staff members nationwide. Quest is one of QUEST'S the only companies in the industry that offers in-field support.

of its kind

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.

QCP is one of the few manufacturers in our industry to possess **both** ISO 9001 and 14001 certifications.





ISO 9001:2008 ISO 14001:2004

parking lot solutions right product, right place

StreetBond150

- High performance coating for flat or imprinted asphalt surfaces
- Long lasting and durable
- Renewable; can be recoated

StreetBond Premium System

- Added friction aggregates for high vehicular traffic areas
- Layer-based system designed to perform under extreme wear conditions

DuraShield

- Economically-priced
- Repairs imperfections in existing asphalt
- Environmentally-friendly alternative to coal tar-based asphalt emulsions





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