



Karditsa, Greece / 24 July 2017

**Department of Wood & Furniture Design and Technology**

Technological Education Institute (TEI) of Thessaly – *a Greek higher education institution*

**Laboratory of Wood Science & Technology**

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URL (Google Scholar): <https://scholar.google.pt/citations?user=rFT6H-wAAAAJ&hl=en>

Technical cases (2004-2017): <http://users.teilar.gr/~mantanis/technical-projects.htm>

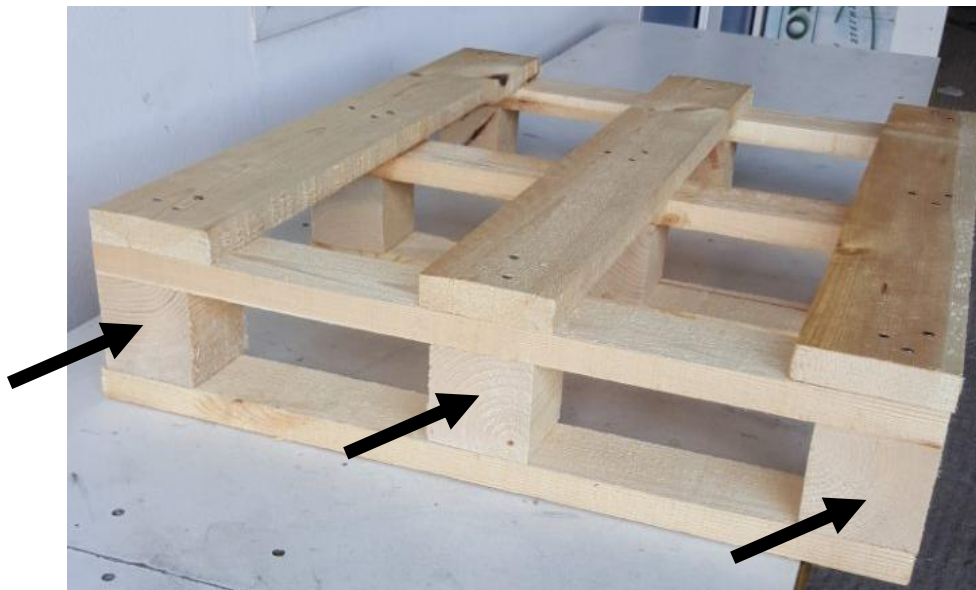
To: [REDACTED], Greece

## VERIFICATION LETTER

**RE:** *Compressed wood blocks* in wooden pallets used by the company [REDACTED]

Responding to your letter of July 20<sup>th</sup>, I did examine technically the above subject, and by this letter, as a wood expert in the field of *wood technology* for more than 20 years, **I do verify** that *compressed wood blocks* are certified and safe wood products in the European and international market, insomuch they meet specific law requirements.

Particularly, the wood enterprise Alexiou Ltd., which is based in Chalkis, Greece, that supplies [REDACTED] with wooden pallets (as in the photo) **can substitute** the pallet *solid-wood* blocks with *compressed wood blocks*, which are certified products from coniferous timber chips and compressed using a melamine-urea-formaldehyde resin, as manufactured by the known company Pfeifer Holz GmbH, based in Germany.



Photography of the wooden pallet supplied to [REDACTED] by company Alexiou Ltd.

The mentioned products, *compressed wood blocks*, are very common and frequently encountered in the European market since they are certified according to the European legislation, and corresponding REACH regulations. I enclose for you a *certificate* (doc. 1) from the accredited German institution SGS Institut Fresenius, that verifies that such blocks, from company Pfeifer Holz, belong to **E1 class** (in respect to standard EN 120) in full accordance with REACH requirements.

To note: *most European homes today are fully equipped with articles of furniture or wood panels (namely wood-based panels, i.e. particleboard and MDF), which also belong in the mentioned E1 class, are placed in our bedrooms and living rooms, and are safe products for the inhabitants.*

In addition, I do enclose for you *product data sheet* (doc. 2) and *letter* (doc. 3) from the producing German company Pfeifer Holz, which verifies the high quality and safety of *compressed wood blocks* in the wooden pallets. Such blocks, as products, have much higher mechanical compression resistance, and lesser tendency to cracks.

Following, and in respect to the proper handling, storage and recycling of *compressed wood blocks*, to best of my knowledge, I advise you on the following:

- ✚ The said product **fulfills REACH regulations** as long as they belong to E1 class (EN 120), as it is valid for all the glued wood products in Europe.
- ✚ There is absolutely no need to inform your customers for taking special care, or protective equipment when handling these wooden pallets.
- ✚ You should anyways inform your customers not to store wooden pallets in outdoors, exposed to weather conditions, because wood is a hygroscopic and biologically vulnerable material; when moisture exceeds the 20% level, mould, fungi, insects can damage the pallets. The same for wooden pallets, will be true for the compressed wood blocks as well.
- ✚ You should advise your customers that foil-covered packed products on the wood pallets should not exposed to climatic conditions for more than two (2) months after handover.
- ✚ According to European Directive 94/62/EC, **compressed wood blocks are recyclable materials**. However, since they are characterised as 'non-wood', they should be collected separately and recycled as wood glued based panels like particleboard, plywood, hardboard and MDF (i.e. all contain resins).

**I do verify the above**, and remain at your disposal for any cooperation.

Karditsa (GR), 24/07/2017

Verifying & signing this letter,

**Prof. George I. Mantanis**

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-3 enclosed (documents) to this verification letter