

Abstract

The objective of this research is to study the appropriate mixed ratios of the Cement-lime mortar to be used in Thailand. In this study, the mortars were classified in to two categories: Cement-lime mortar and Masonry cement mortar that to be used in Thailand. The proportions of Cement-lime mortar were set according to ASTM Specification C270 and the ratio of the admixed cement : sand of Masonry cement mortar were increased from 1 : 2.25 to 1 : 4.00 by 0.25 increment. To determine ultimate compressive strength, the Cement-lime mortar and Masonry cement mortar specimens were tested according to ASTM Specification C109. To classify the Cement-lime mortar, the average ultimate compressive strength of Cement-lime mortar at 28 days were brought to compare with the minimum average compressive strength according to ASTM standard. It has been found that, the appropriate mixed ratios of the Cement-lime mortar that correspond with Type M , Type S , Type N , Type O are 1 : 0.5 : 3.38, 1 : 1 : 4.5, 1 : 1.25 : 5.06, 1 : 2.25 : 8.13 for proportion of Portland cement : Lime : Sand by volume, respectively.