All of a sudden I'm hearing more about the increased use of “plastic” cements in stucco application. Are these cements that actually have bits of plastic added to them and if so, are they really supposed to be used in a plaster application?

A standard portland cement mix consists of cement, water and an aggregate, usually sand.

The typical cements used in portland cement plaster construction are hydraulic cements. Hydraulic cements require the addition of water to begin the process of hydration, the chemical reaction between the water and the cementitious binder, and will set and harden under water. Blend the ingredients in correct proportions and you can produce a very hard, durable wall finish, one that stands up very well to moisture and works well under many different climatic conditions.

On occasion, however, you may need to alter the setting time or durability of the mixture to satisfy a specific climatic condition or to produce a specific finish texture. One of the ways of altering the reaction time of the hydraulic process is through the use of a plasticizer, an admixture added during the portland cement plaster mixing process. Plasticizers have nothing whatsoever to do with plastic materials—they contain no plastic and are usually lime or a limestone derivative—rather, they derive their name from the way that they exhibit plastic properties. They have an increased ability, when compared to normal portland cement plaster mixes, to retain enough water to remain workable, or plastic, for an extended period of time.

Plastic cement is nothing more than a special hydraulic cement that contains a plasticizing material in its factory mix. Adding the plasticizer at the factory simplifies the mixing process in the field and eliminates the need to add a plasticizing material to the basic mix, thus providing a more consistent finish quality.

By the way, anyone know why it’s called “Portland” cement and where the name came from?

By the way, anyone know why it’s called “Portland” cement and where the name came from? Special Wachuwan-nano recognition in the next applicable column to the first person to provide the answer. (Here’s a hint: It has nothing to do with a city on the coast of Maine or in Oregon.)

About the Author
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