

# Testing of packaging wooden boxes



**One of the most frequently tested and subsequently certified packaging for dangerous goods in our testing laboratory are **wooden boxes**. According to international regulations, they are referred to as **4C1**.**

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

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In most cases these boxes are made of natural wood. Their use for packaging of dangerous goods varies, but they are mostly used for packaging and subsequent transportation of arms and ammunition.

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## What are the required parameters?

According to international regulations, the timber used must be naturally mature, dry and free of defects that could significantly reduce the resistance of any part of the crate. The strength of the material and design of the crate must be adapted to the internal volume of the crate and its use. The top and bottom may be from water-resistant, large-size materials from reconstituted wood, such as chipboard or fibre board or other suitable types. Joints must be resistant against the vibrations created during normal transport.

It is necessary to avoid nailing in the direction of the fibres of the wood at the end of the list. For joints that are prone to the most stress, the bending of nails, riveted or screwed nails (with a circular motion when hammering), or another equivalent connection must be used.



## Compliance with international regulations

Wooden boxes of natural wood 4C1, as well as other wooden packaging must comply with the following chapters of international legislation:

- 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 **CSN EN ISO 16495 Packaging – Transport packaging for dangerous goods – Test methods.**

## The international validity of our laws

A large number of our customers who demand testing of wooden boxes come from foreign markets. With regard to the fact that the certificates issued by us and the authorisation of the UN are valid worldwide, this service is very widely demanded in our laboratory.

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