

6. Development of the Pipe Chute for Flowing Mortar - Flowing Characteristic of Mortar that Nature Makes Inclination Piping Flow -

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In concrete dams, transportation of mortar, which is used in small quantities, causes drops in the efficiency of transporting concrete. A gravity-flow method was developed that involves flowing mortar through exclusive pipes installed on slopes. A flow test was conducted using widely used mortar mix proportions. The test revealed the applicable mix proportions, quality control items and their ranges, flowing characteristics such as the quantity of mortar adhesion and flow quantity, and a rough estimate of the necessary pipe diameter for flowing mortar; and showed that the system is feasible.

Key words : mortar, flowing characteristics, slump flow, flow quantity, quantity of adhesion