

# FSC TECH Concrete Reinforcing Reinvented

# **Load Carrying Paver Slabs** WITHOUT SURFACE CRACKS



## THESE PRODUCTS CAN TAKE SIGNIFICANT DEFORMATION

# **NO CRACK WILL PROPAGATE** TO THE TOP

By Removing the Load, the Paver Exhibits an Elastic Behavior and Returns to its Original Shape.

- FLOORING WITH FLEXIBLE PAVERS CAN BE APPLIED EVEN ON MEDIUM-HIGH SPEED ROADS.
- LARGER PAVING SLABS WITH REDUCED THICKNESS ARE NOW POSSIBLE.
- PAVERS CAN HAVE ONE SIDE MUCH LONGER THAN THE OTHER.

# The Flexural Strength

The Flexural Strength is obtained by wrapping the Pavers with tensioned FRP around the slab periphery.

What the FSC Tech brings to the world of concrete products is:

- **Increased Strength** a massive increase in flexural strength is provided, not achievable with current technologies.
- **Reduced Cost** the FRP system is substantially less 2. costly than traditional steel reinforcement and allows for reduced product thicknesses.
- 3. **Longer Service Life** – the FRP is corrosion resistant and has higher operating service temperatures than steel.
- 4. Drastic Reduction in CO2 footprint - eliminate steel, reduce concrete sections, replace or reduce OPC with low CO2 binders, enables a large reduction in environmental footprint compared to the current



### **Production Process**

Casting and curing process remains the same. Then, after normal curing, the paver is wrapped according to the FSC Technology. The recess for the FSC roving can be cut in by the wrapping machine, if needed.

### **The Wrapping Process**

The wrapping can happen after the base material has enough strength to be handled.



# The Wrapping Machine

The robot picks up the paver from the pallet, places in the wrapping machine, then once the wrapping is finished it removes the wrapped paver and places it on a different pallet.



#### **FSC TECHNOLOGIES**

FSC is a US company with R&D in Italy. Its core business is to help Customers develop solutions based on its Innovation in Structural Engineering by replacing embedded steel reinforcement with a system of wrapping concrete elements with pretensioned FRP and a small amount of resin.

