Declan Ruiz & Zach Shellhorn

Mrs. Floyd

Engineering Design and Development

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Choosing Materials and Fastening Procedures

Our design will not have anything special when it comes to materials, fasteners, or design. Our design is very simple and uses standard fastening materials in the building of our prototype/product. The only attachment that would experience any type of fatigue or stress would be the handle because it will be undergoing direct y-axis stress from the weight inside the briefcase itself. Our design will be very standard and simple therefore, it will use standard screws, hinges, and other fastening devices. We will use basic tools such as hammers, drills, and various saws to construct our prototype. Our prototype as we have it right now does not consist of any nuts or bolts.

We are using plywood in our prototype and that comes from trees. In order to get the wood it requires the cutting down of trees which damages the world as we know it. We are using engineering by designing and developing a prototype using multiple separate random materials in the construction of our prototype. We are combining things that have already been constructed to make one large overall design.

The advantages of using plywood is that it can be bought easily at Lowe’s or any hardware store. It is easy to work with and make projects with. Plus, plywood is a reasonable price. The disadvantage of using plywood is that it is not the most appealing to the eye because it is a bunch of wood chips glued together in a large sheet. The advantage using hinges and latches are that they are easily obtainable