

**UNIVERSITI TEKNOLOGI MARA  
PERAK BRANCH**

**AUTO SORTING CHUTE FOR CONSTRUCTION  
WASTE DISPOSAL IN HIGH-RISE BUILDING  
CONSTRUCTION**

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**BSc**

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## AUTHOR'S DECLARATION

I declare that the work in this innovation project report was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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## **ABSTRACT**

Malaysia's construction industry has grown to become one of the fastest-growing sectors in the country. The rapid development of Malaysia's construction industry has led to many construction waste products that may negatively impact the environment and increase construction waste quantity in landfills. Therefore, this innovation project focuses only on the disposing method for construction waste in high-rise building construction. Problems may arise during the sorting and disposal of construction waste in high-rise buildings since manual sorting and disposal techniques are often used. Therefore, an innovation concept called Auto Sorting Chute is created to address the identified issues. The objectives of the innovation project are to identify the most sustainable method in construction waste disposal for high-rise building construction, propose sustainable sorting and disposal of construction waste in high-rise building construction, and determine the marketability of proposing sustainable sorting and disposal of construction waste in high-rise building construction. To achieve the objective, the method used to develop this innovation concept included conducting a case study on relevant issues related to Auto Sorting Chute. An interview and an online questionnaire survey are conducted to strengthen the innovation idea's findings. From the review, the major problems faced during the disposing and sorting of construction waste may include the issues of double handling and safety issues on the current method of disposing and sorting construction waste in high-rise building construction. Based on the data collected, a comparative analysis is made to compare existing equipment and method with the Auto Sorting Chute as the result of findings. Furthermore, depending on the respondents' response, the Auto Sorting Chute may be marketed to the potential user. It was hoped that the innovative concept of the Auto Sorting Chute would improve both the safety of the environment and the quality of future development.