ABSTRACT

In high-rise buildings typically lower part of the building (basement) is used as a parking area and utility rooms. Construction used for the basement is retaining wall, as a lateral force resisting caused by the soil and water. Retaining wall is used because the land is narrow and does not allow using the open cut method. In this study, two method of retaining wall, soldier pile and diaphragm wall method are discussed, the research carried out by comparing in terms of cost and time.

The purpose of this study to determine the cost and time of the two methods, soldier piles and diaphragm wall method. The data in this study obtained by distributing questionnaires to planners, contractors and owners. The results of this study in terms of cost known the majority of respondents with the position as engineer and two years experience agreed the application of soldier pile method is cheaper than the diaphragm wall method, in terms of time respondents answered varied there are agree, neutral and disagree. Using the continuum scale, in terms of time respondents answered slightly above neutral, close to neutral.

Keywords: soldier pile, diaphragm wall, cost, time