



Achieving Cardboard Heaven!

By Tony Martin, Manager Physical Testing Branch, TestSafe Australia

We use cardboard products for a surprisingly wide variety of purposes. We vote in a cardboard booth, we drink wine from what Australians call "chateau cardboard" and we tolerate airline catering delivered in a cardboard box and now we are increasingly likely to be buried in a cardboard coffin.

Recently, TestSafe was asked to conduct a series of tests on a cardboard coffin - a new product to enter the market catering for the dearly departed! The testing was designed to give an indication of the strength and suitability of this material for use in lieu of other alternative products in the funeral industry.



A number of years ago, TestSafe was involved in the initial testing of coffins following consultation with funeral industry representatives. They were keen to create a method for determining the performance of coffins so that all products could be judged equally. A timber coffin was tested during that initial testing session.

The test program consisted of various types of load testing. First, the coffins were loaded by placing sand bags inside each of two cardboard coffins, conditioning of one the coffins at ambient temperature and one at 3°C, and then performing a series of load tests. Some of the load tests included:



- coffin load test - lifting the coffin with a specified weight inside to a maximum of 300kg, to determine deflection or damage.
- handle force test - to determine if the handles would break holding a specified load.



- lid load test - to check that the lid would not cave in when loaded.
- drop test - to determine if the coffin would break when dropped in transit!

TestSafe has also conducted an exhaustive set of tests on coffin handles to determine what force is required to break the handles! Over 100 handles were tested in this program and results were presented formally to the industry.

It is interesting to see the range of reactions people have when they see our staff testing coffins! It is always a great talking point around the site.



Strangely enough, there is often some difficulty getting volunteers to act as weights during part of the testing process! We have to resort to bags of sand instead of real human test weights!