

**arxada**

## Specifiers Guide

Vacsol®

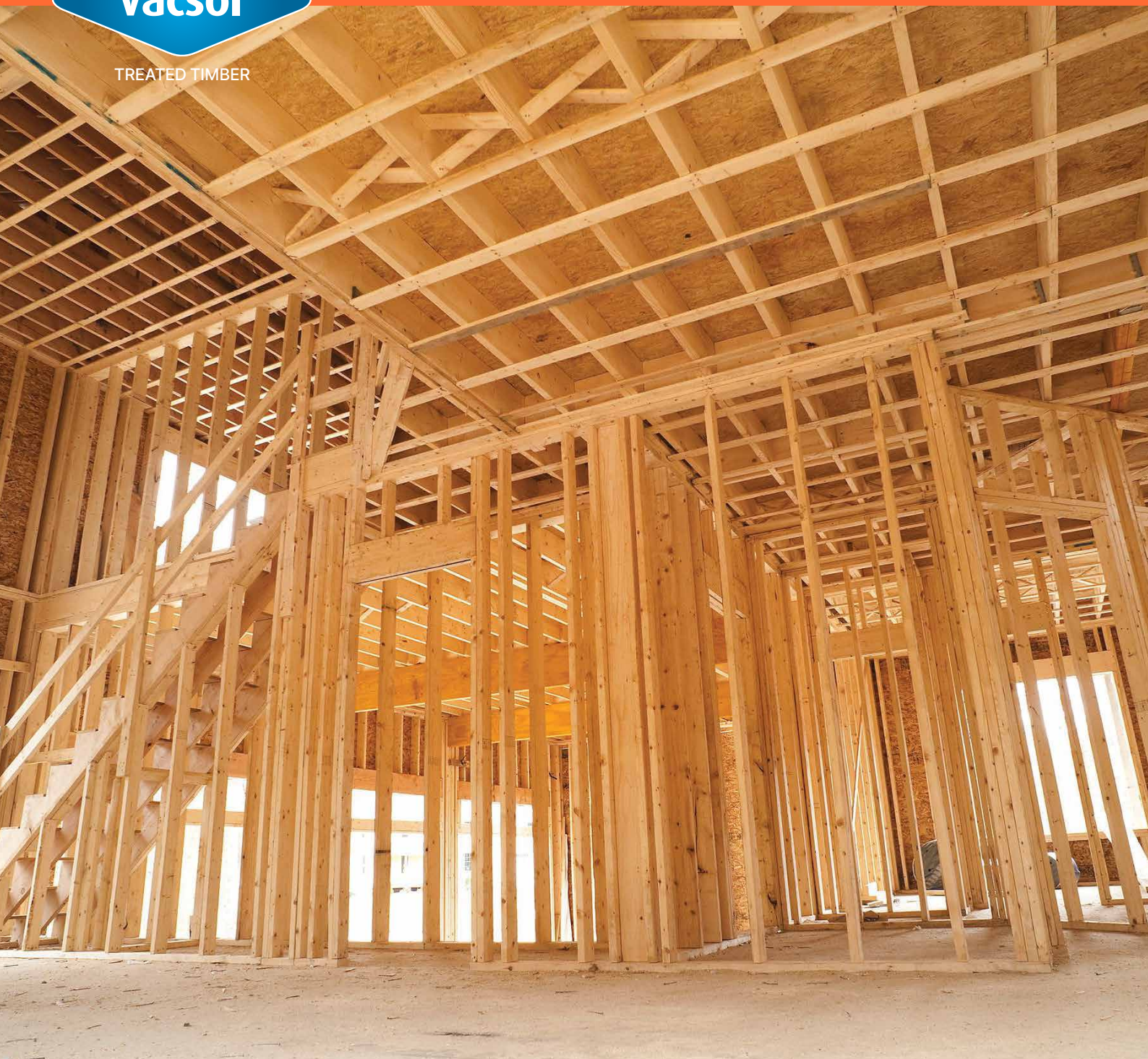
Double Vacuum, Low Pressure  
Treated Timber

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Wood Protection

**Vacsol®**

TREATED TIMBER



# Proven long term protection against decay and insect attack for general internal building timbers, timber frame material, roof and floor components and external joinery.

Vacsol® treated timber has been treated with Vacsol® wood preservative, containing biodegradable organic fungicides and insecticides in a water base.

Proven performance against fungal decay and insect attack through a treated envelope protection.

Low uptake process ensures timber dries rapidly after treatment and has dimensional stability.

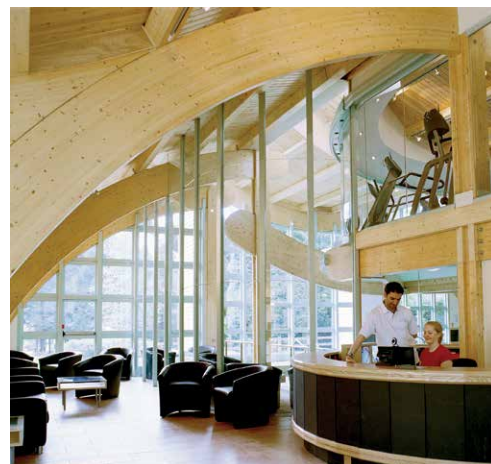
Treatments can be supplied with a clear appearance, although a colour dye (typically yellow) can be used to help identify treatment.

Suitable for use in internal and external building applications above damp proof course (dpc) level where there is a low to medium risk of fungal decay or insect attack - e.g. timber frame components, external joinery, construction, roofing and flooring timbers.

External joinery and other external timbers treated with Vacsol® must be protected with an appropriate and maintained surface coating.

## To specify Vacsol® treated timbers, the following wording is recommended (UK only)

The timber as detailed . . . (insert quantity, dimensions, species and its end use/description of component) . . . is to be double vacuum (Vac-Vac) or vacuum, low pressure treated with VACSOL preservative to comply with the Treatment Code . . . (insert "VA" Code from the chart on the following pages).



- Use Class 2
- Use Class 3.1

**LOW PRESSURE VACSOL TREATED TIMBERS CANNOT BE USED FOR USE CLASS 3.2 AND 4 SITUATIONS.**

Illustration courtesy of the Wood Protection Association (WPA).

# Treatment specification guide for Vacsol® treated timber

| COMPONENT GROUP           | USE CLASS               | SERVICE FACTOR | COMPONENT                            | COMPONENT DETAILS   | COMPONENT RISK  | TREATMENT CODE | DESIRED SERVICE LIFE |
|---------------------------|-------------------------|----------------|--------------------------------------|---|---|----------------|----------------------|
| Internal Building Timbers | 1                       | B              | Roof Timbers (Dry)                   | Pitched Roofs, Rafters, Purlins, Joists, Sarking, Wall Plates   | No Risk of Wetting  | VA1            | 60 years             |
|                           | 1                       | D              | Roof Timbers (Dry: Hylotrupes Areas) | Pitched Roofs, Rafters, Purlins, Joists, Sarking, Wall Plates   | House Longhorn Beetle (Hylotrupes bajalus) risk <b>NOTE 1</b>     | VA1            | 60 years             |
|                           | 2                       | C              | Roof Timbers (Risk of wetting)       | Rafters, Purlins, Joists, Sarking, Wall Plates, Flat Roofs (Cold and Warm Inverted), Enclosed Beams, Valley Gutter Timbers, Exposed Beams | Where components are exposed to risk of wetting e.g. condensation | VA1            | 60 years             |
|                           | 2                       | C              | Tiling Battens                       | Tiling Battens  | Where components are exposed to risk of wetting e.g. condensation | VA1            | 60 years             |
|                           | 2                       | D              | Sole Plates <b>NOTE 2</b>            | Sole Plates   | Above Damp Proof Course   | VA1            | 60 years             |
|                           | 2                       | C/D            | Timber frame / Ground Floor Joists   | Timber Frame Material, External Walls   | Above Damp Proof Course   | VA1            | 60 years             |
| External Building Timbers | 3.1 <b>NOTE 2&amp;3</b> | C/D            | Softwood Joinery                     | Softwood Window Frames and Casings, Soffits, Barge and Fascia Boards, Cladding, Doors   | Non Load Bearing  | VA2            | 30 years             |
|                           |                         | C/D            | Hardwood Joinery <b>NOTE 4</b>       | Window Frames and Casings, Exterior Doors and Frames  | Non Load Bearing  | VA3            | 30 years             |
| Plywood (Internal)        | 1 and 2                 | B/C            | Plywood                              | Weather and Boil Proof (WBP) or BS EN 636 Exterior Grade (BS EN 314: Part 2 Bonding Class 3) <b>NOTE 6</b>                                | Above Damp Proof Course <b>NOTE 5</b>                             | VA3            | 60 years             |
| Plywood (External)        | 3.1 <b>NOTE 2&amp;3</b> | C/D            | Plywood                              |   | Above Damp Proof Course <b>NOTE 5</b>                             | VA3            | 30 years             |

| SERVICE FACTOR INDEX (Need For Treatment) |   |
|---|---|
| <b>A</b>                                  | <b>UNNECESSARY:</b> negligible risk of failure.   |
| <b>B</b>                                  | <b>OPTIONAL:</b> failure risk is low: preservation insures against cost of repair or replacement not difficult or costly. |
| <b>C</b>                                  | <b>DESIRABLE:</b> risk of failures is high: replacement difficult and expensive.  |
| <b>D</b>                                  | <b>ESSENTIAL:</b> risk of failure is very high and would result in serious danger to structure or persons.                |

| NOTE INDEX    |  |
|---------------|--|
| <b>NOTE 1</b> | According to Building Regulations (England & Wales); Building Regulations (Northern Ireland); Building Standards Scotland. |
| <b>NOTE 2</b> | Higher Solution Strength Specification: Contact our Technical team.  |
| <b>NOTE 3</b> | External timbers in service should be protected with an appropriate and maintained surface coating.                        |
| <b>NOTE 4</b> | Test samples to be treated for colour change prior to commercial production.   |
| <b>NOTE 5</b> | For Plywood, sheets should be stuck every layer or at least every two layers as a minimum.                                 |
| <b>NOTE 6</b> | BS EN363 humid grade (Bonding Class 2) might be acceptable. Consult with Board manufacturer/supplier.                      |

## NEED FOR TREATMENT

The need to preservative treat timber is assessed through:

1. The biological hazard (Use Class);
2. The service factor;
3. The inherent natural durability of the timber.

## TIMBER SPECIES

All specifications refer to the treatment of softwood species (S1: Permeable and S2: Resistant).

All softwoods contain sapwood which is perishable and therefore requires treatment. No softwood used in the UK has sufficient natural durability to be used without treatment.

## RESTRICTIONS

VACSOL treated timber cannot be used:

1. Below Damp Proof Course.
2. In ground contact (defined as UC4).
3. Externally WITHOUT an appropriate and maintained surface coating (defined as UC3.2).

## STANDARDS

VACSOL conforms to the efficacy requirements of BS EN 599-1, is treated in accordance with the penetration and retention guidance given in BS EN 351-1 to give a desired service life in the selected Use Class, defined in BS EN 335-1. The UK national interpretative document of these standards is BS 8417.

## DESIRED SERVICE LIFE

Desired Service Life is not a guarantee of performance but merely an indication of the expectation against which the recommendations for timber treatment are drawn up, assuming good design and maintenance. It relates to resistance of the wood to biodeterioration. Mechanical damage or failure of constructional elements may also limit the life of the commodity and should be taken into account.

## MAXIMUM PRE TREATMENT MOISTURE CONTENT IS 28%

Specification compliance is confirmed by direct testing of timber and on a day to day basis through indirect testing after first establishing a safe relationship.

**Vacsol® treated timber must only be used above damp proof course level and not in ground contact.**

## Useful documents

The Vacsol® Treated Timber User Guide provides full details on the properties and handling of Vacsol® treated timber.

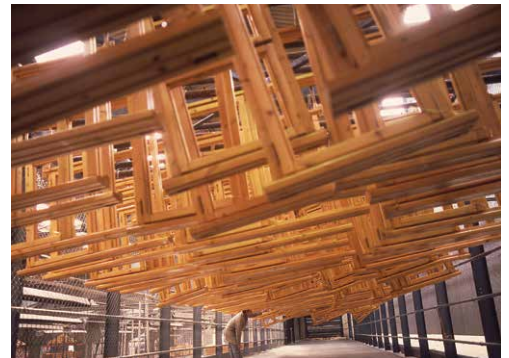
## Cutting of Vacsol® treated timbers

Any treated timber surface exposed by cross-cutting, drilling, notching or boring must be brushed with a suitable end-grain preservative to maintain the integrity of the treatment. Always follow the end grain product manufacturer's instructions.

Timber which is rip sawn, equalised, planed or heavily sanded must be returned to the treatment plant for retreatment.

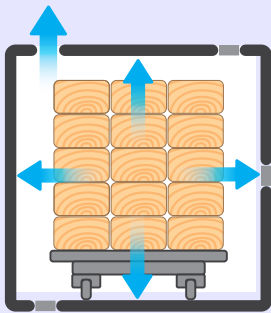
We advise specifiers and end users to request confirmation of treatment from the supplier as part of the specification / purchasing process. Usually this is in the form of a Treatment Certificate and should include an indication of expected service life.

NOTE: Treatment Certificates are not a guarantee of quality - merely an expression of how timbers have been treated. Quality compliance is achieved through direct testing of a suitable number of sacrificial components.

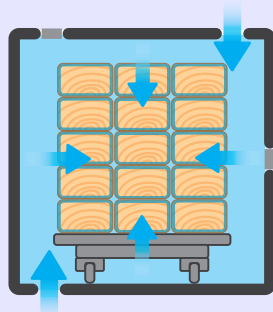


## Low pressure treatment process

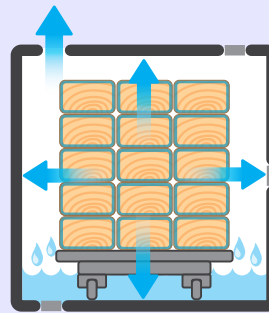
Vacsol® treated timber is impregnated with Vacsol® timber preservative under controlled conditions by double vacuum (Vac-Vac) or low pressure technology in an enclosed system.



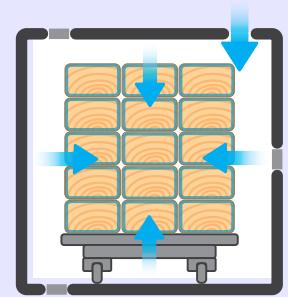
Vacuum created and timber cells evacuated of air.



Vessel flooded under vacuum. The vacuum release enables the VACSOL preservative to penetrate into the timber cells under atmospheric pressure, in order to achieve a target penetration for the specified Use Class.



A second vacuum is applied to evacuate the timber cells of excess preservative. Timber surface wet.



Venting of atmospheric pressure (second or 'double' vacuum) drives any surface preservative back into the timber cells. Timber surface drip dry.

## Availability of treated timber/specific treatments

Vacsol® treated timber requirements are usually processed to order.

Specific treatments are available through a wide network of timber companies and treaters throughout Europe.

For details of your nearest supplier, please contact us at the address overleaf.





Hexagon Tower, Crumpsall Vale, Blackley,  
Manchester, M9 8GQ, UK

Email: [timberprotectionadvice.ukca@arxada.com](mailto:timberprotectionadvice.ukca@arxada.com)

[www.trusttreatedtimber.com](http://www.trusttreatedtimber.com)

**Use wood preservatives safely. Always read the label and product information before use.**

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