

**THE EFFECT OF SCREW TYPES ON THE HOLDING STRENGTH  
OF COMMERCIAL 15MM AND 18MM MEDIUM DENSITY  
FIBERBOARD (MDF)**

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**AUGUST 2021**

## **ABSTRACT**

### **THE EFFECT OF SCREW TYPES ON THE HOLDING STRENGTH OF COMMERCIAL 15MM AND 18MM MEDIUM DENSITY FIBERBOARD (MDF)**

An increasing demand on solid wood based product has led to insufficient supply to fulfil the market demand. As an alternative to meet the required demand, engineered wood was used. The logging industry produce a lot of wood waste and some of it were utilize to produce an engineered wood. It can be used as a substitute for solid wood, it can be used in furniture manufacturing but the behaviour of engineered wood is different from solid wood. Limited research has been conducted to study the performance of fasteners with this panel. Therefore, in this study the characteristics of each screw types were investigated to see the effect of screw types on commercial MDF 15mm and 18mm. The results indicate that the most suitable type of screw to be used with MDF is stainless steel and chromed plated screw. To the result differ from the lower screw withdrawal (SW) compare to brass screw for both thickness. In addition, MDF 18mm shows higher SW compare to MDF 15mm for all types of screw used. The SW was found to be higher at the face side of each thickness

**Keyword:** Commercial MDF, fastener, density, test direction, screw withdrawal.

## ACKNOWLEDGMENT

First and foremost, I would like to show my gratitude to ALLAH S.W.T for whom with His will gave me this opportunity to complete this thesis while facing the hardship on a new environment due to the pandemic Covid-19.

I would like to dedicate a special thanks to my supervisor, Professor Madya ChM Dr Nor Yuziah Mohd Yunus for the guidance and help throughout the whole journey on completing this thesis from the very beginning until the end. It is my pleasure to have her as my supervisor.

I also want to gratitude my thanks to my project coordinator, Dr Siti Zalifah binti Mahmud for guiding me with guided lines for the thesis writing and also the viva presentation.

I would like to express my thanks and gratitude to my senior Nur Wafa Amalina binti Amali who has given me so much help to understand about the topic and share her knowledge and wisdom. With her presence, I am able to complete this thesis and it would be impossible for me to finishing this thesis without her incredible support. Then, I would also like to thanks my friend Nurul Syafiqkah bt Noh who has given me a moral support and act as my competitor in order for me to complete this thesis on time.

Most importantly, I would like to thanks my parents,

who has never stop taking a very good care of me and giving me their unlimited encouragement and support physically and spiritually. They always provide me with the best care, give me the best environment and providing me with all the equipment needed for my open and distance learning (ODL) to be as comfortable as I can.

Muhammad Hariz Isyraf bin Yuszaini

(2019659962)

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