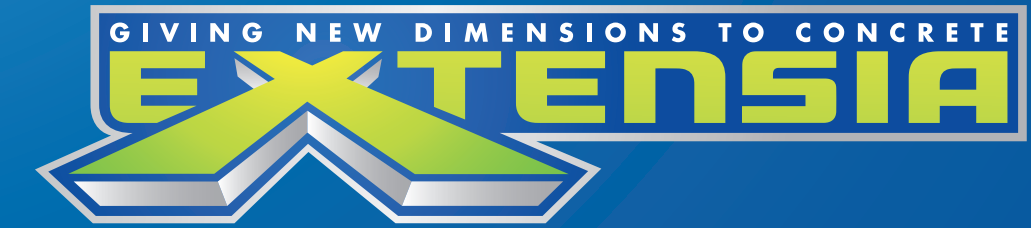


**NO  
STEEL**

**REDUCED  
THICKNESS**

**LESS  
JOINTS**

**EASE OF  
PLACEMENT**



## 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 concretes attain new levels of technical performance and anticipate changing industry requirements.** Each new product is designed to be more effective in the construction process and help our clients **achieve greater success.**



LAFARGE NORTH AMERICA – EASTERN CANADA  
7880 Keele Street  
Concord, Ontario L4K 4G7  
(905) 738-7070

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



**Innovative Technology**  
in low shrinkage concrete  
for commercial and  
industrial floors







# Extensia™ benefits

Extensia™ is a powerful solution to the problem of shrinkage cracks in interior concrete floor slabs. Its innovative design offers many benefits over conventional concrete.

- ▶ Increases saw-cut spacings up to **20 m x 20 m**.
- ▶ Increases durability without surface treatment.
- ▶ Eliminates the need for steel mesh and steel fibre.
- ▶ Allows reduction of slab thickness.
- ▶ Allows early finishing and early loading of slab.
- ▶ Opportunity for **LEED® credit points**.



Extensia™ is a global sustainable alternative to steel mesh and steel fibre floors.

## What Extensia™ means for you



Extensia's™ advanced design and its ability **to reduce shrinkage** means there is no need to include any steel within the slab structure.\*



Extensia's™ enhanced flexural strength will **enable floor designers to consider thinner section floors**. The environmental and economic benefits of this in conjunction with no steel are substantial.



Extensia™ allows **saw cuts to be extended up to 20 m x 20 m**, which realizes major savings for the clients regarding joint maintenance.



Extensia™ concrete can be placed using **conventional laserscreed methods** and **traditional finishing processes**.

\*The reference for removal of steel is for non-structural slabs on grade.

\*Design to be confirmed by a structural engineer

## The Extensia™ Innovation

Extensia™ is a **breakthrough technology** meeting market needs based on the understanding of hydration, shrinkage, and the cracking associated with the structural behavior of a concrete floor. The unique patented Extensia™ solution uses our **Crack Control Concrete Technology** offering tangible advantages for floor designers, contractors, and end users.

With Extensia™, **Lafarge opens new dimensions to concrete** for industrial and commercial floors.

**CRACK CONTROL CONCRETE** technology is a triple-effect performance enhancer:

1. Controls early-age shrinkage
2. Minimizes drying deformations
3. Reduces microstructure porosity

	Conventional floor (Typical)	EXTENSIA™
Steel amount	25 kg/m <sup>3</sup>	<b>No steel</b>
Saw cuts sections	6 m x 6 m	<b>20 m x 20 m</b>
Typical concrete shrinkage**	.04% to .065%	<b>.04%</b>
Typical slab thickness*	200 mm	<b>150 mm – 175 mm</b>
Finishing time (in winter, expressed in hours after batching)	7 – 8 hours	<b>4 – 5 hours</b>
Use of surface hardener*	yes	<b>no</b>
Loading time*	28 days	<b>14 days or less</b>

\*Design to be confirmed by structural engineer.

\*\*Tested in accordance with CSA, clause 8.9 of CSA A23.1-04

For optimal performance, Extensia™ must be used in conjunction with correct site preparation (refer to data sheet for further information).