

# MasterSeal P 770: Xolutec® primer applied in various weather conditions - what do the experts say?

Posted by [Albert Berenguel](#) - 27 November, 2020

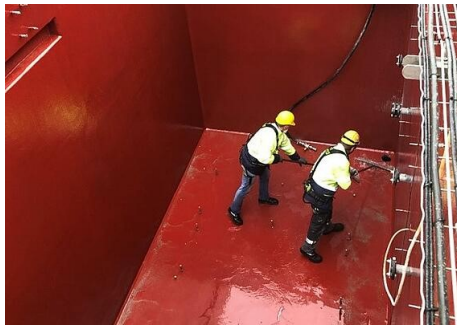
*"... what is essential is invisible to the eye."* Antoine de Saint-Exupéry

MasterSeal P 770 is a primer for concrete substrates based on Master Builders Solutions' unique Xolutec® technology. Xolutec® is developed for improved durability, to solve the problems of concrete and steel in demanding environments.

The main purpose of MasterSeal P 770 was thought to simply be the primer for the high-performance membrane MasterSeal M 790 in the MasterSeal 7000 CR system and since its launch in 2017 many projects where high chemical resistance is required (as in waste water treatment plants, secondary containment, industrial retention tanks and biogas plants) have been completed using MasterSeal 7000 CR.



MasterSeal 7000 CR in sedimentation tank in WWTP Harmanec, Slovakia



MasterSeal 7000 CR in microfiltration tank in chemical industry, Germany

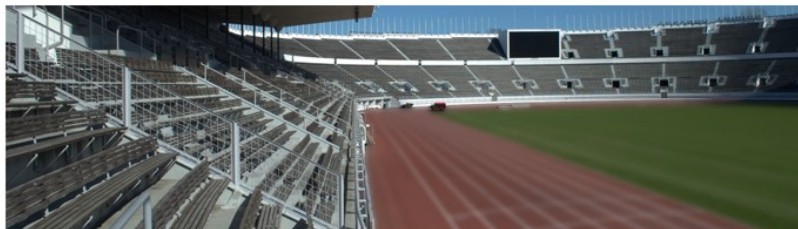
But it was soon apparent that the properties of MasterSeal P 770 were greater than expected and enabled the use of this primer outside of the MasterSeal 7000 CR system in combination with other waterproofing membranes such as MasterSeal M 689 or MasterSeal M 811.

The European climate is very diverse and during applications in the field products are exposed to conditions that are not always ideal. We have carried out interviews with managers of three application companies that operate in regions with completely different climate conditions (cold, humid, and hot) and asked them for their opinion about the performance of MasterSeal P 770 as primer for different types of membranes.

Mrs. Ritva Suuriniemi, Managing Director of the company URETEK-Elastomer Oy, Finland has been using MasterSeal P 770 since its launch in 2017 in waterproofing applications and in combination with sprayed membranes such as MasterSeal M 811. URETEK is a company which specializes in the waterproofing of vaults, earth pressure walls, plinths and ventilated rooms and traditional coatings for floors.

The average annual temperature in Finland is around 5°C in the southwestern region, decreasing towards the northeast and the use of fast-curing MasterSeal P 770 represents a good way to prolong the application season.

One of the most relevant projects completed by URETEK is the Olympic Stadium in Helsinki, Finland, where MasterSeal P 770 was applied before application of the MasterSeal M 811 sprayed membrane.



**Ritva Suuriniemi:**

***"We have completely replaced epoxy primers by MasterSeal P 770.***


***The product demonstrates very high adhesion in numerous pull off tests. Also, our workers have no allergic reactions as they did in the past with some epoxies"***

Apliner Xpraytech Systems S.L. Spain, specializes in waterproofing applications through the use of self-levelling polymer systems, cementitious mortars and polyurea sprayed membranes. They have completed around 300.000 m<sup>2</sup> of projects mainly in Spain but also internationally in Europe and Doha.

Mr. Paul Terente, Technical Manager of Apliner Xpraytech Systems S.L., explains that the region where they mainly operate,

(Asturias in the north of Spain) is very rainy and humid. MasterSeal P 770 is an ideal product for the region because it can be applied to substrates that are not completely dry but still maintain the optimal adhesion and pore blocking features.

Additionally, MasterSeal P 770 is fast hardening so that the membranes (MasterSeal M 811 or M 689) can be sprayed after only 4 to 5 hours, enabling completion of the application in a single working day.



**Paul Terente:**

***“MasterSeal P 770 is a spectacular product. For me this is really the flagship product”***

And finally, we spoke to Mr. Fabio Cosentino, Sales Manager of Polyflex S.R.L. in Sicily, Italy, who specializes in the application of spray applied waterproofing systems with continuous membranes.

The summer in Sicily means an average of 300 hours of sunshine per month with temperatures rising to 40 - 45° C on the coast. In these conditions the pot life of MasterSeal P 770 or MasterSeal M 790 can be reduced to 10 minutes and just as with any fast hardening product, the expertise of the applicator is key to the success of the project.

In a recent project using MasterSeal 7000 CR in a waste-water treatment plant of the Pfizer factory in Catania, complete synchronization of working steps for the hand application was achieved by delegating specific team members to only mix the system components and dedicating other team members to the application of the primer and later, the membrane.

**Fabio Cosentino:**

***“MasterSeal P 770 is an optimal product with excellent adhesion results.***

***We always use in confined areas where products containing solvents are not permitted or in areas where reduced hardening times are essential for a quick return to service”***



In summary, three opinions converge in highlighting the main properties of MasterSeal P 770:

- ✓ High adhesive strength with dry and humid (visible dry) concrete substrates with different types of membranes. These are sample of results from our laboratory tests:

Primer	Membrane	Type of membrane	Adhesion (N/mm <sup>2</sup> )
MasterSeal P770	MasterSeal M 391	Epoxy 2C, rigid	> 3,0
MasterSeal P770	MasterSeal M 310	Epoxy 2C, rigid	> 3,0
MasterSeal P770	MasterSeal M 808	Polyurethane, 2C, elastic	> 2,5
MasterSeal P770	MasterSeal M 790	Xolutec, 2C, Elastic	> 2,5
MasterSeal P770	MasterSeal M 689	Polyurea, hot-spray	> 2,5
MasterSeal P770	MasterSeal M 811	Hybrid-polyurea, hot-spray	> 3,0

Quick hardening and short re-coating time:

- ✓ At +10° C: after 11 hours
- ✓ At +20° C: after 5 hours
- ✓ At +30° C: after 3 hours

Low odor for use in enclosed areas

Application by hand with roller or brush or by hot spray equipment:

- ✓ Video hand application MasterSeal 7000 CR: <https://www.youtube.com/watch?v=EQrHnZOvZ3g>

For more information about MasterSeal P 770, MasterSeal M 790 and the MasterSeal 7000 CR system go to:  
<https://masterseal-7000cr.basf.com/en>