So far, the use of boron compounds as composites of cement binder, except for the limited usage conditions like setting retarders, has not become widespread because of the hardening (socket) and the related problems. The boron compounds will can be obtained of widely usage as an additive in the production of cement and concrete in case of the elimination of this negative event thus, technological properties such as fire resistance, impermeability of the radiation to cementations composites will can be enhanced. In this study, the effects of the boron compounds into hydration process of the different cement types and controllability of the effects is investigated. For this purpose, mortar mixtures were prepared using Portland, boron modified active belite (BAB) and calcium aluminates cements and, in addition to adding boric acid of 0.25-1.00% by weight of cement. Initial setting and finish setting times of fresh mortars were measured. The increase of boric acid concentration in the mortar mixtures, the increase setting times of the fresh mortars. For suppress to the negative impact of boric acid to the hydration process, setting times were again measured adding three different stabilizer types at different ratios by weight of cement and results of added stabilizer mortar samples were compared to both control samples and boric acid added/ without stabilizer mortars samples. As a result, the suitable stabilizer type and usage ratio for purpose were determined taking into consideration optimum workability times of mortars adding boric acid.