Abstrac

Every mortar used in civil work usually wished having long durable value. But must remember, mortar will experience strength increasing of long time, compression and flexural strength. So need research about mortar increasing strength for knowing time to maximum strength and time of experience increasing strength.

Same supporting material often base by researcher for comparing mortar strength value with concrete. But not absolutely mortar behavior likely with concrete. According research by Wood that mortar will increasing of strength after 90 age. but concrete will increasing of strength 1 year age.

Of course will interesting of evidence this Wood research with using Indonesia material. Beside comparing compression and flexural strength mortar also need know for determine mortar quality. To concrete, compare flexural strength value with strength compression it often used ftr = C $\sqrt{f'c}$, where C is constanta. To mortar use it need determine.

Abstrac

Setiap penggunaan mortar di lapangan selalu diharapkan mempunyai nilai keawetan yang lama. Namun yang perlu di ingat bahwa seiring bertambahnya umur mortar pada suatu ketika mortar akan mengalami penurunan kekuatan, baik kuat tekan maupun kuat tariknya. Oleh sebab itulah pengujian terhadap kekuatan mortar perlu dilakukan untuk mengetahui sampai dimana mortar mencapai kekuatan maksimum dan kemudian mengalami penurunan kekuatan.

Kemiripan bahan penyusun sering dijadikan alasan para peneliti untuk membandingkan nilai kekuatan mortar dengan beton. Namun ternyata tidak selamanya perilaku mortar mempunyai kesamaan dengan beton. Menurut penelitian yang dilakukan Wood bahwa mortar akan mengalami penurunan kekuatan sesudah umur 90 hari sedang beton masih akan mengalami kenaikan kekuatan sampai pada umur 1 tahun.

Tentunya akan sangat menarik membuktikan penelitian Wood ini dengan menggunakan material Indonesia. Di samping itu perbandingan kuat tekan dan kuat tarik lentur mortar juga perlu diketahui untuk menentukan kualitas dari mortar tersebut. Pada beton perbandingan nilai kuat tarik dengan nilai kuat tekannya sering di gunakan dengan formula $ftr = C\sqrt{f'c}$, dimana C merupakan konstanta. Pada mortar penggunaan formula ini perlu di buktikan.

Every mortar used in civil work usually wished having long durable value. But must remember, mortar will experience strength increasing of long time, compression and flexural strength. So need research about mortar increasing strength for knowing time to maximum strength and time of experience increasing strength.

Same supporting material often base by researcher for comparing mortar strength value with concrete. But not absolutely mortar behavior likely with concrete. According research by Wood that mortar will increasing of strength after 90 age. but concrete will increasing of strength 1 year age.

Of course will interesting of evidence this Wood research with using Indonesia material. Beside comparing compression and flexural strength mortar also need know for determine mortar quality. To concrete, compare flexural strength value with strength compression it often used $ftr = C\sqrt{f'c}$, *where C is constanta.* To mortar use it need determine.