



Resistol Treated Timbers



RESISTOL treated timber is timber which has been dip or spray treated with RESISTOL 6216 metal-free wood preservative. Treatments are only available in certain mainland European markets.

RESISTOL 6216 is a waterbased wood preservative containing proven organic active ingredients. The appearance of RESISTOL 6216 treated timber following treatment is virtually unchanged. A colourant is often included to facilitate identification of treatment.

Performance has been proven through extensive biological testing confirming RESISTOL 6216 treatment of softwoods conforms to French and European Standards for construction timbers in Use Classes 1, 2 and 3 coated.

RESISTOL 6216 treated timber gives long term protection against fungal and insect attack including termites, for both interior and exterior (above ground contact) construction timber and joinery applications.

Exterior joinery/woodwork must be subsequently protected with an appropriate and maintained surface coating.

RESISTOL 6216 treated timber must only be used above the damp proof course level and/or above ground contact.

RESISTOL 6216 is certified by FCBA, under the CTB P+ scheme, in France.

RESISTOL 6216 Wood Preservative

RESISTOL 6216 wood preservative is approved for use by the relevant regulatory authorities in the markets it is used. The biocides contained in RESISTOL 6216 wood preservative are being supported under the Biocidal Products Regulation.

Treatment Specifications

Timbers treated with RESISTOL 6216 are targeted to meet the requirements of Use Classes 1, 2 and 3 coated for softwoods. Use Classes are defined in EN 335:2013 and can be summarised as follows:

- Use Class 1 - internal building timbers - no risk of wetting.
- Use Class 2 - internal building timbers - risk of wetting.
- Use Class 3 coated - external timbers used above ground contact and coated.

In accordance with EN 335:2013, Use Class 3 can also be classified into sub-classes 3.1 and 3.2. The interpretation of these sub-classes may vary from country to country.

Treated Timber Appearance

After the application of RESISTOL 6216 the appearance of the majority of timber species is virtually unchanged. Colour additives are available to facilitate identification of treatment.

As with all water based products there is potential for grain raising to occur. Experience has shown to date that there is no particular problem with grain raising.

Colour variations may occur due to the natural variability of the relative proportions of heartwood and sapwood.

RESISTOL 6216 can react with some species and change the colour of the timber. Trials should be carried out on decorative timber species to check any shade changes prior to treatment of the full commercial batch. Further information can be obtained from the Lonza Advisory Service.

Post-Treatment Storage and Collection of Treated Timber

When received, RESISTOL 6216 treated timber should be free from surface liquid. Drying will be accelerated when stored in a well ventilated, weather protected area.

Treatment with RESISTOL 6216 imparts a low moisture uptake. This may cause slight swelling across the end grain surfaces. If this occurs treated material should be stored, open stacked, to provide sufficient ventilation for moisture to evaporate. The timber will re-dry to its original dimensions when placed in the same temperature and humidity conditions in which it was machined and profiled prior to treatment.

Flat items such as sheets of plywood should be separated and either stickered horizontally or stacked more or less vertically, with air space between them to promote drying.

Treated components stored on a building site should be clear of the ground and stacked and protected so that they are not distorted or saturated by rainwater.

Trussed rafters should be stored on-site and out of ground contact. If the storage time exceeds two weeks recommendations of regional standards and associations should be followed.

Post-Treatment Machining

As far as possible all cutting, machining, notching and boring is to be carried out prior to treatment.

Some cross-cutting on-site is unavoidable. This will expose an untreated core and it is imperative that cross-cuts, notches and bored holes be liberally swabbed with an approved end grain preservative to maintain the integrity of the preservative protection.

Rip sawing, grooving, planing and heavy sanding are not permitted unless the timber is returned for re-treatment to maintain the integrity of the preservative protection.

Gluing

RESISTOL 6216 treated timber dried to less than 20% moisture content and in equilibrium or within 5% of its expected in-service moisture content, may be glued with most commonly available adhesives.

RESISTOL 6216 treated timber may be glued after cleaning off any surface deposits or dirt with a wire brush, or after a light sanding.

In consultation with the adhesive manufacturer, select an adhesive appropriate to the in-service exposure condition and appropriate for load bearing or non-load bearing requirements. Consult the glue manufacturer on the suitability and use of their particular product and follow the directions of the appropriate regional standards.

For load bearing constructions, phenol resorcinol formaldehyde, resorcinol formaldehyde, phenol formaldehyde, melamine urea formaldehyde, melamine formaldehyde, urea formaldehyde, emulsion polymer isocyanate glues are generally used.

For non-load bearing constructions, emulsion polymer isocyanate, polyurethane, polyvinyl acetate, urea formaldehyde, melamine urea formaldehyde, melamine formaldehyde and phenol resorcinol formaldehyde glues are generally used.

For exterior or damp conditions, phenol resorcinol formaldehyde, resorcinol formaldehyde or phenol formaldehyde glues are generally used.

For internal dry conditions, resorcinol formaldehyde, phenol formaldehyde, melamine urea formaldehyde casein, polyvinyl acetate, urea formaldehyde, emulsion polymer isocyanate glues are generally used.

Surface Coatings

RESISTOL 6216 treated exterior joinery/woodwork must be protected with an appropriate and maintained surface coating

Many coating products are available on the market. Always consult the coating manufacturer's recommendations before applying a coating product to RESISTOL 6216 treated timber.

If RESISTOL 6216 treated timber is to be painted, stained or varnished, the timber should be dried throughout the cross section. Always follow the coating manufacturer's instructions, taking note of the recommended maximum moisture content.

The preservative treatment is not a substitute for sealing of knots, base coating or priming.

Over absorbent timber may adversely affect decoration. Care should be taken to ensure adequate drying of timbers suspected of over absorbency or thin timbers, e.g. cladding and beading, before any surface coating is applied.

If waterbased coatings are applied, some discolouration may occur in exceptional circumstances. If this happens, allow the coating to dry completely. Then apply an additional coat of product, preferably one with a high build, high solids content.

The following notes apply to common painting practice.

Solvent Based Decorative Coatings

- Freshly treated RESISTOL 6216 timber should be allowed to dry for 48 hours, open-stacked in an under cover, well ventilated area, prior to application of primer or basecoat (see section on over absorbency).
- Where acrylic primers are to be used, it is advisable to carry out a simple test to establish compatibility.
- When using aluminium leafing primer, longer periods of drying may be necessary after RESISTOL 6216 treatment due to the sealing characteristics of this type of coating.
- A further 7 days should elapse before the final paint or stain finishes are applied, allowing normal drying time before applying each coat.
- For RESISTOL 6216 treated plywood the time allowed between treatment and priming depends upon drying conditions, the types and thickness of plywood used and the amount of preservative absorbed during treatment. Before applying a basecoat, it is recommended that at least 72 hours be allowed from the time that the sheets of treated plywood are separated for drying under favourable conditions, and that a further 7 days elapse before final paint/stains are applied.

Water Based Decorative Coatings

- Freshly treated RESISTOL 6216 timber should be allowed to dry for 48 hours, open-stacked in a well ventilated area, prior to application of a primer or basecoat. A further 7 days should elapse before the final paint or stain finishes are applied, allowing normal drying time before applying each coat.
- For RESISTOL 6216 treated plywood the time allowed between treatment and priming depends upon drying conditions, the types and thickness of plywood used and the amount of preservative absorbed during treatment. Before applying a basecoat, it is recommended that at least 72 hours be allowed from the time that the sheets of treated plywood are separated for drying under favourable conditions and that a further 7 days elapse before final paint/stains are applied.

Metal Fixings & Fittings

General Advice

It is important to follow the recommendations of the manufacturer of any metal products used for specific advice regarding suitability, desired service life expectations and particular exposure conditions.

RESISTOL 6216 treated timber has a long life expectancy and it is appropriate to use metal fixings and fastenings that will have a comparable length of life.

- RESISTOL 6216 treatment has no corrosive effect on mild steel fittings and fixtures. The timber must be at a moisture content below 20% before mild steel fixings and fittings are applied and must remain below 20% in service.
- Where higher moisture contents (above 20%) are expected in service, galvanised steel, stainless steel, copper, aluminium or brass fixings and fittings should be used. At least 24 hours should elapse after treatment before these fixings are applied.
- For trussed rafter manufacture, fixings and fittings recommendations of regional standards and associations should be followed.
- Zinc sheeting can be applied to RESISTOL 6216 treated timber so long as the timber is completely dried - less than 28% moisture content.

Floor Coverings and Plasterboard/ Absorbent Composite Board Materials

Where RESISTOL 6216 treated timber is to be in contact with floor coverings, plasterboard or other absorbent material, care should be taken to ensure adequate moisture evaporation has taken place prior to fixing, otherwise the substrate may absorb excess RESISTOL 6216 (see section on over absorbency).

If necessary, the moisture content of the timber should be checked. However it should be noted that moisture meters may be affected by preservative treatment. Moisture meters with insulated probes should therefore be used.

Typical Applications

If in doubt about any particular area of application or compliance with other relevant standards or specifications, it is advisable to consult with Lonza using the contact details given in this document.

This list, which is not totally exhaustive, gives an indication of the range of timbers and timber based products which can be treated with RESISTOL 6216 wood preservative.

Plywoods

Plywood grades are based on EN 636 (Dry, Humid and Exterior classifications), which themselves are based on bonding classes 1, 2 and 3 from EN 314 Part 2. Plywood to EN 636 Exterior grade (EN 314 Part 2 bonding class 3) should be specified. Humid grade (bonding class 2) might be acceptable, but the board manufacturer or supplier should be asked to confirm that Humid grade board can be put through RESISTOL 6216 treatment process.

Internal and External Building Timbers

Structural elements and general timbers in domestic, commercial and public buildings, such as wall frames, sole plates, beams, joists, sub-floors, roof timbers, battens, cladding, roof shingles.

When used in construction applications it is always best practice for preservative treated timbers to be dried down to the in-service moisture content prior to fabrication.

Softwood External Joinery

Softwood window frames and casings, soffits, barge and fascia boards, cladding, load bearing joinery and doors.

Misuse

DO NOT Use Resistol 6216 Treated Timber in the Following Situations:

1. Below dpc and/or in ground contact.
2. In direct contact with foodstuffs.
3. In an exterior situation without a well maintained protective surface coating.

Over Absorbancy

Occasionally, a pack of timber will contain some pieces which have an abnormally permeable sapwood. Such pieces should be placed on one side for prolonged drying before overpainting/staining or the fixing of porous materials which may absorb the excess solution and adversely affect subsequent decoration.

Handling Precautions

You should have received the treated timber in a drip-free condition with no sign of preservative fluid on the surface. If this is not the case, the timber should be stored open stacked under ventilated conditions and protected from rain and snow to dry before use.

When working with timber, wear gloves to protect the skin against abrasions and splinters. Any cuts and abrasions should be protected by a waterproof dressing.

When power-sawing and machining, wear goggles to protect the eyes from flying particles. Wear a dust mask and, whenever possible, perform these operations outdoors to avoid accumulations of airborne sawdust or use a suitable dust extraction system around any mechanical saw or planing machine. Avoid frequent or prolonged inhalation of sawdust. Consult local regulatory authorities for further information on workplace exposure limits for wood dust.

In order to prevent injury, care should be taken when lifting or moving timber.

These same handling precautions equally apply to untreated and treated timber.

Personal Hygiene

After handling or working with treated timber, all exposed skin should be washed before commencing other activities, especially eating, drinking, smoking or going to the toilet.

If sawdust accumulates on clothes, clean them before re-use.

Launder soiled clothing professionally.

On-Site Precautions

All sawdust and construction debris should be cleaned up and disposed following local regulations.

Waste Disposal

RESISTOL 6216 treated timber off-cuts and end of life timber is not classified as hazardous waste. Local market regulations should be referred to.

RESISTOL 6216 treated timber and post treatment processing wastes such as sawdust and offcuts, must not be used for animal litter or bedding or for fuel in barbecues, cooking stoves or grates.

Domestic end users should dispose of any waste treated timber, sawdust or ash through the ordinary waste collection service or at a local authority amenity/disposal site.

Any waste timber, sawdust or redundant timber from commercial or industrial use (e.g. construction sites) should preferably be recycled by re-use, or disposed of to an authorised landfill or to a correctly controlled and approved waste incinerator.

Further Information

For further information on RESISTOL 6216 treated timbers or end grain preservatives please contact Lonza using the contact details below.