Getting to Know the Types of Concrete and its Production Methods

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Abstract : Definition of Concrete and Concreting: Concrete (in French: Béton) in a broad sense is any substance or combination that consists of a sticky substance with the property of cementation. In general, concrete refers to concrete made by Portland cement, which is produced by mixing fine and coarse aggregates, Portland cement and water. After enough time, this mixture turns into a stone-like substance. During the hardening or processing of the concrete, cement is chemically combined with water to form strong crystals that bind the aggregates together, a process called hydration. During this process, significant heat is released called hydration heat. Additionally, concrete shrinks slightly, especially as excess water evaporates, a phenomenon known as drying shrinkage. The process of hardening and the gradual increase in concrete strength that occurs with it does not end suddenly unless it is artificially interrupted. Instead, it decreases more over long periods of time, although, in practical applications, concrete is usually set after 28 days and is considered at full design strength. Concrete may be made from different types of cement as well as pozzolans, furnace slag, additives, additives, polymers, fibers, etc. It may also be used in the way it is made, heating, water vapor, autoclave, vacuum, hydraulic pressures and various condensers.

Keywords : concrete, RCC, batching, cement, Pozzolan, mixing plan

Conference Title : ICCCECCM 2024 : International Conference on Concrete Construction Engineering and Concrete Constituent Materials

Conference Location : Toronto, Canada **Conference Dates :** June 13-14, 2024

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