

Exalt® option to achieve quick drying of architectural coatings and extend application window in tough environmental conditions.

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Calcium aluminates are recognized formulation levers in the drymix mortar industry. When combined with calcium sulfate or Portland cement, these powdered hydraulic binders react with water and deliver key functions such as rapid drying and hardening; high mechanical strength; controlled dimensional stability and high-end aesthetics. Such performance can now be achieved in water-based “ready to use” products with the unique Exalt® technology. Exalt® is a patented concept of calcium aluminate stabilization in a water-based suspension. This extends the application of these materials and their benefits into pastes; adhesives; and paints and coatings, opening new uses and functions in these hybrid systems (organic – mineral based).

As Exalt® is reactive in cold and humid conditions, one of the first identified benefits has been for architectural coatings applications. This paper reports on the use of Exalt® calcium aluminate suspension in water-based exterior renders and especially the benefits it brings for fast drying in difficult environmental conditions such as relatively low temperatures and high relative humidities. Other properties related to improved drying properties, such as early rain resistance, have also been evaluated.