

## The mechanical properties of high strength concrete for box girder bridge deck in Malaysia

### Abstract

This paper presents an experimental investigation of the mechanical properties of high strength concrete for box girder bridge deck in Malaysia. To study the Malaysia condition, high strength concrete samples were obtained from a Malaysian precast concrete factory that provides precast and in-situ concrete for box girder bridge deck construction. The mixed design properties of this type of concrete mixture were investigated; including the slump test, compressive strength, flexural strength, static modulus elasticity and Poisson's ratio. Stress-strain curve relationship was produced as well, to be used for non-linear behaviour study.