

MECHANICAL TESTS ON DIFFERENT WOOD JOINING METHODS

Prepared by: Lee Jiunn Jye

ABSTRACT

Joint actually is place, line or surface at which 2 or more things are joined. Wood also appears in every way of our life. So, wood joint is an integral part in our daily life. In other words we can say that we have to face wood joint everyday so the strength of the joint is very important to us. Beside that we have to know that different types of joint match with different type of wood have different types of strength. If the strength is not as strong as enough to let us to use it, it will easily to hurt us when it breaks. This project was undertaken to get to the bottom of this problem. So an experiment of different types of wood joint is being carried out for us to more familiar to which joint with which wood can hold more weight. This experiment involve to do different type of wood joint which are in lap joint, butt joint, T joint and a cylinder of wood is insert to the other wood. The experiment is carried out which a machine with two support points and then will have a force to press on it until it break. At the moment it breaks, I will record down the data and then do bending moments calculation. From the results of it, we can find out the weight limit of which type of joint with which type of wood is the strongest or which is the weakest. Then with different kind f needs we can use the different kind of wood joints. So we can use the least cost to maintain the high safety of a product. Thus with this simple experiments, the worries of the products can withstand how much of weight is capable eradicating. There is no more worries like the products will hurt the users beside that also can reduce the cost of o product.