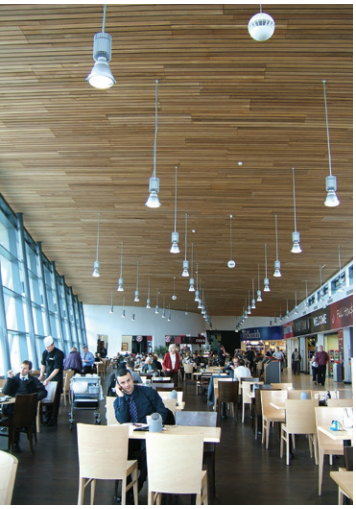
Lonza

Specifiers Guide
A Choice of Treatments

Tried, tested and proven preservative and fire retardant industrial treatments to help make the most of timber.



HELPING YOU MAKE THE MOST OF TIMBER

Timber is our most environmentally friendly and sustainable construction material. Commercial softwood timbers are continuing to be responsibly managed through industry initiatives such as the FSC and PEFC programmes which help to ensure the continued availability of these species and a low environmental impact from their harvesting. Our only truly renewable natural resource, timber also offers a range of functional qualities, inherent warmth and beauty and an economic suitability which are unmatched by man-made alternatives.

Correctly treated with modern wood protection products and processes, timber's long term durability, performance and market appeal can also be significantly enhanced.

Lonza offers the most comprehensive range of industrially applied wood protection products to help make the most of timber.

- **Proven wood preservative systems that provide complete protection against fungal decay and insect attack for a wide range of timber end uses.**
- **A choice of established and industry recognised fire retardant treatments which provide a highly effective surface spread of flame protection and more time for a safe escape in a fire situation.**

All are unique products which offer effective and assured timber protection solutions. Preservative treatments are offered through a network of licensed treaters throughout the UK and Europe. Fire retardant treatments are available through Lonza's own ISO 9001 and ISO 14001 accredited treatment centre at Castleford as well as licensees in Europe.

This document explains the range of products available from Lonza, the Use Class system designed to help classify levels of preservative protection and details of the relevant European Standards applicable to timber protection.

A CHOICE OF PRESERVATIVE TREATED TIMBER

The following information highlights the importance of Use Classes to determine the correct choice of preservative treated timber to meet the protection requirements of the timber's end use. Use Classes are defined in the European Standard EN 335 and are based on the potential threat to the timber from decay or insect attack in its eventual application. The higher the Use Class, the greater degree of protection is required.

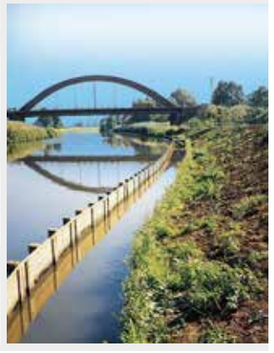
The range of preservative treated timbers shown in the illustration is not exhaustive and if your required timber component is not highlighted, please contact Lonza for further advice.

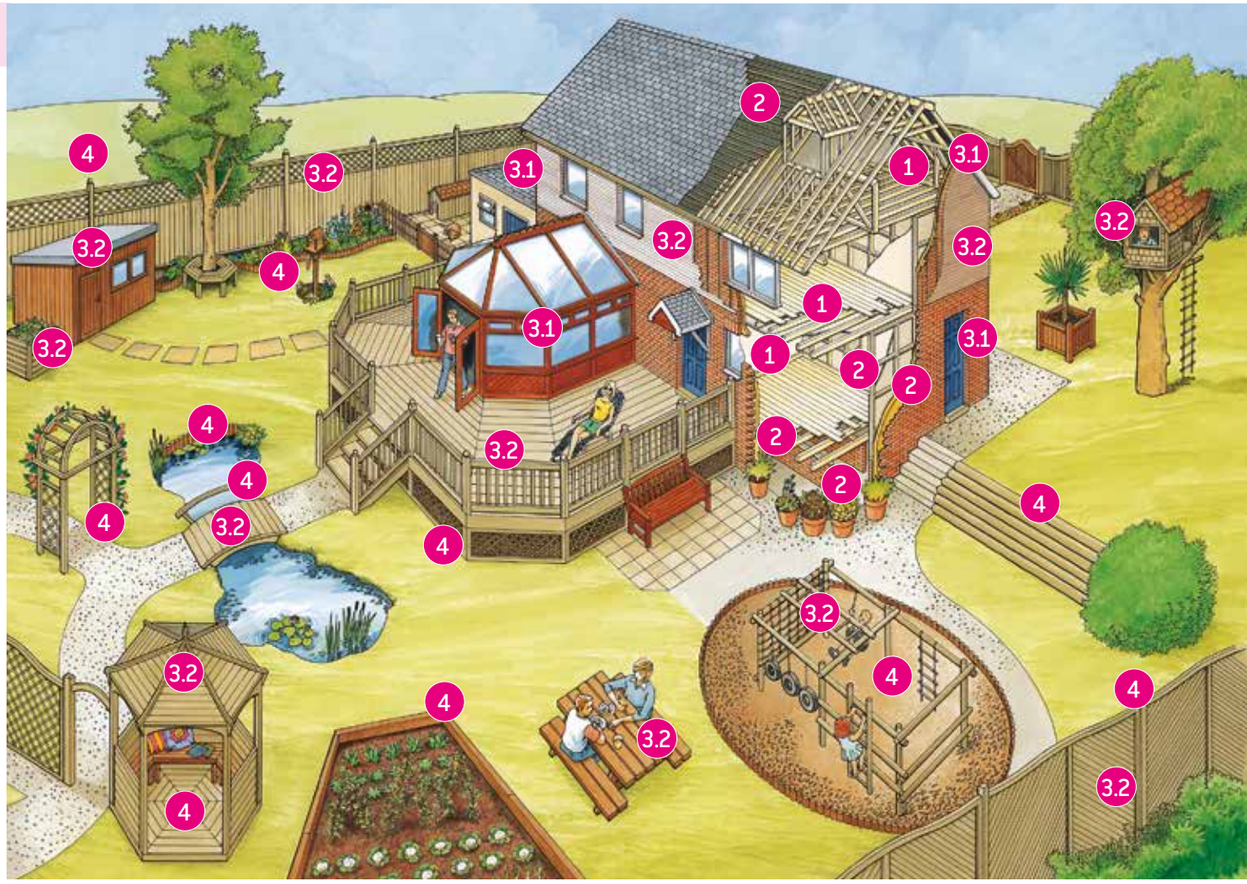
Ready treated stocks of TANALITH and TANATONE pressure treated timbers, together with specific treatments for VACSOL and TANALITH Creol treated timbers are available through a wide network of timber companies and treaters throughout the UK and Europe.

What is special about Use Class 4?

Timbers destined for USE CLASS 4 situations will be permanently exposed to wetting in either ground or fresh water contact – one of the most challenging environments for timber. It is therefore even more important to specify and treat correctly to meet either the 15 or 30 year desired service life specification available. Whenever you are specifying or purchasing preservative treated timber for in ground or water contact end uses, **make sure it's treated to Use Class 4!**

make sure it's BS8417 TREATED Use Class 4 GROUND CONTACT TIMBER™





The illustration above shows the wide range of end uses for various timber use classes.

USE CLASSES AND PRESERVATIVE TREATED TIMBER

Use Class	Use Situations	Principal Biological Agency	Typical Service Situation	Typical Examples	Relevant Pressure Preservative Treatments For Each Use Class
1	Above ground, covered. Permanently dry. Permanently less than 18% moisture content	Insects	Internal with no risk of wetting or condensation.	All timbers in normal pitched roofs except tiling battens and valley gutter timbers. Floor boards, architraves, internal joinery, skirtings. All timbers in upper floors not built into solid external walls.	Vacsol™ Tanalith™
2	Above ground, covered. Occasional risk of wetting. Occasionally more than 20% moisture content.	Fungi Insects	Internal with risk of wetting or condensation.	Tiling battens†, structural timbers in timber frame houses†, timber in pitched roofs with high condensation risk, timbers in flat roofs, valley gutter timbers, ground floor joists†, sole plates (above dpc), timber joists in upper floors built into external walls.	Vacsol™ Tanalith™
3* COATED	Above ground, not covered. Exposed to frequent wetting.	Fungi	External, above damp proof course (dpc) - **coated**.	External joinery including roof soffits and fascias, bargeboards, cladding.	Vacsol™ Tanalith™
3* UNCOATED	Often greater than 20% moisture content.	Fungi	External, above damp proof course (dpc) - **uncoated**.	Fence rails, gates, fence boards, garden timbers, cladding, deck boards and balustrades, agricultural timbers not in soil/manure contact.	Tanalith™ Tanatone™ Tanalith™ CREOL
4	In contact with ground or fresh water. Permanently exposed to wetting. Permanently above 20% moisture content.	Fungi	Soil contact. Timbers in permanent contact with the ground or below dpc.	Fence posts, gravel boards, deck support timbers, agricultural timbers in soil/manure contact, poles, sleepers, garden timbers.	Tanalith™ Tanatone™ Tanalith™ CREOL
			Fresh water contact. Timbers in permanent contact with fresh water.	Lock gates, revetments.	
			Cooling tower timbers.	Cooling tower packing (fresh water).	

† These timbers are assigned to a higher Use Class than suggested by their location in the structure of a building, owing to the potential consequences of failure based on experience within various markets.

If Vacsol treated, exterior woodwork must be subsequently protected with a maintained and appropriate surface coating.

* In accordance with EN 335: 2013 Use Class 3 COATED can also be referred to as 3.1 and Use Class 3 UNCOATED as 3.2.

Tanalith Family

USE CLASSES AND EXAMPLES

PRESSURE TREATED TIMBER

TANALITH pressure treated timber has been high pressure impregnated with the very latest TANALITH preservative, a waterborne product based on copper triazole technology. TANALITH pressure treated timber is usually specified for both in and out of ground contact applications where there is a medium to high risk of decay or insect attack. TANALITH pressure treated timber has an initial natural pale green colouration.

Use Classes 1, 2, 3.1 (Coated), 3.2 (Uncoated) & 4
Ideal for general construction, fencing, garden and leisure timbers and industrial applications such as transmission poles, cooling tower timbers and retaining walls.

PRESSURE TREATED TIMBER WITH BUILT-IN COLOUR

TANATONE pressure treated timber has been high pressure impregnated with TANALITH preservative containing a built-in brown colouration. Tanatone pressure treated timber is usually specified for fencing and landscaping applications, eliminating the need for brush applied colour at the point of installation.

Use Classes 3.2(Uncoated) & 4
Ideal for rough sawn fencing and landscaping timbers.

PRESSURE TREATED TIMBER WITH BUILT-IN COLOUR AND WATER REPELLENCY

TANALITH CREOL pressure treated timber is protected by TANALITH wood preservative and CREOL - a water repellent colourant which imparts a durable, rich dark brown colour. Treatment is applied throughout a two-part process; a high pressure TANALITH treatment followed by a dipping or vacuum pressure treatment with CREOL.

Use Class 3.2 (Uncoated) & 4
Ideal for cladding, garden and leisure wood structures, sleepers, fencing and transmission poles.

Vacsol Family

USE CLASSES AND EXAMPLES

TREATED TIMBER

VACSOL treated timber has been low pressure impregnated with VACSOL preservative, a waterborne product containing biodegradable fungicides. VACSOL treated timber is usually specified for above dpc level interior construction timbers and external coated joinery applications where there is a low to medium risk of decay or insect attack. The colour of VACSOL treated timber is virtually unchanged, although a treatment colour indicator can be added, if required.

Use Classes 1, 2 & 3.1 (Coated)
Ideal for interior timber frame components, roofing and building timbers and external coated joinery.

Antiblu Family

USES AND EXAMPLES

STAIN PROTECTED TIMBER

ANTIBLU Select treated timber has been dip treated with a proven waterborne stain management system based on biodegradable ingredients that provides advanced and economical protection against sapstain and mould fungi. Protection is designed for freshly harvested or sawn timbers to last throughout the seasoning, storage and transport of the timber and is therefore of short duration, typically three months.

Pallet and packaging timbers.

Fire Retardant Family

STANDARDS AND EXAMPLES

FIRE RETARDANT TREATED TIMBER

Dricon fire retardant treated timber and sheet material has been high pressure impregnated with Dricon, an INT2 (humidity resistant) fire retardant formulation, and kiln dried to a specific moisture content. Dricon fire retardant treated timber and sheet material is suitable for permanent interior situations. It is the only industrial fire retardant treatment for timber with BBA (British Board of Agrément) approval. The treatment does not significantly alter the appearance of the timber.

Euroclass B & C in accordance with EN 13501-1. Claddings, plywoods, solid construction timbers, staircases, transport and scaffold boards.

FIRE RETARDANT TREATED TIMBER

ATP Generic fire retardant treated timber has been high pressure impregnated with ATP Generic, an INT1 (dry interior) fire retardant formulation, and then kiln dried to a specific moisture content. ATP Generic fire retardant treated timber is suitable for temporary interior situations.

Euroclass B & C in accordance with EN 13501-1. Film and theatre sets, shop fitting projects and some Ministry of Defence work.

STANDARDS AND GUIDANCE

Following are the principal documents, Standards and national specifications currently covering wood preservation, which provide more detailed information to the designer/specifier. Also listed are the key documents and Standards relating to fire protection of timber.

PRESERVATION

UK WPA Manual
The UK Wood Protection Association (WPA) publishes a manual which contains information on products suitable for the industrial preservative pre-treatment of timber. This manual largely mirrors BS 8417 but also includes commodity codes covering specific timber products.

BS 8417
Provides recommendations and guidance for the preservative treatment of timber to provide protection against biodeterioration in certain specified end use situations in the United Kingdom.

EN 599
Defines the formal efficacy assessment procedures by which the performance of wood preservatives can be evaluated.

EN 351
Part 1 covers the classification of retention and penetration of wood preservatives as used in BS 8417. Part 2 provides guidance on sampling for the analysis of preservative treated wood.

EN 350 (Part 2)
Gives information about the 'natural durability' of named wood species.

EN 335
Describes and classifies the many situations in which wood may be used into Use Classes.

UK Highways Agency
Specification for highways works clause 311.

UK National Building Specification Z12
Preservative treatments.

FIRE PROTECTION

UK WPA Manual
The UK Wood Protection Association (WPA) publishes a manual which contains information on product types suitable for the industrial fire retardant treatment of solid timber and panel products.

EN 13501-1
Defines the formal reaction to fire performance assessment procedures by which fire retardant treated materials are evaluated and graded with a European classification.

UK National Building Specification Z12
Fire retardant treatments.

LONZA WOOD PROTECTION
Wheldon Road, Castleford, West Yorkshire, WF10 2JT.
Tel: +44 (0)1977 714000 Fax: +44 (0)1977 714001
Email: timberprotectionadvice.ukca@lonza.com
www.lonzawoodprotection.com/eu