# *COMPARISON OF TYPE D ADDICTION USING SIKA PLASTOCRETE RT-6 PLUS AND TAMCEM 6RS ON CONCRETE OF F'C QUALITY 25 MPA*

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## *ABSTRACT*

*In the process of transporting ready mix concrete to the casting location, problems that often arise are delays due to distance and travel time, which can affect the quality of concrete. This study aims to compare the effectiveness of two types of D-type retarder additives, namely Sika Plastocrete RT-6 Plus and Tamcem 6RS in maintaining concrete quality against casting delay time. The study was conducted experimentally in the laboratory of PT. Dumai Jaya Beton with a concrete mix design based on the DOE (Design of Experiments) method in accordance with the company's job mix where this method is adopted in SNI (Indonesian National Standard) for making concrete mixes. The parameters observed included slump value, setting time, and compressive strength of 28-day-old concrete, with variations in delay times of 0, 30, 60, and 120 minutes. The test results showed that BN+Tamcem 6RS 0.4% produced the highest compressive strength of 49.53 Mpa at a delay of 60 minutes. BN+Sika Plastocrete RT-6 Plus 0.4% has a maximum compressive strength of 40.85 MPa at a 30-minute delay. These two admixtures have been shown to increase the compressive strength of concrete compared to normal concrete without admixtures, which only reaches 33.71 MPa.*

***Keywords**: Sika Plastocrete RT-6 Plus, Tamcem 6RS, Time delay, compressive strength.*