

TECH NOTE



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Xypex ‘White’

For over 40 years, specifiers and installers have been using Xypex coating products to waterproof and protect below-grade and water-holding structures. Because the unique chemistry of Xypex’s Crystalline Technology works within the concrete itself, the application of the Xypex coating system to in-place and in-service facilities can be made from either the positive or negative side of the concrete structure. This benefit, coupled with the fact that the Xypex concrete waterproofing system lasts the life of the concrete and requires no re-application or maintenance regardless of UV exposure and most other environmental effects, has made Xypex Crystalline Technology a reliable waterproofing solution for users, worldwide.

However, an additional benefit is often overlooked – the fact that Xypex, while typically a concrete-grey product, is also available in “white”. This visual feature can be of considerable importance to the designers and owners of concrete structures who understand the value of brighter surfaces. Indeed, a number of significant value-added benefits can be realized when using Xypex ‘White’.

Light Reflectance Value (LRV)

The “Light Reflectance Value” is the total quantity of visible and useable light reflected by a surface in all directions and at all wavelengths when illuminated by a light source. Simply put, LRV measures the percentage of light a surface reflects. Below is the LRV Scale showing percentage ranges from 0, which is the darkest or least reflective, to 100, which is the lightest or most reflective. In reality, the LRV of the whitest white is approximately 85% and the darkest black is approximately 5%. When compared to a normal Xypex grey coating (50% - 60%) or to aged concrete, Xypex ‘White’ has much higher reflectivity.



Improved Safety

The higher light reflectance value (LRV) of white Xypex coatings over standard grey Xypex coatings increases the reflected light in an environment. This substantially increases and upgrades the overall visibility in a given area, resulting in much-improved general safety conditions for both pedestrians and vehicles.

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Reduced Costs

Building codes, as well as general practice, will dictate given levels of lighting. White surfaces, including walls, floors and ceilings will, through increased reflectivity, reduce the number and size of lighting fixtures required, thereby significantly lowering the costs of both initial fixtures and ongoing power needs. The Xypex coating system in White will permanently eliminate the ingress or egress of water and, at the same time, will offset the need and cost of installing an additional white surface.

Improved Aesthetics

Brighter and lighter environments created by a white surface are normally found to be more aesthetically appealing. The perception and overall feel of areas such as parking facilities and other unfinished concrete spaces can be vastly improved and enhanced by use of Xypex 'White' while, at the same time, the Xypex Crystalline Technology addresses the waterproofing and chloride and chemical protection needs of the concrete.

Value Engineering at Work

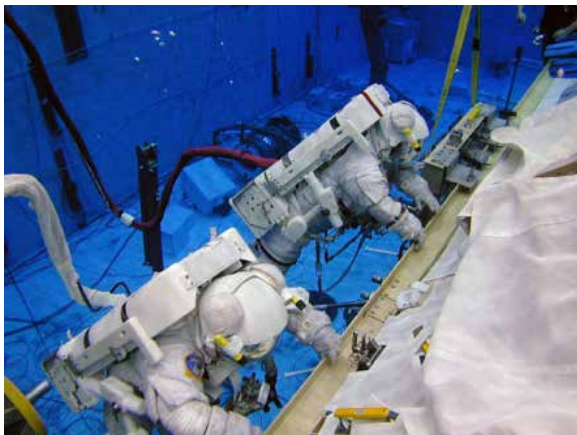
In summary, Xypex 'White', in addition to its primary function as a preferred product for waterproofing and protecting concrete structures, can also multi-task as a product that lowers costs and improves safety and aesthetics. One product – four benefits.

A few examples of projects using Xypex 'White' include:

NASA Neutral Buoyancy Lab

Houston, Texas

A two-coat application of Xypex Concentrate 'White' was used to waterproof and protect this 50,000 sq. ft. NASA Neutral Buoyancy Lab Tank. Xypex 'White' eliminated the need for a separate white coating.



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Dos Quebradas Road Tunnel

Bogota, Colombia

Xypex Concentrate 'White', in addition to waterproofing and protecting this tunnel, was used to brighten it.



Tralee Apartments Parking Garage

Dublin, California

A two-coat application of Xypex Concentrate 'White' and Xypex Modified 'White' was used to waterproof and brighten this below-grade parking structure, including the area walls and outdoor driveway retaining walls.



Other Xypex 'White' Applications

Xypex 'White' coatings have also been used in manholes, conveyor or utility tunnels, wastewater treatment tanks, and decorative pools. Where waterproofing is required and a sprayed or brushed cementitious surface is acceptable, using Xypex 'White' will waterproof and protect the structure and, at the same time, provide a dry, bright and maintenance-free finish.

Availability

Xypex products normally available in white include Xypex Concentrate and Xypex Modified (Xypex Patch'n Plug can also be produced in white).

Note: Although Xypex 'White' is not typically stocked by distributors, it is normally available from Xypex's world-wide production facilities on reasonably short notice.