

BUILDING CAPACITY TESTING OF FULL U PRECREATED CONCRETE BEAM FOR SIMPLE HOUSE BUILDING

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Abstract

The installation of the precast beam has several obstacles, one of which is the weight of the precast concrete panels, if the weight of the panels is heavy, a lifting device with a large capacity is needed so that to reduce the weight of the contents of the precast concrete panels, FUUL U precast concrete is used to facilitate the lifting of concrete using heavy equipment, save time, reduce labor consumption and save costs.

The specimens of precast concrete blocks were made with a size of 180 x 20 cm as many as 4 pieces with 2 types of curved and box models then each sample was tested to get the value of its flexural strength. The results of research and analysis of FULL U precast concrete beams obtained for the maximum load arch model obtained is 55 kn with a flexural strength value of 11.34375 N/mm³ for sample 1 arch, sample 2 arch maximum load obtained is 52 Kn with a flexural strength value of 10,725 N/mm³. Meanwhile, for sample 1 box, the maximum load is 33 Kn with a flexural strength value of 6.6 N/mm³, and for sample 2 boxes, the maximum load is 31 Kn with a flexural strength value of 6.39 N/mm³. So that the load capacity that can be accommodated by the curved sample precast concrete beam is greater than the box sample beam.

Keyword : Flexural Strength, Beams, Precast concrete