

target between 8 cm - 18 cm, it is influenced by the high absorption of water from ironwood aggregates. The amount of water that enters the ironwood coarse aggregate reduces the level of work of fresh concrete.

- Normal concrete weight in this mix design planning that uses SNI 03 2834 2000 weighing 2274 kg per m³ to get the weight of concrete according to ACI [20] maximum weight of 1842 kg / m³, for this reason, there is a need to replace both partial and complete aggregates of coarse and fine aggregates, to get the weight and strength of the concrete that has been designed that is 25 MPa at 28 days, the coarse aggregate is replaced by 100 % by ironwood waste aggregate, the design aims to get a concrete weight below 1842 kg / m³ and a concrete strength of 25 MPa at 28 days.

Aggregate material made from ulin wood waste coated with *no drop* paint can be used as an alternative to artificial aggregate material to make structural lightweight concrete.

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