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A REVIEW ON STRESS BLOCK PARAMETERS OF HIGH PERFORMANCE CONCRETE

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ABSTRACT

High-performance concrete (HPC) is widely used in large scale concrete constructions that require high strength, high flow ability and high durability. Various studies were performed on high performance concrete with respect to workability, strength and durability. High-performance concrete exceeds the properties and constructability of normal concrete. But the design parameters adopted as per IS: 456 is based on the stress block parameters of conventional concrete and this leads to a conservative design. The present study focuses on reviewing the stress block parameters of high performance concrete so that it can be used in design of structural elements using high performance concrete.

KEYWORDS: Compressive Strength, High Performance Concrete, Modulus of Elasticity, Stress Block Parameters, Stress-Strain Curve