

Design a Retaining Wall Using Geopolymer

Prepared by: Chong En Yong

ABSTRACT

Main purpose of this project is to replace standard concrete with geopolymer concrete. Geopolymer concrete is a “go green” concept where it doesn’t use any cement but only replace with fly-ash and also some alkaline activators. This geopolymer concrete is very suitable to build a retaining wall of a port or harbor and also sewage system due to the high early strength of it and also it is high resistance to corrosion attack .

This project will compare the compressive strength of a standard concrete and also the geopolymer concrete by using the same mix proportion to achieve a fair result. Geopolymer concrete will not achieve a high early strength if the procedure and mix proportion are not in order but it still will achieve a strength of a normal concrete .

Conclusion that I made is geopolymer can replace standard concrete but high early strength of it its not guarantee .