

## HOLCIM ECUADOR: LEADING THE WAY ON ROAD SOLUTIONS

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Holcim Ecuador started in 2018 to develop and implement the TCP – Thin Concrete Pavement as a solution to optimize and diversify its Road Solutions portfolio. The local team was already present on the local road market with products like Agrovial (special Hydraulic Binder for agricultural roads) or Base Vial (Hydraulic Road Binder used for stabilization of granular bases and sub-bases), but wanted to reinforce its position as a distinctive and solid player. Thus, Holcim Ecuador managed to gain trust and respect from all the players involved in road construction and maintenance (central and local authorities, Contractors, Designers).

TCP® is a technology that develops intelligent pavement structural designs that allow distribute vehicle load efficiently on a geometrically optimized slab, reducing the possibility of workload cracking. This method allows to reduce the thickness of the hydraulic concrete slabs between 4 and 10 cm with respect to the proposals offered by the traditional design methodologies; without losing the virtues of a traditional concrete pavement, achieving an optimization of the concrete consumption of up to 30%.

Thanks to an agreement between TCPavements and Holcim Ecuador, this technology is already applied in a significant number of projects: industrial and logistics park Piady in Yaguachi, Nicovita in Milagro, Inverneg S.A., Borsea, Ferremundo in Guayaquil, Agripac in Duran, Shopping Center in Ambato, Almax 3 in Samborondon. The technology proved to be equally a success in urban roads, such as San Patricio in Quito and streets surrounding the Terrestrial Terminal in Portoviejo.

On the last 4 years, the team contributed to a significant number of projects with this technology, covering now around 170,000 sqm. But the future looks even brighter, as the pipe of projects for the years to come is counting roughly 80 new projects, in various studies of concept or design.

These pavements have been combined with a base stabilized with cement to have a support of greater performance and durability, necessary for the conditions of Ecuador where the rains always undermine the bases, the fines of the bases migrate or contaminate with the fines of the subgrade, reducing the useful life of the pavements. The cement used for stabilization was Holcim Base Vial Tipo MH (Moderate Heat of Hydration), with immediate impact on layer quality:

- Longer setting time, enabling better homogenization of the mix,
- Reduce the risk of cracks and the permeability of the material in more than 90%
- Has neutral carbon certification, turning it into an eco-friendly solution with the environment

And the Holcim Ecuador team is continuing to develop Road solutions for the years to come, addressing the increasing need of road infrastructures in the country.

**For more information:**

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