Minimizing the Impact of a Constant Force Using Metals

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Purpose: I want to find the best metal or combination of metals/materials that will minimize the most amount of force. This data can help determine what is the best siding to use when siding a house/shed. It will also determine the cost of the materials. Procedure: I used a Neulog Force Plate sensor to detect how much force in Newtons was given when hit with the hammer machine I welded together. I put different metals/materials in different combinations on the Force Plate and hit it 7 times with the hammer. I then took the readings and put them in Excel. Observation: When the hammer hit the wood or any metal with the wood underneath it, it had a higher bounce. It also had a higher number which means there was more force reflected back then absorbed which is what you want as a protective siding. Results: Using aluminum with wood behind it is the best combination to use for siding. Hot rolled steel with wood is the cheapest combination of materials.

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