

DESIGN AND CONSTRUCT A MODEL OF A MOBILE OUTDOOR ELEVATOR FOR CONSTRUCTION USE

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ABSTRACT

The purpose of this project is to design an adjustable elevator in terms of height (up to 1 storey) and can be mobile as well as can change its position (with rotating the circular base). It is meant for the purpose of moving raw material like cement bags, boxes of tiles from the floor to the upper floor during constructions of houses and the like. The base of the moving part of elevator is a square platform that sits on a smaller circular base, the elevator can translate vertical or at angle bringing the materials up or down, depending on the choice of the availability of the parts; it can be designed by cables-pulleys mechanism or gear mechanics. For whatever methods the students may choose, the structure must be well balanced so that it will not tumble as the center of gravity varies in position as it is raised when the loads begin to rise.