SHOTCRETE

Shotcrete is concrete projected at high velocity through a hose onto a surface. There are two methods; wet-mix and dry-mix which is also referred to as “gunite”. Wet-mix involves pumping previously-prepared concrete to the nozzle where air is introduced to impel the mixture to the surface. With dry-mix, water is added at the nozzle and can be adjusted instantaneously by the nozzleman.

Surecrete Inc. provides a variety of shotcrete formulations to meet specific requirements and has the capability to provide custom formulations to meet project specifications. Our shotcrete materials can usually be packaged close to the project in either small paper bags or in jumbo bags. All our mixes, with the exception of the Artic Blend Shotcrete, can be formulated to be applied using either the wet mix or the dry mix shotcrete method. Examples of some of our products are as follows:

Standard Shotcrete: This material is designed for all purpose applications such as new construction, concrete repair and restoration or as part of temporary or permanent ground support.

Flash-Crete: This is a base material designed to be augmented with accelerator additive and typically fiber to achieve the high early strength gain and flexural strengths required on many tunneling projects.

Artic Blend Shotcrete: A very fast setting, rapid strength material designed to be applied against frozen ground. With additional layers, this material can be used as the final shotcrete or serve as a sacrificial layer and be covered with convention shotcrete.

Smoothing Coat: This is a sanded mix with additives to give it lower rebound and enhanced finishability. This material is primarily used for providing a smooth layer prior to the application of a water proof membrane system but can also be used for limited depth concrete repairs or for cutting off water in tunnels.

These shotcrete materials can be modified to meet specific requirements by adding fiber in the form of micro-synthetic for shrinkage crack control or macro-synthetic or steel fiber for structural applications. Accelerator additive, either as a powder blended into the mix for dry application or as a liquid to be added at the nozzle for either dry or wet mix. Shotcrete enhancers improve pumpability, finishability or add integral waterproofing.

Surecrete Inc. is your single point source for all things shotcrete from material to equipment to expertise. After over 40 years in the industry, we understand the art. Give us a call with your questions, or to request technical data or a quote.

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