

Questions Answered - Metalex

The information in this document does not supplant the information in the Metalex Timber Preservative & Metalex Ready To Use Technical Data Sheets or form part of the technical documents for this product, but rather provides some information regarding best practice in using Metalex Timber Preservative & Metalex Ready To Use. If concerns over the use of the product are encountered, please always refer back to the appropriate Technical Data Sheet.

What is the purpose of the Metalex Timber Preservative(s) and Metalex Ready To Use?

These products provide an envelope treatment in accordance with NZS3602 Timber & Wood Based Products Used in Building “Section 2.3.5 Supplementary Treatments” for H3.1, H3.2, H4, H5 Timber Treatments.

This provides protection to cut, notched, scarfed and ripped timber and ply to that the worked timber complies with the NZ Building Code.

Can Metalex be used to kill black mould on timber? (or what appears to be black mould)

Yes – it can in a limited sense, however to get the timber looking bright and clean you will need to use a commercial wood cleaner to get back to a more original appearance prior to the application of the Metalex Timber Preservative(s) and Metalex Ready To Use.

While there is an argument for just using the above Metalex products for this purpose, neither of these products will give you a clean timber surface free from “Black Mould” for the next stage of the process. Due to the copper in the Metalex Green this product will have a higher inhibitive effect against future mould growth than the clear version.

Can Metalex Timber Preservative(s) & Metalex Ready To Use be used to provide additional treatments to timber?

This means lifting the treatment from H1.2 up to another treatment level? (ie: H3.1)

No – Metalex Timber Preservative(s) is an end/envelope treatment only, to preserve the treatment envelope only. **It is not a treatment in its own right.** This is clearly stated in NZ3204

of the NZ Building Code. The processing difference between a “H-Class” treatment and a “Envelope Preservation” treatment is quite different.

Can Metalex Timber Preservative be used in remedial leaky buildings works on framing timbers:

No – this refers where the NZBC calls for the Boron Glycol treatment for the full retreatment of the effected timber members.

However, is still able to be used as an end treatment for new timbers used in H3.1, H3.2, H4, H5 remedial works. The only product that can be used here are Boron Glycol based formulations.

Can Metalex be used to treat against Borer.

Yes -Metalex Timber Preservative(s) or Metalex Ready To Use can be used with its insecticide values to eliminate the infestation of flying borer. If borer is pre-existing in the timber, it will continue boring through and affecting the timber until it emerges and has to break out which will then cause it to die (however the Borer fly does not tend to eat on its way out. Treatment by the “Metalex” range of products will actively discourage Borer fly from settling on or laying their eggs in the treated timber.

Can I paint over the Metalex?

Yes, you can, however there are some important things to consider which I will outline below: Metalex Timber Preservative(s) and Metalex Ready To Use are solvent based, therefore before an acrylic base can be applied over it you need to ensure that the solvent has evaporated out of the applied timber.

Ok then, how long do I need to wait?

- Acrylic based coating - a period of 10 days (Ca. 20°C, 65% R.H.)
- Oil based enamel coating - a period of 3 days (Ca. 20°C, 65% R.H.)

Where the final appearance of the timber is a natural timber finish.

With any wood product (Plywood or Solid Timber) you will get "draw" (to different extents) of the above products up the grain (end grain more so that side grain due to porosity of the timber grain).

As these products are solvent based, and as such may/will change the visual colour of the timber that has been exposed to the supplementary envelope treatment.

If you are going to clear coat the board/panel, you need to coat the full face of the board with the Metalex Timber Preservative or Metalex Ready To Use, so that the finish is consistent across the timber face.

If the final coating on the revel was to be a full colour, there is no need to coat the full face of the timber as the "draw" line would not be visible.

How do I check to see if the Treated Surface is ready to paint?

A simple way to see if your surface is ready is:

When you apply the treatment to the timber also apply a treatment to a spare piece of timber.

Before you put the finished coating on the good timber try it on the spare timber and see if there is a reaction.

If there is, then there is still solvent in the timber and you need to wait longer.

Painting over an enamel base

If ever you come across new paint easily peeling off the old paint you can be nearly sure it will be because acrylic has been painted over enamel. There is a simple way to deal with this

- if painting acrylic over an enamel you need to make sure the surface is clean, then give it a light sand and then use an oil-based under coat before you apply the acrylic top coats.

What difference is there between Metalex Timber Preservative vs Metalex Wood Protector?

The difference between the two products is that the **Metalex Wood Protector** is a final coating and cannot be painted over, as it will not allow the paint to adhere to the fibre's underneath. It preserves the natural look of the timber while making it impervious to moisture penetration and UV.

The **Metalex Timber Preservative(s)** is an end/envelope treatment only, to preserve the treatment envelope only. And as such can be painted over following the required drying time (time for the solvent carrier to dissipate).

Can Metalex Timber Preservative(s) or Metalex Ready To Use be used on Bee Hives?

Yes, it can - especially when diluted to 1-part Metalex to 5 parts solvent rather than the usual 2:3 ratio. Remember that the treated timber needs to then be left to “weather” for a period of at least 6 weeks ensure that all of the Solvent Carrier (used to carry the Copper Naphthenate salts into the timber) has evaporated from the timber.

Reference to this can be found at the attached <http://beehive.org.nz/tips-and-advice/hive-preserving> link for here in New Zealand.

Soudal would suggest that to ensure best practice, it is only the exterior of the hives that are treated with the Copper Naphthenate as Bee’s are inherently clean insects, therefore treating only the outside of the hives will reduce any possibly chance of the Bees coming into contact with the Naphthenate salts. (please note the information relating to Bee Hives has been extracted from www.beehive.org.nz)

Why do some farrier’s buy the Green Metalex?

Soudal cannot recommend, nor will we ever recommend the use of diluted Green Metalex for the treatment of hooves on animals.

The use of Copper Naphthenate has been around for many years for the treatment of foot-rot, assisting in the hardening of the hooves and as a preventative for animal hoof fungal diseases.

Soudal do not recommend this use as for us to do so would mean that Soudal would be subject to the requirements of the “Animal Health Act” and Metalex Green would be considered an animal medicinal treatment therefore the controls for it would be very costly.

Metalex Timber Preservative Green and Zinc Based Coatings on Fastenings and Zinalume

Green Metalex Timber Preservative has a copper base to it (hence it being Green). While this enhances that anti-insecticide and anti-fungal properties it also has a detrimental effect on zinc-based products.

This may include (Galvanised) Nails, Bolts, Plates and Zinalume as there is a reaction between zinc and copper called galvanic corrosion which at the least may cause discolouration of the zinc components, at worst may lead to physical corrosion between the two surfaces.

Where Metalex Timber Preservative Green is used, if you are unsure about what fastenings to use and the effect of the treatment, Soudal suggests the use of 316 Stainless Steel fastenings.

Metalex application methods:

The simplest way to do it is dip, however this requires big baths. Otherwise use a heavy nap roller, a paintbrush or a spray-pack (it should be noted that using a spray unit, you will atomise much of your product and it may lead to subsidiary contamination issues.

Be aware that the solvents in the Metalex products are the carrier base and this will mean that the knapsack o-rings will/may get eaten away over time. Soudal recommends a minimum of two coatings as per the Metalex Technical Data Sheet (available at www.soudal.co.nz) by Dipping, Brushing or Roller.

What is an issue with LOSP & CCA treated timber?

CCA & LOSP treatments will only treat the sapwood and not the heart-wood, therefore in many cases not all treatment is accurate as it treats only the sapwood, not the heart wood. What this can lead to is greater warping of the finished timber due to stress between the treated and untreated portions of the finished timber.

Dimension Accuracy of Timber:

CCA treatments or “Commercially Available Products” using the “wet” Boron Glycol Treatment, the dimensional accuracy of your timber can be up to 10mm out. This is because it is considered a “Wet Treatment”.

Without waiting for the timber to completely dry, if you require greater dimensional accuracy “LVL” & “CLV” timbers will provide this in timber

Timber process: Dry Treatment vs Wet Treatment.

This refers to the way that the treatment penetrates the timber to provide the protection

Dry Treatment process means that the timber can be used much sooner (potentially after 24hours), whereas the wet process leads to the timber having to be wrapped and left to cure for up to three weeks. For the timber processing plants this means that the flow of timber through the plant is considerably faster when the plant uses a “Dry Treatment”

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