



## **Comparison of Static and Dynamic Elastic Modules of Different Strength Concretes**

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### **ABSTRACT**

In this study, the static and dynamic elastic (Young) modules of concrete with different strength was intended to compare. For this purpose 150mm dimensions 9 for each design cubic samples prepared and they were subjected to water cure during 28 days. After Seismic Ultrasonic P and S wave travel time measurements of samples, P and S wave velocities and taking advantage of elasticity theory the dynamic elastic modules were calculated. Concrete strength was obtained from the uniaxial compression tests in order to calculate the static elastic modules of the samples. The static elastic modulus is calculated by using the empirical relationships used in international standards. The obtained static and dynamic elastic modules have been associated. A curve was obtained from this association result that approximately similar to the stress-strain curve of obtaining at failure criterion of the sample.

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