

Product Specification Sheet

CD50/CD50 Extreme

Project:

Contract:

Building:

Address:

Owner/Agent:

Specification Number:

Prepared by:

Date:

1. GENERAL
1.1 Scope:
The work involved in this Contract is to be carried out at the location specified on the previous page. It includes the preparation of surfaces and application of CD50, or CD50 Extreme in accordance with the manufacturer's instructions and this specification.
1.2 Documents:
1.2.1 Referred Documents
Health and Safety in Employment Act 1992
OSH Guidelines for the provision of facilities and general safety in the construction industry
AS/NZS 2311 Guide to the painting of buildings
MPNZA Painters Hazard handbook
This specification takes precedence if there is a variation with the cited document above
1.2.2 Manufacturer's and Suppliers Documents
These documents include Churton Pacific Ltd Technical Data Sheets - available from : www.CD50.co.nz info@CD50.com.nz 09 478 4370 (phone or fax) 0800 107 555 The Product labels must be read in full and understood before work commences
Safety Data Sheets – available from www.chemisys.com.au or www.CD50.co.nz
Any Supplier Statement or Producers Statement where issued for a specific situation
Product Labels
1.3 Requirements
1.3.1 Qualifications
Persons applying the products must be competent and experienced painters, fully conversant with the materials and techniques specified
1.3.2 Samples
Samples shall be prepared, including preparation and colour if used, and approval of the finished colour and appearance obtained before proceeding. Ensure sampling is carried out using the amount of product, and the same number of applications that will eventually be applied - to get an accurate indication.
1.3.3 Technical Data Sheets and Safety Data Sheets
TDSheets and SDSheets shall be obtained and keep handy for each product used. Ensure all applicators have read both these documents and the product label before work commences
1.3.4 Health and Safety
The requirements of the Health and Safety in Employment Act and OSH "Guidelines for the provision of facilities and general safety in the Construction Industry", must be complied with. Protective clothing and equipment must be supplied. The Contractor and employees must be informed of any hazards which cannot be eliminated and procedures must be put in place for dealing with emergencies
1.3.6 Insurance
The Contractor shall provide adequate Public Liability Insurance

1.4 Guarantee	
The Contractor is to guarantee the work against all defects arising from poor workmanship or failure to comply with the procedures and directions in the Technical Data Sheets and Product labels, or failure to Carry out 1.3.2 above in a satisfactory manner.	
Warranty	
Refer to the Consumer Guarantees Act	
1.5 Performance	
A program for inspecting each stage of the work is to be established and carried out. Each stage of the work shall be inspected and pass inspection, before proceeding to the next stage.	
2. PRODUCTS	
2.1 CD50 (formerly CD50 Liquid Art)	
CD50 is a specially formulated protective oil based product for use on exterior timber. It is designed to penetrate deeply into any species of dry timber. CD50 provides water repellency and also controls gas phase moisture. It helps control warping, cupping and splitting. CD50 helps protects against the effects of mould and fungus within the timber. CD50 is not a “film forming” product, and will not crack, peel or flake. CD50 has greater protection at the surface than CD50 Extreme – so is used in situations of severe weather conditions, high rainfall etc	
2.2 CD50 Extreme	
CD50 Extreme is a variation of CD50. It possesses all the qualities listed above for CD50, but penetrates deeper and more rapidly than CD50. CD50 Extreme has been especially formulated for more challenging environments, substrates and requirements and so is the product of choice for timber in extreme conditions – high humidity situations, (boardwalks over wetlands, indoor aquatic centres) and challenging timbers (heat treated timbers) and thick timbers (log homes, beams and posts). CD50 Extreme is the product of choice for decking – pine or hardwoods.	
Summary – which CD50 Product to use	
CD50	CD50 Extreme
Weatherboards Trellis Garage doors Board and batten	Joinery Front doors Thick profile timbers – logs, beams, posts, slabs Decking – pine, hardwoods Extreme conditions eg structures over water, boardwalks, high humidity
Note: For use on Bamboo, Accoya and other modified timbers, contact Churton Pacific Ltd before use 0800 107 555	
CD50 and CD50 Extreme are compatible. CD50 Extreme can be used as the first coat (pre-coated or applied on site), followed by CD50 for the next coat.	
2.3 Colourtones	
A large range of Colourtones are available – and new colours can be made on request. The CD50 Oils are clear oil based products. When used in its Clear form on exterior surfaces, the timber will silver naturally with exposure to sunlight, while the CD50 Oil deep inside the timber continues to protect the timber. If the natural colour of the timber is to be retained or enhanced, a Colourtone is added to the Clear CD50 before application. A sample of the Colourtone should be tried on a sample of the actual timber to be used. Differences in timber species and types, and even within timber species and types, influence the final	

appearance.

Ensure sampling is carried out using the amount of product, and the same number of applications that will eventually be applied -to get an accurate indication

Allow for some lightening to take place over the first 3 to 8 months as weathering occurs.

The final colour is obtained after 2 coats of CD50 or CD50 Extreme.

Colour retention is more durable on rough sawn timber, and dressed timber that has been lightly sanded.

Clear CD50 Oil without Colourtones is recommended in situations where silvering is acceptable and low maintenance is desired eg holiday homes. Clear CD50 Extreme is used on decking & outdoor furniture where an annual clean with SARAClean (DeepClean if very dirty or stained) will restore the timber back to its near original colour.

Due to the harsh NZ sunlight and high UV, timber exposed to greater amounts of sun will be under significant stress and require more regular application of CD50 Oils. These situations include northerly aspects, reflections off water, white sand or concrete, and horizontal surfaces) In these situations, the first sign will be fading of the colour. Wash the timber with SARAClean, and reapply one coat of CD50 or CD50 Extreme as needed.

3. EXECUTION

Instruction for Use – CD50 and CD50 Extreme

3.1 Precautions

Read all instructions on the label before beginning. Read all SDS Sheets and take appropriate precautions.

Protect materials during transit and during application. Store correctly and do not allow contamination.

If applying to areas of or above rain water collection surfaces, disconnect the downpipes where they go into the water tank. Allow a significant amount of rainfall, before reconnecting downpipes.

Carefully wrap or mask fittings, downpipes, fixtures and windows where applicable, if spraying is to be the method of application.

Do not spray in windy conditions. Ensure there is no overspray onto areas or items that are not intended to be coated.

Protect plants, waterways and ponds from exposure to CD50 Oils.

Place drop sheets (at least 3 times thickness) to protect adjoining surfaces from drips, spray and damage. Place plastic masking sheets over any porous surfaces to prevent damage.

Take all usual precautions to prevent spillage, and splatter/dripping to other areas.

Ensure the correct Colour has been provided – check all pails before commencing .

Mix thoroughly before starting, and regularly during application

Do not apply CD50 if rain is likely within 6-8 hours

3.2 Instructions for Use – General (CD50 and CD50 Extreme)

Timber must be dry – less than 17% moisture content

Ensure there are no sealants, barriers or any other products that could affect the penetration of CD50.

If any coating has been used, it must be completely removed by sanding or stripping (Bamboo-sand only) before applying CD50)

Do not dilute , add thinners, or alter in any way

Use the correct size Colourtone for the pail or can of CD50

Shake and stir the Colourtone to ensure it is evenly dispersed before adding to the CD50

Add all of the Colourtone to the appropriate pail or can of CD50

Stir thoroughly before use and frequently during use

Apply with brush, speed brush, roller or spray – avoid excess drips and runs. Timber should be only slightly oily after application

Wash up in turps or detergent

Do not use on veneers

When used on some plywoods, CD50 Oils may accentuate characteristics in the underlying layers. The use of Colourtones will tend to camouflage this. Contact Churton Pacific for advice

Penetration takes longer on new hardwood timber

Apply second coat after completion of all dusty earthworks (timber may require a light wash first)

LOSP treated timber

CD50 Extreme can be used on LOSP treated timbers. LOSP must have thoroughly evaporated (dried) until no smell remains. On dressed LOSP timber – brush 1st coat on sparingly

3.3 Instructions for New Timber

For both CD50 and CD50 Extreme - coat all four sides of the timber, and apply a second coat between 1 & 6 weeks after the first coat, to accessible surfaces

(Timing of the second coat will depend on the porosity of the timber and environmental conditions – humidity, warmth, rainfall. Do not apply second coat if the first coat has not appeared to penetrate away from the surface. Allow longer for penetration into hardwoods) (In general, CD50 Extreme penetrates faster than CD50)

Instructions for Old Dirty or Weathered Timber

Prepare first with SARAClean to remove dirt, mould and silvered fibres

Use DEEPClean (formerly WAY2GO) to remove tough stains such as watermarks, grease and resin stains

When completely dry – apply CD50 or CD50 Extreme

Instructions for Timber with Existing or Failed Coatings

Film forming products (conventional stains, paint, oil, polyurethane, varnish etc) must be removed before applying CD50 or CD50 Extreme. Naked Stripper is a very safe surface coating stripper made by Churton Pacific Ltd

Maintenance

Regular cleaning is recommended to remove pollen, dust, salt, dirt etc

CD50 or CD50 Extreme with Colourtone - Wash very lightly with SARAClean . (try a sample patch first)

Clear CD50 or CD50 Extreme – timber can be left to silver naturally – lightly wash with SARAClean when necessary

Clear CD50 or CD50 Extreme – timber will silver naturally in sunlight – if silvering is not the desired look, wash with SARAClean every 12-18 months or when silvering occurs

Reapplication

Reapply CD50 or CD50 Extreme as necessary to retain the natural beauty and colour of the timber.

Reapplication time can be from 2 to 6 years – this depends on timber type, and exposure to weather and sunlight.

Protected situations 4-6 years

Where UV exposure is extreme eg coastal and fully exposed conditions, reapplication times may be reduced accordingly. Coastal & exposed situations 2-3 years

Coloured horizontal exterior surfaces exposed to full sunlight such as decks and handrails may require

annual maintenance 12-24 months

Reapplication process: Wash with SARAClean (DeepClean if very dirty or stained), and when dry, reapply one coat of CD50 or CD50 Extreme.

3.4 Instructions for New Bamboo Decking (Note: While the procedures detailed below have proven to be highly successful in the decorative coating of bamboo in many countries, neither Churton Pacific Ltd nor our manufacturer Chemisys Ltd offers any warranty or performance guarantee for the use of CD50 products on any bamboo substrate. This is due to the wide variation in the quality of products in the engineered bamboo market including variations in manufacturing processes, preservative/treatment processes, origin of the raw bamboo, quality of the glues, place of manufacture etc. Many different manufacturers choose to specify CD50 Extreme as suitable for their engineered bamboo product, but this does not mean that we are included or involved in any independent warranties issued by a specific manufacturer or distributor in relation to their product.)

Assuming that new Bamboo decking has had two coats of CD50 Extreme at manufacture:

Apply one coat of CD50 Extreme when installing, to the top surface and cut ends of the decking.

Apply a second coat when the first coat is dry

Inspect every 4 months for wear, fading or mould. If necessary, clean with SARAClean and apply a further coat of CD50 Extreme once decking is dry.

Apply another coat of CD50 Extreme once first coat is dry.

Cleaning with SARAClean and coating with CD50 Extreme (2 coats) must be carried out at least once every 12 months

Coverage – New Bamboo – 10-15 sq meter per litre

Instructions for Older Bamboo Decking

Ensure there is no other product (other than CD50) on the bamboo, as this will inhibit the ability of CD50 Extreme to penetrate. (Old coatings must be sanded off)

Old, dirty or weathered surfaces must be prepared and cleaned using DEEPClean (WAY2GO), then allowed to dry thoroughly before applying CD50 Extreme. If black mould is present, clean with SARAClean.

Maintenance for New and Restored Bamboo Decking

Maintenance consists of a simple washdown with SARAClean, followed by 2 coats of CD50 Extreme when dry.

Inspect regularly for wear, fading or mould. If necessary, clean with SARAClean and apply a further 2 coats of CD50 Extreme.

Cleaning with SARAClean and coating with CD50 Extreme (2 coats) must be carried out at least once every 12 months.

Note: Bamboo coated with clear CD50 Extreme will eventually silver where exposed to sunlight. Most bamboo decking is pretreated with Goldtone coloured CD50 Extreme. To maintain the original colour longer, we recommend continuing with Goldtone coloured CD50 Extreme for all future maintenance coats.

If silvering has occurred, and is not wanted, removing the silver fibres is a simple and cost effective process. Just wash with SARAClean according to the directions.

In areas of high pollen, salt or dust, wash the surface regularly.

3.5 Instructions for Hardwood Decking

Apply 1 coat of CD50 Extreme at installation to all sides of the decking.

Apply second coat to the top surface only, after 1-6 weeks depending on the porosity of the timber and environmental conditions – humidity, warmth, rainfall. Do not apply second coat if the first coat has not appeared to penetrate away from the surface.

If a Colourtone has been used - reapplication time is 1-2 years

If Clear CD50 Extreme has been used, timber can be left to silver naturally – lightly wash with SARAClean when necessary. Reapply CD50 Extreme every 2-3 years

If Clear CD50 Extreme has been used and silvering is not the desired look - wash every 12-18 months with SARAClean (DEEPClean if very dirty or stained) to rejuvenate the colour of the deck.

Reapply CD50 Extreme every 2-3 years

Old Decks: Clean old dirty, weathered decks with DEEPClean prior to applying CD50 Extreme.

Do not apply over old coatings – remove old coatings by sanding or stripping.

3.6 Log Buildings and thick timber

CD50-Extreme is applied at a rate of 5-7 sq m per litre, with 1 application (minimum) per 100mm diameter of log, when moisture percentage is suitable. ie 4 coats for a 400mm diameter log.

If newly felled logs are to be treated, apply once the surface has started to dry, leaving the ends or preferably the interior untreated to allow the moisture to be driven out. This will slow drying and help prevent checking on log ends.

Apply the calculated number of applications liberally – can be applied on consecutive days in ideal conditions – dry, warm weather.

Maintenance: First wash any dirt, pollen, salt etc off the timber using SARAClean according to the instructions. Then apply a minimum of one application of CD50 Extreme at a rate of 5-7 sq m per litre every 3 years.

This is a summary only - Technical Data Sheets can be found on our website www.cd50.co.nz

3.7 Completion and Clean Up

Ensure all the work is even, with no drips or runs, at the correct coverage rate, with no missed areas.

Ensure the surrounding area is clean and all masked areas are unmasked and unmarked.

Remove all drop sheets and coverings and ensure all spills, and accidental drips, etc are removed with turps or Kumclean.

Remove rubbish, masking etc and leave the premises clean, tidy and undamaged.

Dispose of all materials, empty containers etc in an approved manner.
Ensure the newly applied surfaces are protected from further site work, dust, dirt, concrete grinding, water blasting, paint or other work overhead.

3.8 Technical Information

Coverage - Typical coverages for common materials eg Cedar, Macrocarpa, Pine, Douglas Fir.

New dressed timber	12-15 sq m/litre
New rusticated or bandsawn timber	7-9 sq m/litre
Old restored timber	7-9 sq m /litre
Old restored bandsawn timber	4-7 sq m/litre
Shingles	2-5 sq m/litre
Bamboo	10-15 sq m/litre

Weather & Temperature

Cold temperatures affect the viscosity of CD50 Oils and slow the rate of absorption. In cold weather, place containers in a warm place overnight prior to use.

Moisture content of timber must be below 17%.

Do not apply CD50 Oils to exterior timbers if rain is likely within 6-8 hours of application.

Mould & Fungus

Timber must be free of mould before application. Even clean looking timber may be contaminated with mould spores. If CD50 Oils are applied over mould spores, dark stains will appear.

If in doubt, clean timber with SARAClean and allow to dry, before applying CD50 or CD50 Extreme. If staining occurs, use DEEPClean to remove stains, or contact Churton Pacific Ltd for advice.

Storage

Store in a cool dry place with the lid tightly on. Do not let pails get too hot (over 50 degrees C). Do not expose pails to fluctuations in temperature.

Do not store for longer than 1 year, as pails may split. Do not store where damage could occur if pails split. Check pails regularly, and transfer contents to new pails if "sucking in" occurs.

Joinery Glazing & Glues

The first application can be factory dipped or sprayed. Further applications are applied on site.

Compatible sealants or glues are Holdfast "Fix-All", Holdfast Gorilla Glue, Bostik "Seal N Flex", Bostik SAFestud, and 3M "Scotch-Seal"

If glazing with linseed oil putty or similar, "stripe" the glazing rebate with 2 coats of Churton Pacific's WETSHIELD. When fully cured, glaze as normal.

Interior Use – Protection from Splash Stains

Timber surfaces coated with the CD50 Oils may show splash or spilling marks if contacted by chemically staining products such as wine, cleaners, contaminated water, or strong chemicals. At risk areas include kitchens, bathrooms, and spa pools. Churton Pacific's WETSHIELD can be used in these situations to give a protective coating which can be wiped clean.

To protect adjacent materials

Where gib, plaster or any other absorbent material abuts timber protected with CD50 Oils, "stripe" the mating surfaces or edges with 2 coats of Churton Pacific's WETSHIELD to prevent CD50 Oil migrating into the absorbent material. On level surfaces where objects may be placed e.g. shelving, apply WETSHIELD to prevent CD50 Oils migrating into absorbent objects placed on those surfaces.

Timber protected with CD50 Oils can become stained if in constant contact with bituminous-type materials.

Exterior painted or plastered surfaces situated below CD50 Oil protected timbers, may become stained by leachate from above. To minimize this, paint edges underneath the timber with 2 coats of Churton Pacific's WETSHIELD.

Fastenings

CD50 and CD50 Extreme will not corrode galvanised iron, silicon bronze, stainless steel or copper nails. Colourtones may lightly stain lead flashing and other substrates contacted by leachate.

Garage Doors

CD50 Oils will soften rubber based adhesives. If the glue holding the timber to the frame is rubber based or of unknown origin, run glazing sealer along the back of the door where the timber meets the frame. Then the timber will remain intact if the CD50 Oil weakens the adhesive.

Butynol surfaces

CD50 Oils will affect Butynol and rubber surfaces if not wiped off soon after contact. CD50 Oils applied to wooden shingles do not normally affect the Butynol underlay.

Drinking Water

CD50 Oils can be used where drinking water is run off treated roofing surfaces. However, downpipes should be disconnected before cleaning and application, and left disconnected until there has been significant rainfall before reconnecting to the tanks, to prevent oil taint affecting the drinking water.

