

SigmaSlab®

Pushing the limits of smart & sustainable seamless floors



Up to 20% more cost-efficient

Better aesthetics

Up to 35% more sustainable

Minimum maintenance

SigmaSlab® allows you to win on all fronts when it comes to delivering strong & durable seamless floors.

SigmaSlab® is an innovation born from the collaboration between Bekaert and CCL, internationally renowned for its engineered solutions for the construction industry. It combines the power of our Dramix® concrete reinforcement fibers with CCL's post-tensioning systems.

Together, they allow to push all current boundaries. You can create seamless floors, slabs on piles and structural elevated slabs with joint free distances up to 150 meters, be 20% more cost-efficient and lower your floor's carbon footprint up to 35%.



Innovative concrete reinforcement solution

The combined expertise of two innovative leaders

The efficiency of Dramix® steel fibers over rebar or mesh to ensure the structural stability and fatigue resistance of a floor/pavement has already been widely demonstrated. CCL's post-tensioning system, on the other hand, take up the shrinkage and temperature stresses in concrete floors. In doing so, it increases the material's strength and delays development of the first crack. After cracking, Dramix® raises the tension capacity of the concrete, providing ductile behavior. Together, they offer the smartest and most robust concrete reinforcement system available on the market.

Product specifications:

Dramix®

- Fibre type: 4D or 5D
- Diameter: 0,75 mm - 0,9 mm
- Tensile strength: 1650 - 2300 N/m²

Post-tensioning systems

- Anchor type: XF or XU2
- Diameter: 15,3 mm - 5,7 mm
- Tensile strength: 1860 N/m²

The next level of concrete reinforcement



Up to 20% more cost-efficient

Installing SigmaSlab® is easier and faster than traditional concrete reinforcement solutions. You only need to install a reduced number of CCL post-tensioning tendons. You premix the Dramix® steel fibers in the concrete before it is cast.



Minimum maintenance

Create joint-free distances up to 150 meters, and reduce the number of joints and their associated weaknesses. This, in turn, diminishes the maintenance and repair costs and increases your floor durability.



Up to 35% more sustainable

Compared to conventional reinforcement solutions, SigmaSlab® reduces steel by up to 70%. The solution also has a positive impact on concrete and water consumption. The overall carbon footprint of your seamless floor decreases by up to 35%.



Better aesthetics

Longer spans and fewer columns provide more spacious interiors, greater flexibility of layout and better aesthetics.

bekaert.com/sigmaslab

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SigmaSlab® is suited for

- seamless ground slabs (indoor & outdoor)
- elevated slabs
- slabs on piles