THE COMPARISON STUDY OF THE USE VARIOUS CEMENT BRANDS TOWARDS COMPRESSIVE AND BENDING STRENGTH WITH CURING AND UNCURING ON RIGID PAVEMENT

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The raise of many developments and improvements of highway construction, especially on *rigid pavement*, indirectly force the construction worker to choose some criteria for getting the good quality of concrete, one of the ways are choosing the brand of the cement and doing curing. Therefore, the aim of this research is to know about the strength of each brand of cement towards cured and uncured concrete.

This research used experimental method in accurate with SK SNI T-15-1990-03 and used brands of cement Padang, cement Holcim, and cement Bosowa with soaking treatments on concrete samples. The used of the tests are compressive and bending strength of concrete with using quality plan fc 30 MPa and age range 7, 14, 28 and 56 days. For each age range used 3 curing and uncuring items.

Based on the result of compressive strength test is range fc 30 MPa, cement Padang got 32,65 MPa, cement Holcim 31,33 MPa and cement Bosowa 31,33 MPa. While the comparison of compressive and bending strength got difference value. The curing concrete got higher value than uncuring concrete. Based on the comparison result, it show that cement Padang is better than others cement and by getting the highest value also made cement Padang has the sensitivity to the curing, in order that cement Bosowa got high strength at the beginning of the age and for cement Holcim is relatively stable with the age. From the result we know that how important the selection of cement brands and curing to get the good result consist of the quality by the first plan.

Keywords: rigid pavement, cement, curing and uncuring, compressive & bending strength.