

Solar Plaza Building

Temuco, Chile (2020)

PRODUCTS USED:

Kryston Internal Membrane™ (KIM®) **Kryston Waterstop Treatment™**
Krytonite™ Swelling Waterstop

OWNER:

Inmobiliaria iSiete

GENERAL CONTRACTOR:

Constructora iSiete

READY-MIX SUPPLIER:

Soc. Hormigones Maquehue Ltda.

DISTRIBUTOR:

Contek Ingeniería Ltda.

BACKGROUND

For residents in Chile who want a more modern and comfortable lifestyle in the heart of Temuco, there will soon be a new desirable living space: Inmobiliaria iSiete's latest creation, the Solar Plaza building. Planned to be fully constructed by 2020, this residential place will offer homeowners a number of appealing features. These include the space to exercise in a gym, a place to relax at the building's very own lounge bar, and even an area for cars in an underground parkade.

However, all of that relied upon the construction team's ability to navigate the very ground the Solar Plaza building would rest on for the life of its structure. After all, the building's surrounding area has a significant and permanent amount of hydrostatic pressure. That can put concrete structures under a lot of stress and potentially leave them vulnerable to water ingress, weakening the building further. In turn, that can reduce the life of the structure, which is much less appealing to homeowners.

To fully protect the Solar Plaza building from these hydrostatic pressure concerns, the construction team determined they'd need a successful and highly durable waterproofing solution that came with no subsequent maintenance costs.

SOLUTION

Initially, the team felt that bentonite waterproofing membranes were the perfect solution. However, it didn't take long before they changed their minds as the membranes got wet during the construction process. That caused the membranes to prematurely hydrate, making them swell before they could be properly installed.

From there, the team sought a better solution and was eventually recommended Kryton's KIM admixture and Waterstop products. That led them to get in touch with Kryton's Chile distributor Contek Ingeniería Ltda.



SMART CONCRETE®



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Through this distributor, they learned more about the benefits of Kryton's Smart Concrete® technology. For instance, KIM is an admixture that needs no extra application steps, so it can negate the whole need for installation in the first place. Instead, it is simply added to the concrete mix during batching, providing the concrete with innate waterproofing abilities. That way, the concrete will chemically react to any water ingress with needle-like crystals that form a matrix to fill up any pathways for water. Then, to thoroughly protect nearby construction joints from high hydrostatic pressure, construction workers can apply Kryton's Kryston Waterstop Treatment and Krytonite Swelling Waterstop.

It was a process that sounded like it could be a great match for the Solar Plaza building's needs, so the construction team went to work applying it. Throughout their work, they followed up frequently with Kryton's technical assistants to ensure everything went smoothly.

The end results of this effort were such a success that Construction Manager Leonardo Romero from Constructora iSiete noted the following:

After 12 months of application of [Kryton] products, we can say that [our project] was a success, and we feel satisfied with their performance [and also] with the attention and assistance received. We [will] consider this technology [for] our next projects and recommend its use when the conditions of the work require a quality waterproofing [solution] [to] avoid post-sale problems.

Now, the new Temuco building is ready to entice new homeowners with a desirable and reliable place to live for years to come.

