

Protective Coatings Specification

N° **TG-207-0868**

P



INDUSTRIAL & MARINE
 Altex Coatings Limited
 PO Box 142
 TAURANGA
 NEW ZEALAND

Phone:(64-7) 541-1221
 Fax:(64-7) 541-1310

Spec Type: Repaint	Supersedes
Project: Opus IV	
Description: Hull Below Water - Option 1 Full Abrasive Blast 2 Year Antifoul System	
Project Location: New Plymouth	
Environment: Marine immersion	
Substrate: Mild Steel (coated)	

Company Name:	Contact Name: Paul and Joanne Wilson
Address: opusnz@yahoo.ca	Contact Title: Owners
City:	Phone:
Region:	Fax:
Country:	Post Code:

Surface Preparation

High pressure water blast 6000 psi to remove all marine growth, hydrolised antifouling, salt, loose paint and soluble contamination.
 Abrasive blast to SSPC SP10 (Sa 2.5) to remove all existing coatings and to achieve a uniform jagged blast profile of between 35 and 50 microns.
 Apply coat 1 to the prepared SP10 substrate.
 Apply full coats of coats 2-5.
 All surfaces must be clean and dry before painting.

Coating System

Coating Name	Theoretical Coverage m2/litre	Mix Ratio by volume				Recoat Min. @ 20°C / 50% RH		Recoat Max. @ 20°C / 50% RH		Note No.
		Dry Film Thickness µm						Thinner (spray)		
		Wet Film Thickness µm								
1 Altra~Prime 504-50 - full prime	10.0	100	50	4:1	1.5 hrs	Data	1/2			
2 Altra~Build 540 - full coat	4.7	211	150	4:1	6 hrs	5 days	1/2			
3 Altra~Build 540 - full coat	4.7	211	150	4:1	6 hrs	Note 1	1/2			
4 AF 3000 - full coat	5.2	192	100	N/A	6 hrs	Data	1/2			
5 AF 3000 - full coat	5.2	192	100	N/A	6 hrs	Data	1/2	2		
6										
7										
8										

Notes

- Apply AF3000 Antifouling before coat 3 (Altra~Build 540) has cured. ie tack free but still soft to finger pressure. DO NOT allow the Altra~Build 540 to cure hard before applying AF3000 Antifouling.
 - Allow 12 hours cure of the final coat of AF3000 Antifouling before relaunching.
- NB: DO NOT exceed maximum recoat times.

Issue Date: Thursday, 11 October 2007	Copies to: G Moran	Issued by: P Singfield
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* For specific details referred to in the above specification, please refer to the relevant product or material safety data sheets.
 * Spray application is normally recommended. Suitable equipment may include airless / air assisted airless / HVLP or conventional pressure pot equipment.
 * If the specified thickness is not achieved in one coat, additional coats must be applied to meet the specified D.F.T. Stripe coats should be brush applied.
 * Any contamination or moisture which occurs between coats must be removed by suitable means before applying successive coats in the system.
 * Care must be taken handling and applying all paint coatings. All stated minimum and maximum recoat times are based on 20°C/50% RH.
 ** This specification has been issued in good faith based on information given by the Client at the time of issue. Altex Coatings Ltd. has taken all reasonable steps to ensure the specification meets the needs of the client but reserves the right to amend or withdraw the specification if (a change in) conditions so dictate.

Protective Coatings Specification

N° **TG-207-0868.1**

P



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 NEW ZEALAND

Phone:(64-7) 541-1221
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Spec Type: Repaint
Supersedes

Project: **Opus IV**

Description: Hull Below Water - Option 2 UHP Strip Option
 2 Year Antifoul System

Project Location: New Plymouth

Environment: Marine immersion

Substrate: Mild Steel (coated)

Company Name: **Contact Name:** Paul and Joanne Wilson

Address: opusnz@yahoo.ca **Contact Title:** Owners

City: **Phone:**

Region: **Fax:**

Country: **Post Code:**

Surface Preparation

This option assumes a suitable 30-50µm profile exists underneath the existing coatings.
 Ultra high pressure water jet (35000 psi, 2400 bar) to SSPC SP12, WJ-2M/SC-2 to remove all paint and corroded areas. Water wash to remove any jetting residue. If excessive flash rusting occurs, remove with a hard bristle brush before application of coat 1.
 Apply a thin even coat of coat 1 to the prepared SP12 substrate.
 Apply full coats of coats 2-5.
 All surfaces must be clean and dry before painting.

Coating System

Coating Name	Theoretical Coverage m2/litre	Mix Ratio by volume				Recoat Min. @ 20°C / 50% RH		Recoat Max. @ 20°C / 50% RH		Note No.
		Dry Film Thickness µm						Thinner (spray)		
		Wet Film Thickness µm								
1 Altra~Lock 577 - full prime	25.0	40	40	3:1	18 hrs	72 hrs	N/A			
2 Altra~Build 540 - full coat	4.7	211	150	4:1	6 hrs	5 days	1/2			
3 Altra~Build 540 - full coat	4.7	211	150	4:1	6 hrs	Note 1	1/2			
4 AF 3000 - full coat	5.2	192	100	N/A	6 hrs	Data	1/2			
5 AF 3000 - full coat	5.2	192	100	N/A	6 hrs	Data	1/2	2		
6										
7										
8										

Notes

- Apply AF3000 Antifouling before coat 3 (Altra~Build 540) has cured. ie tack free but still soft to finger pressure. DO NOT allow the Altra~Build 540 to cure hard before applying AF3000 Antifouling.
 - Allow 12 hours cure of the final coat of AF3000 Antifouling before relaunching.
- NB: DO NOT exceed maximum recoat times.

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 * Spray application is normally recommended. Suitable equipment may include airless / air assisted airless / HVLP or conventional pressure pot equipment.
 * If the specified thickness is not achieved in one coat, additional coats must be applied to meet the specified D.F.T. Stripe coats should be brush applied.
 * Any contamination or moisture which occurs between coats must be removed by suitable means before applying successive coats in the system.
 * Care must be taken handling and applying all paint coatings. All stated minimum and maximum recoat times are based on 20°C/50% RH.
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Protective Coatings Specification

N° **TG-207-0868.2**

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 Altex Coatings Limited
 PO Box 142
 TAURANGA
 NEW ZEALAND

Phone:(64-7) 541-1221
 Fax:(64-7) 541-1310

Spec Type: Repaint
Supersedes

Project: **Opus IV**
Description: Hull Topsides

Project Location: New Plymouth
Environment: Marine exposure
Substrate: Mild Steel (coated)

Company Name: **Contact Name:** Paul and Joanne Wilson
Address: opusnz@yahoo.ca **Contact Title:** Owners
City: **Phone:**
Region: **Fax:**
Country: **Post Code:**

Surface Preparation

Degrease all surfaces to be coated with 10/90 Prep Solvent to remove all oil, grease and any other soluble contamination. Use the two rag method i.e. one on, one off, changing cloths often. Sand with 220 grit paper to a uniform matte finish and de-dust.
 Apply a full coat of coat 1. Allow to cure, sand with 320 -400grit paper and de-dust.
 Apply a full coat of coat 2 as per recommended procedure.
 All surfaces must be clean and dry before painting.

Coating System

Coating Name	Theoretical Coverage m2/litre	Dry Film Thickness μ m			Mix Ratio by volume	Recoat Min. @ 20°C / 50% RH		Recoat Max. @ 20°C / 50% RH		Note No.
		Wet Film Thickness μ m						Thinner (spray)		
1 AY&B Epoxy Primer Sealer N°.4 - full prime	7.8	128	50	4:1	12hr	24hr	E 10			
2 321 Elite Brushing Polyurethane - full coat	11.2	89	50	3:1	4 hrs	24 hrs	U22	1		
3										
4										
5										
6										
7										
8										

Notes

- Add flattening agent to coat 2 as desired to reduce gloss level to a low sheen finish.
- NB: DO NOT exceed maximum recoat times.

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 * Spray application is normally recommended. Suitable equipment may include airless / air assisted airless / HVLP or conventional pressure pot equipment.
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The **Brushable** Professional Finish



Elite 321 Brushing Polyurethane

Product Description: Easy to brush on finish coat

PRODUCT FEATURES

- Two component linear polyurethane
- Designed specifically to be rolled and brush applied
- High gloss, excellent flow-out, superb coverage

PRODUCT USES

- For manual repaints and spot repairs on topsides, cabins, superstructures and interior spaces
- Hard to access areas
- Areas where spraying is restricted

APPLICATION INFORMATION

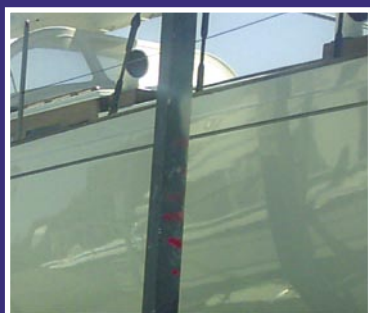
- Elite 321 Brushing Polyurethane is normally applied over suitably sanded No.4 Epoxy Sealer Undercoat.
- Comes in a range of three of the most common yacht/boat colours; Snow White, Matterhorn White, Oyster White.
- Apply by using a short-nap roller to load paint onto the prepared surface and tipping off with a stiff bristled brush to obtain a desirable finish.

Australia (Head Office)
Shop 5/55 Waterway Drive, Coomera
Telephone: +61 7 5556 0577 Facsimile: +61 7 5502 7426
www.altexcoatings.com.au



New Zealand (Head Office)
91-111 Oropi Road, Greerton, PO Box 142, Tauranga
Telephone: +64 7 541 1221 Facsimile: +64 7 541 1310
www.altexcoatings.co.nz

TOPCOAT
PRODUCT LAUNCH



PRODUCT INFORMATION

The Elite 321 Brushing Polyurethane is a two component linear polyurethane designed specifically to be rolled and brush applied for touch-ups or manual repaints on topsides, cabins, superstructures and interior spaces such as showers, heads and galleys in situations where spraying is not allowed or is impractical.

APPLICATION INFORMATION

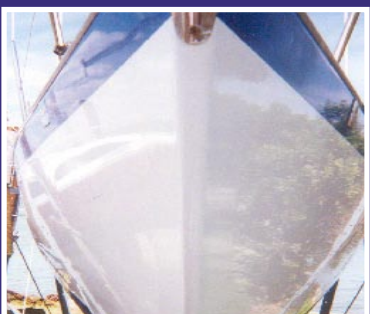
Elite 321 Brushing Polyurethane is normally applied over suitably sanded No.4 Epoxy Sealer Undercoat.

Elite 321 Brushing Polyurethane comes in a range of three of the most common yacht/boat colours:

- Snow White (standard white)
- Matterhorn White (blue/grey off white)
- Oyster White (creamy off white)

Elite 321 Brushing Polyurethane has been added to the Altex Yacht and Boat range to complement the existing range of quality products. This has been developed to fill a need for an easily brushed DIY 2-pack topcoat.

With the increasing prevalence of restrictions against spraying on many marina hard-stands, the Elite 321 Brushing Polyurethane makes a timely debut on the professional and DIY marine paint market.



FIELD TRIAL FEEDBACK

"...the results achieved are quite outstanding!"

"..the next day, the finish had levelled to that equal of a good spray job with excellent gloss"

"The finish is brilliant and easy to apply."

"...the second coat levelled perfectly...no overlap marks and no trouble joining to an edge done 10 minutes prior."

"I had two patches on the hull to spot paint - primer and 2 finish coats. I left it two days, cut the edges with 600 grit wet and dry, then cut and polished - you cannot see the blend!"

"The colour was a very close match and it was hard with the eye to see the difference."

"The photo's of my hull didn't manage to catch the difference between the original spray job and the brush job, but maybe that's a tribute to the performance of the paint itself!"





Elite 321 Brushing Polyurethane

Product Description: Easy To Brush On Finish Coat

ADVICE FROM THE EXPERTS

1. Use only plastic masking tape such as 3M Longlife Blue Vinyl Tape
2. Ensure thorough de-dusting/degreasing has been performed prior to each coating stage, as this has a direct effect upon coating adhesion
3. Do not apply upon surfaces in direct sunlight
4. Apply coatings in rising temperatures i.e. start in the morning rather than the afternoon
5. Apply only freshly mixed paint, in a quantity suitable for the job at hand
6. Always keep your brush or roller lubricated with fresh paint
7. Allow 36-72 hours curing prior to overcoating with sign writing, cove lines or a boot topping
8. Ensure all surfaces are clean and dry prior to coating
9. Weather conditions are vital:

Minimum ambient temperature	8°C
Maximum ambient temperature	30°C
Maximum relative humidity	85%

MATERIALS AND EQUIPMENT CHECKLIST

- Suitable sized brush. The Linzer brand is available exclusively through Altex Coatings Limited
- Roller sleeve such as the Rol Rite 3/8" Nap Smooth Surface solvent resistant sleeve
- Roller tray
- Roller handle
- Sandpaper (P.180, P.280, P.400)
- Green Scotchbrite pads
- Tack rags
- Mixing stick and container
- Dust and paint masks and cartridges
- Overalls
- Masking tape
- Sanding blocks
- P40 Pre-Painting Cleaner
- D30 Degreaser
- No.4 Epoxy Sealer Undercoat
- U22 Thinner
- Elite 321 Brushing polyurethane (Snow White, Matterhorn White, and Oyster White)



For further information see other Altex literature or contact our Altex Yacht & Boat helpline

Australia 1800 738 383

New Zealand 0800 429 527

For health and safety recommendations, see can label and datasheet information.

Easy As 1-2-3



1

SURFACE CLEANING AND PREPARATION

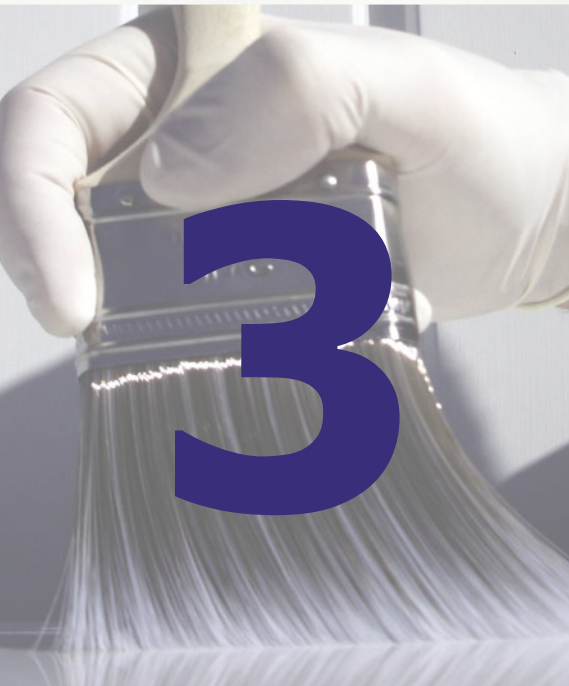
- Using a 1:1 solution of P40 Prepainting Cleaner and water and a clean new green Scotchbrite® pad, thoroughly scour the entire surface to be painted
- Complete in small sections, cleaning and rinsing with **PLENTY** of fresh water as you go.
- Check for 'grease-free' cleanliness by wetting the surface with clean fresh water - if no 'water-break' is observed then the surface may be considered grease-free. If a break is detected, re-wash and re-rinse as above. Allow to thoroughly dry.
- An alternative degreasing and de-dusting regime: use 10/90 Prep Solvent to remove all oil, grease and any other soluble contamination. Use the two rag method i.e. one on, one off, changing cloths often.



2

PRIMING/UNDERCOATING SURFACES TO BE COATED

- For new or complete repaints, use Altex Yacht & Boat two component primers, filling and fairing material's and high-build undercoats to bring surface to be painted, up to an acceptable standard.
- For sound and fair existing paint jobs or gelcoat surfaces, use 220 grit paper to de-gloss existing topcoat/epoxy undercoat back to a uniform matte finish and de-dust. Fill any minor imperfections with 421 Epoxy Filler. Sand smooth and de-dust. Mask off all areas to be coated.
- Apply a rolled and tipped off coat of No.4 Epoxy Sealer Undercoat. Allow to cure, sand with 380-400 grit paper and thoroughly de-dust.



3

TOPCOATING WITH ELITE 321 BRUSHING POLYURETHANE

- A roller sleeve combined with the Linzer Nylon/Polyester brush are recommended to obtain a high quality result.
- Roll out a section that can be worked on (bearing in mind the 3-5 minute wet-edge hold out time), being careful not to overload paint thickness particularly on the vertical.
- Tip off the rolled paint with the Linzer brush to remove roller stipple. Finish off with vertical strokes on large flat upright areas with a wetted-out brush. Continue with rolling as quickly as possible in order to retain the applied paints wet edge.
- For large surface areas, it would be advisable to paint as a two-person team, one rolling with the other tipping off immediately behind.
- Once completed, leave to cure overnight. As curing progresses you will see brush marks slowly disappear to a uniform, glossy finish.
- Normally 2-3 coats are required to gain full opacity of colour. Lightly sand with 380-400 grit paper to de-nib and de-gloss the first coat and thoroughly de-dust the area. Re-apply as above to obtain a desirable finish with full colour opacity.