## STANDARDIZE WUDHU PLACE DESIGN FOR STANDING POSITION BY USING QUALITY FUNCTION DEPLOYMENT

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## ABSTRACT

Wudhu place is the place where all every Muslims wash or wash all the members of a particular body with water before working on Shalat (Prayer and Shiva Sunnah). Based on the previous study there is no research for standardize the wudhu place for standing position. More research and method only focus to find the best design for sitting wudhu place. On top of that, this research studies about ergonomic aspect and standardize for designing male wudhu place for standing position by using Quality Function Deployment (QFD) that included voice of customer and House of Quality. QFD is an effective design method to integrate ergonomics needs and comfort into wudhu place design because it explicitly addresses the translation of customer requirements into engineering characteristics. This method use to find what the importance criteria in order to improve design of wudhu place. The method of this research is collecting the data for existing and customer survey of wudhu place. This purpose of the study is to compare and to find the best measure for standardize the wudhu place so it become more comfort and ergonomic. Based on the study, there are three main criteria that have been standardize: a) distance tap from standing position is 78.7  $\pm$  5.2 cm b) distance between two tap is 67.6  $\pm$  3.2 cm c) distance tap from wall is  $15.6 \pm 1.6$  cm.

