

Testing of packaging

4G cardboard boxes



The **cardboard boxes belong to the next of a serie of tested and subsequently certified packaging for dangerous goods in our testing lab. According to the international regulations, they are referred to as 4G.**

These are boxes made of cardboard, whose use for the packing of dangerous goods is different, and due to its properties, also very wide.

Our work is grounded in the authorisation of the Ministry of Transport and certification in transport packaging for dangerous goods and the relevant accreditation.

What are the required parameters?

As stated in international regulations, the boxes must be constructed of three and multi-layer corrugated board of good quality, adapted to the internal volume and purpose of use. The resistance of the outer surface against water must be such that the increase in weight during the test by the Cobb method shall not exceed more than 155 g/m² (ISO 535 : 1991).

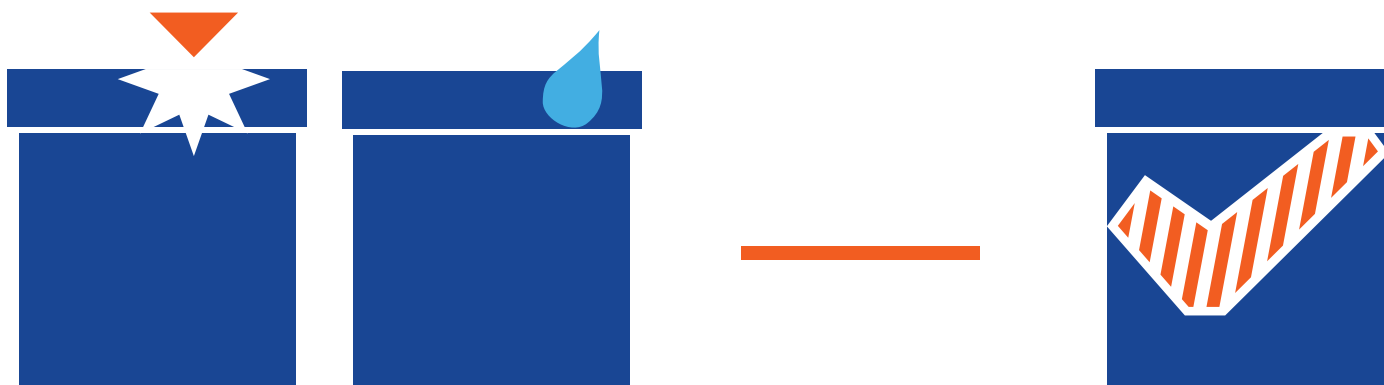
- Cardboard must be of appropriate quality strength upon bending. It must be formatted without cuts or cracks, and ribbed so that during the assembly operation, the packaging must not break in ribbed sections, or crackle or bend on the surface.
- Waves of the corrugated cardboard must be securely glued together with the outer layer.
- The edges of the boxes can be fitted with a wooden frame, or can be completely made of wood or of another material. Amplifying strips of wood or other suitable material can be used.
- Manufacturing joints of the shell boxes must be glued with adhesive tape, transplanted and glued or transplanted and stapled with metal staples. Overlapping joints must have an appropriate overlap. When sealing is done by gluing or by pasting over the adhesive tape, waterproof glue must be used. Boxes must be constructed so as to well suit the content.

Compliance with international regulations

Boxes of cardboard 4G, as well as other similar packaging, shall conform to the following chapters of the international regulations:

- | | | | | | |
|-------------|---|-------|-----|-----|-----|
| • ADR | - | chap. | 4.1 | and | 6.1 |
| • RID | - | chap. | 4.1 | and | 6.1 |
| • RTDG | - | chap. | 4.1 | and | 6.1 |
| • IATA-DGR | - | chap. | 5.0 | and | 6.2 |
| • IMDG-Code | - | chap. | 4.1 | and | 6.1 |

For the creation and implementation of the methodology we also use technical standards, specifically ČSN EN ISO 16495 Packaging – Transport packaging for dangerous goods – Test methods.



The international validity of our law

The customers of our company who test cardboard 4G boxes, originate both from domestic and foreign markets. Our certificates and the UN permits are valid worldwide.

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