

TALKING TIMBER



THE PLYWOOD SAGA - PART 2

*Sellers of plywood should know its composition and how it will perform in service, says **John Park***



When you are selling a product, how much should you know about it? Clearly more than whoever sold the plywood used on that soffit (*pictured*) and I make no excuses for using that picture again!

When someone is selling a new car there is no need for them to have an intimate knowledge of the science of internal combustion or the vulcanization of rubber but most people buying a new car would expect the

salesperson to know a model's specification and how it performs in service.

When you sell someone plywood, you don't need to have an intimate knowledge of the botanical structure of the wood or the chemical formulae of the adhesive's constituent parts but you should be expected to know the plywood composition and how it will perform in service – see picture below.

In the *TTJ* May issue Jim Coulson referred to good specification, but that relies entirely on the company supplying the product to meet that specification. What did the person who specified and used the plywood on that soffit think they were getting? What did the person who bought that plywood from the producer think they were getting and subsequently think they were selling?

When you are selling any wood and wood-based products, especially into construction, you at least need to know Wood Science 101, ie the absolute basics. You don't need a degree in wood science but you should at least know how what you are selling will behave in the presence of moisture.

Plywood is fraught with difficulties from the start not least of which is that it is not possible to standardise to overcome fraudulent or improper practise, which is why due diligence is important. But standardise we do which, for the manufacture of plywood, begins with EN 636 'Plywood – Specifications' which includes, in the list of 32 normative references, the most pertinent in relation to the supply chain, namely EN 314-2 for glue bond and EN 350 for biological durability. It also references CEN/TS 1099 – 'Guidance for the assessment of plywood for use in the different use classes', but the use of that relies on knowing what the plywood is made of.

EN 636 – unlike BS 1088 'Marine plywood – Requirements' – is only partially prescriptive being categorical with reference to glue bond but not with regard to biological durability, requiring plywood to be 'appropriate for the prevailing climatic conditions'. That presents the manufacturer and merchant with something of a dilemma because unless sapwood is excluded, all plywood is

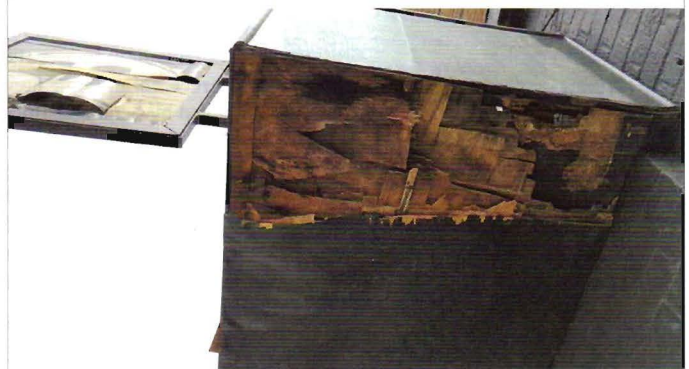
John Park is a board member and immediate past chairman of the WTS and manager of Canada Wood UK

Durability Class 5, ie not durable. And yet, with the correct adhesive, all plywood will cope with Service Class 2 (humid) conditions, which includes "Use Class 2 if the component is in a situation where it could be subjected to occasional wetting caused by, eg, condensation". So how inappropriate was the plywood used on that soffit?

EN 636:2012+A1:2015 (current) is also lacking the plywood Technical Classes which are listed in EN 13986:2004+A1:2015 (current) as 'Dry (EN 636-1)'; 'Humid (EN 636-2)'; 'Exterior (EN 636-3)'. The parentheses (and contents) were added in the 2004 revision but it was not intended, hence the parentheses, that the contents should supplant 'dry', 'humid' and 'exterior' as the Technical Classes for identification purposes. But they did!

And that inappropriate adoption is now apparently also causing confusion as they are the only wood-based panel Technical Classes that are the product Standard number, (cf eg OSB/3). They are also lacking the structural or general purpose (non-structural) qualifying identifier, ie 'S' or 'NS' the requirement for that being included in EN 636 in Clause 12 'Marking, identification and documentation'. So, please note, structural plywood should be identified as 'S', not 'CE2+'. I googled CE2+; and we thought 'WBP' was a problem! ■

Below. The plywood in this soffit was not fit for purpose



The Wood Technology Society

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