

# STABILIA

## Key benefits

STABILIA is a sustainable alternative, combining the strength of concrete and the permeability of a granular base, for a hybrid pavement solution.

### Durable

- Long-term stability and a level working platform
- High strength characteristics with cement-stabilized aggregate
- Density results of 98% proctor
- Stiffness (resilient modulus) values of at least 600 MPa

### Drainage

- Quick water removal, water-free surfaces
- Water and salt do not get trapped in bedding layer, preventing long-term break down
- Permeability rates similar to compacted granular

### Economical

- Cost-effective base option
- Uses less material than conventional granular
- Prevents long term and costly maintenance issues

### Sustainable

- Less material to achieve the same and/or better results
- Aggneo™ recycled concrete aggregate (where locally available)
- Contempra™, a cement manufactured with a 10% reduction of CO2 emissions
- Stronger materials for longer lasting paved surfaces: 'Build it once, Build it right' means less related waste



## Customer driven innovation

Each second Lafarge delivers concrete to one of countless construction projects around the world. Every day 1,200 technical sales representatives from Lafarge interact with customers at over 6,000 different sites. Innovation is our way of addressing the needs we encounter through these interactions. Our research and development teams are dedicated to innovation, exceeding even the greatest demands of our clients. Our new solutions attain technical performance and anticipate changing industry requirements. Each designed to be more effective in the construction process and help our clients achieve a greater level success.

LAFARGE CANADA INC.  
Eastern Canada - Head Office  
6509 Airport Road  
Mississauga, ON, L4V 1S7  
www.lafarge-na.com | 905-738-7070

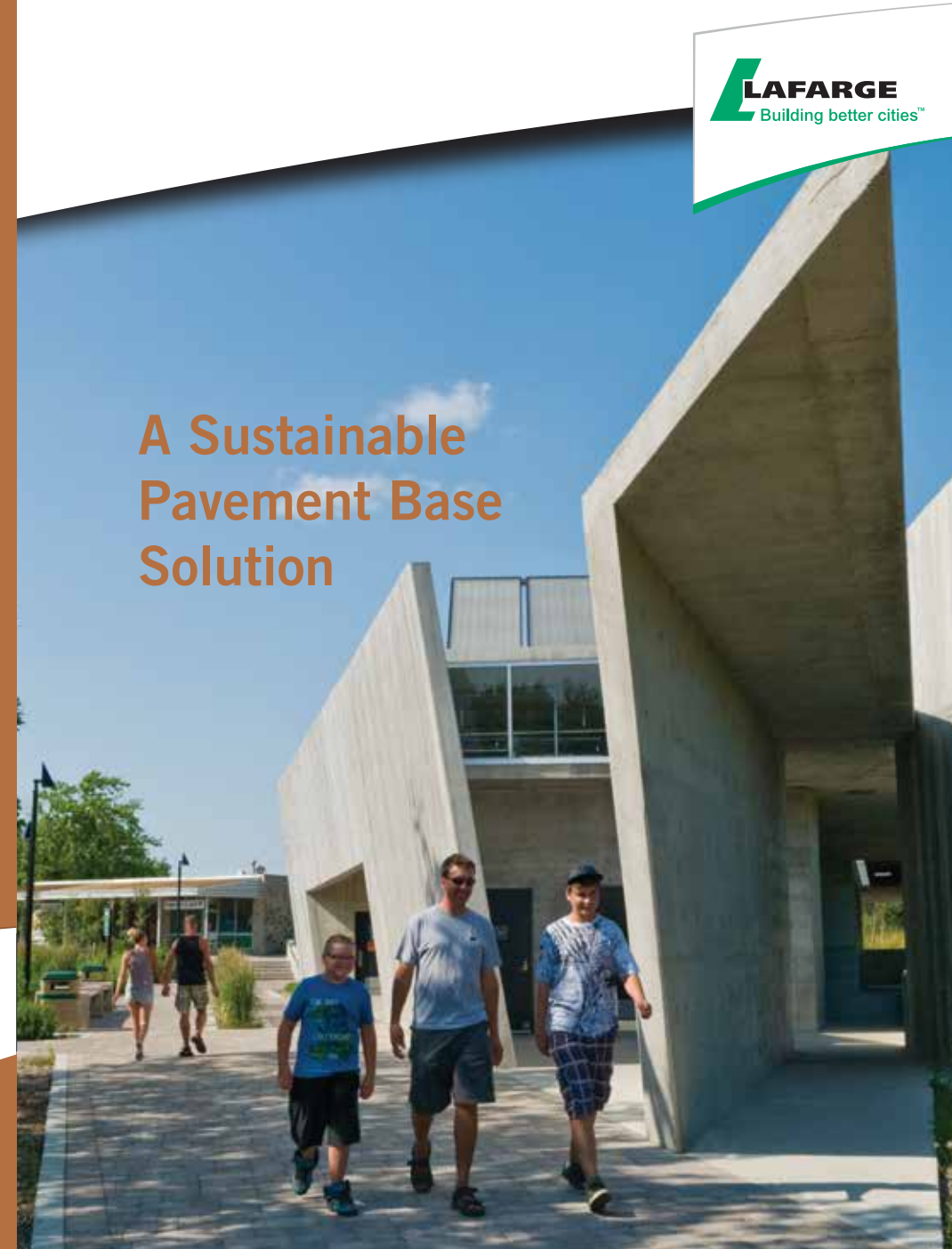


# STABILIA

## a solid base



## A Sustainable Pavement Base Solution



# STABILIA

## Sustainable Pavement Solutions

### Background

Challenged with finding a sustainable base solution? STABILIA addresses these installation concerns, allowing the placement of interlocking paving stones to be completed under potentially poor subgrade conditions and provides long term performance.

Lafarge has utilized global expertise to develop the technology within the cement-treated aggregate now known as STABILIA. Concerns with future settlement or unevenness in your interlocking paving stone projects are eliminated when using STABILIA, a solid base.

*“ I have never been called back for a performance issue since I’ve been using STABILIA as a base for interlocking jobs. ”*

- Lomco Landscape Contractors



### Scope

STABILIA is used as an **alternative base** for paving installations all across the province. STABILIA can be used in a **wide range of application** types from remote projects such as wind farm turbine construction sites requiring **temporary roads** to **interlock paving installers**, where it can provide an edge over the competition and a way to **eliminate long term issues**.

### Technology

Traditional bases have forced pavement designers to choose between the **flexibility of a granular** drainage base or the **sturdiness of a reliable base**. STABILIA combines the best of both worlds by providing the high strength characteristics using **cement-stabilized aggregate** while maintaining the permeability rates of a granular.

### Performance

There are many factors that are considered in the pavement design and will determine the thickness of the base. Every structure is analyzed on an individual basis to establish the exact requirements, including **climate conditions, traffic load** over the entire service life, material properties and the **subgrade structural properties** such as stiffness (resilient modulus). STABILIA is designed integrally as a system with the purpose of **enhancing the long-term performance** of the pavement.

## Lafarge Innovation



### Advantages

Based on a focus group comparative study which evaluated granular base solutions versus the features/benefits of STABILIA under interlocking stones.

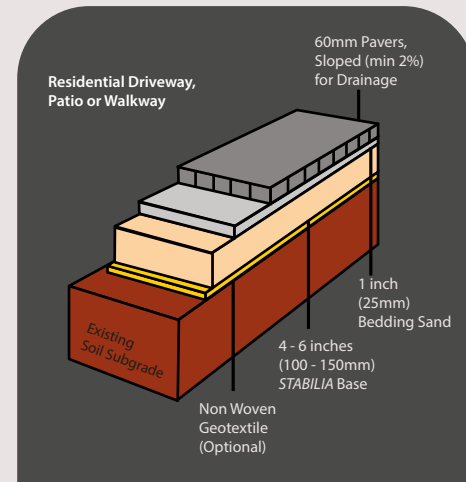
Solutions	BASE (INTERLOCKING)							Total Score
	Rigid Strength	Drainage	Potential for Rutting	Initial Cost	Removal	Replace	Longterm Stability*	
Granular A	2	3	1	5	5	1	2	19
Stabilia Base	3	3	5	4	3	3	4	25
Concrete	5	0	5	3	1	4	4	22

1 = least desirable    5 = most desirable    \* Similar Conditions

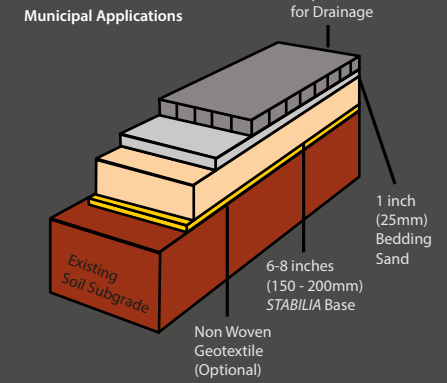
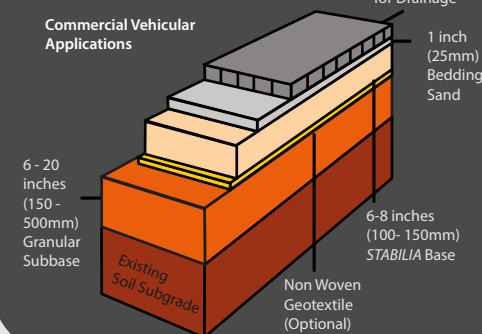
### Preparations

Soil type and climatic conditions should be taken into consideration when designing using STABILIA.

Below are 3 simple diagrams which show STABILIA used in residential driveways, patios or walkways, commercial vehicular and municipal applications.



### Applications



\* It is recommended that a geotechnical engineer be consulted when designing with STABILIA for commercial and municipal applications.