

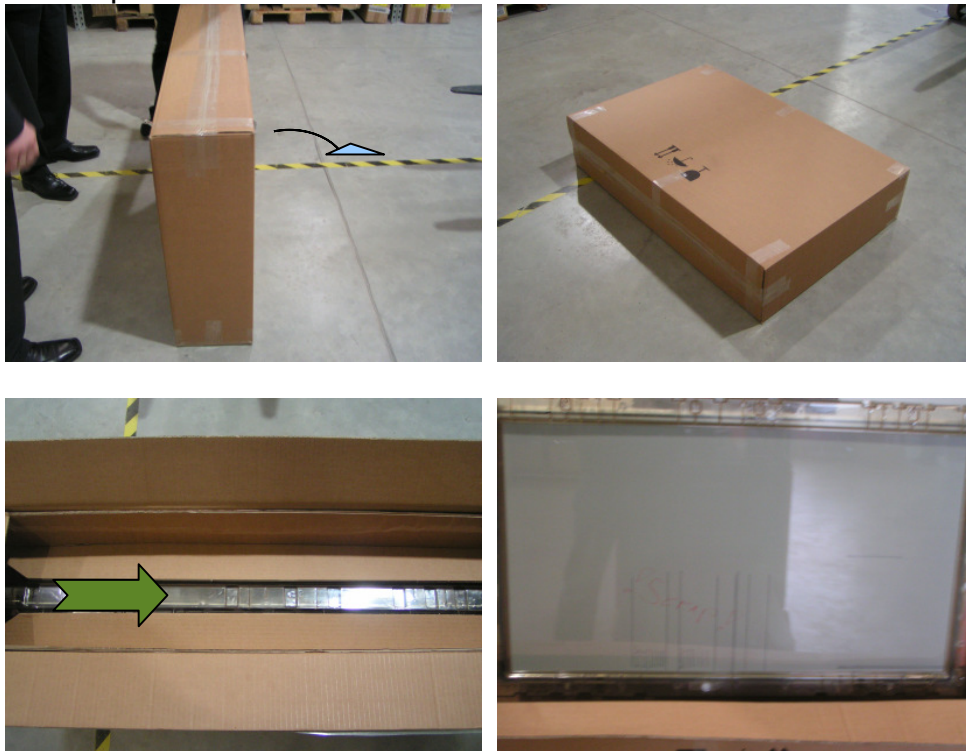
## ALPHA PDP-Transportation-Packaging Report

For the tests, defective Panasonic 42" panels have been used.  
The weight of one panel is roughly 15 kg.

Scenario 1 examines the simple fall over, the scenarios 2 and 3 a drop from a defined altitude.

### **Scenario 1 :**

While standing on the floor, a 42" panel packed and assembled in a frame is 42" panel is knocked over.

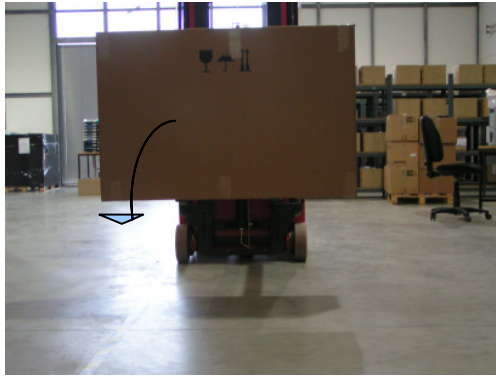


### **Result :**

The panel, resp. the frame is perfectly fixed by the (green arrow) power foil and was able to absorb the shock impulse. The panel stayed intact.

## **Scenario 2 :**

The packed panel, assembled in the frame, is dropped from an altitude of resp. 50 cm.

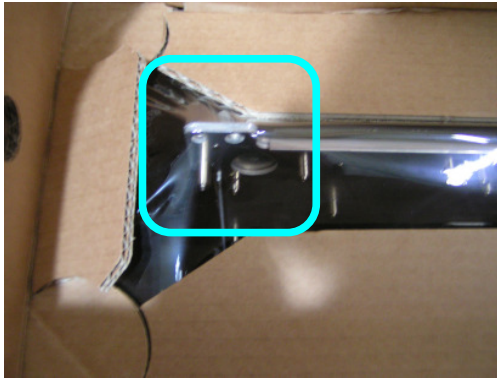


## **Result :**

The power foil is able to fix the framed panel very well (green arrow) even the package was dropped very hard. The panel is still intact. The deformations caused by the shock (seen in the red circles), show how the foil absorbs the energy, and shapes back in a short time.

### **Scenario 3 :**

From an altitude of resp. 50cm the packaging containing a 42" panel without frame is dropped.



The special challenge thereby are the sharp metallic corners of the aluminium back-plates (blue box).



As the packaging has now a minor height, the packaging can be lowered with four short cuts in the corners. The new needed fold lines are already provided at the packaging.



### **Result :**

The panel is still perfectly fixed by the packaging and the power foil. The panel stayed intact and also the packaging has no serious damage. A cover for the sharp corners could give additional safety.

## **Summary and proposal :**

Due to the positive results of the tests, a limitless recommendation can be given for this packaging system. Also the usage and handling is very easy and functionally. Another advantage is the minimum of space needed for storing the packages.

A proposal can only be given for scenario 3, in form of adding hard-foam covers to the sharp metallic corners .

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