



How much weight can sheet material stand?









Design Proposal- Adipower D.I.Y Desk



ADIPOWER D.I.Y DESK- BY NEO MOETI

For the London 2012 Olympic and Paralympic Games Adidas provided 41 styles of shoes for Team GB as part of its lightest ever range, on average 25% lighter than those for Beijing 2008 - and all in a striking red colour to reflect the passion of the games. The range includes the Adidas Adipower Boxing Boot which is made up of a mesh cover to make the shoe light and breathable as well as an interlocking rib to increase support and balance. This rib acts in a similar way to the human backbone which allows adaptability from one position to another through flexibility and movement.

The process of contraction and relaxation can be translated into what is known as collapsible design. Collapsibles can be achieved through folding, stressing, assembling, hinging, inflating and ribbing for example. Some of the advantages of these products is that they save space, they are easily moved from place to place and they reduce the total amount of material used. Ribbing as mentioned earlier is a manufacturing process that is used with fibres, plastics, metal and wood not only for decoration, but also for functional purposes such as enhanced gripping. Through experimentation and investigation I decided to use ribbing as well as folding techniques to improve the strength and performance of a sheet material.

One of the everyday products that we use that requires strength is a table. Different tables are designed for different uses. The Adipower DIY desk is based on an average sized side table and is made completely out of cardboard. It is a designed to be used by children of primary school age in developing countries that face the issue of inadequate educational facilities. The idea being that it can be constructed cheaply and by individuals instead of manufacturing firms. One standard sheet of size 1000mmx1100mmx 3-5mm (single wall thickness) can make 1 and half desks which means that a pack of 20 sheets at about £27.70 can make 30 desks, enough to facilitate an average classroom, for about a pound each. This would therefore make it an affordable development to implement. Furthermore, schools could organise campaigns to reuse boxes manufactured for packaging and supplied templates could help communities undertake the making of these resources themselves. Ultimately combating issues of pollution and negative environmental impact.