

**A STUDY OF STRENGTH ACTIVITY INDEX OF GROUND COARSE FLY ASH WITH
PORTLAND CEMENT**

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Fly ash, from Mae Moh power plant, was classified by air classifier to yield fine and coarse fractions. The coarse fly ash was ground and classified again into 3 sizes. Four different sizes of fly ash from the process including the original fly ash were replaced cement 20% by weight to make mortars. Chemical and physical properties of all fly ashes were tested. Setting times of fly ash-cement pastes and compressive strength of fly ash-cement mortars were investigated, and compared with those of the control. The results revealed that slight change in chemical composition of processed fly ashes did not give much effect on the compressive strength, whereas, the fineness of fly ash played a more important factor on the compressive strength development rate. More than 110% of strength activity index of ground coarse fly ash mortar can be achieved as early as 1 to 3 days since the coarse fly ash is not in crystalline phase.