COMPARISON BETWEEN PRECAST SLAB PANELS VERSUS CAST IN-SITU METHOD OF CONSTRUCTION

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ABSTRACT

Before going any further, I would like to point out that precast construction is the prefabrication of structural members (i.e. beams, columns and walls.) away or on-site then later brought to site to be put into place using various methods. The cast in-situ method of construction is a process of constructing the structural members using formworks casting the members in their respective places.

Due to the fact that precasting covers a wide range of other type of structural members. The scope of this project report shall touch on only the construction of a system called the precast panel construction system. This method of construction uses the precast wall panel as a load-bearing wall to take axial loads and bending moments induced by lateral such as wind loads.

This project shall shed light on the design methodology, construction methodology and the comparison of both methods of construction through various factors governing them. A design calculation analysis shall be included as an example as well as a rough costing analysis.