Super Build 302

Technical Data Sheet: 153-14
P3002

1. Introduction

ALEXSEAL Super Build 302 is an epoxy-based high build primer / surfacer which cures into a smooth easy to sand, water resistant coating. ALEXSEAL Super Build 302 has excellent spray characteristics and is fast drying to allow maximum efficiency while fairing. The cured film offers excellent mechanical resistance values.

2. Range of application

ALEXSEAL Super Build 302 is used to seal ALEXSEAL Fairing Compounds and to even out imperfections remaining after the filling and sanding process. It also is designed to be used as a smooth, non-porous surfacer prior to the application of ALEXSEAL Finish Primer 442.

3. Color

Color of mixture: Off White
Base material: White
Converter: Gray

4. Coverage

Volume Solids catalyzed without reduction: 60 %.
Note: Coverage rates are figured for base and converter. Reducer is added as percent of total quantity of base & converter.

	m² / liter	**m² / gal**	**sq. ft. / gal**	**Rec. DFT in µm (mils)**
Theoretical	2	7.6	81	500 (20)
Practical				
Conventional Air Spray Equipment	1.2	4.6	50	500 (20)
HVLP Air Spray Equipment	1.5	5.8	63	500 (20)
Airless Equipment	2.0	7.6	81	500 (20)
Brush / Roller	2.0	7.6	81	500 (20)

5. Substrate pre-treatment

The substrate must be clean, dry and free from dust, grease, oil and other contamination. ALEXSEAL Super Build 302 may be applied over sanded fillers such as ALEXSEAL Fairing Compound 202. After finish sanding the ALEXSEAL Fairing Compounds with P60 to P150 grit. The surface must be cleaned and dusted off thoroughly before applying ALEXSEAL Super Build 302.
ALEXSEAL Super Build 302 may be applied as a high build isolating surfacer over gel coat and raw resin lay-up.
Gel coat must be sanded with P80 - P150 grit.
Fiberglass resin should be ground with P36 - P60 and / or sand blasted. The surface and the bottom of any profile should be dull and abraded, with no shiny spots.
Refit and repair: Old coatings must have good adhesion and chemical resistance and must be sanded with P100 - P150 grit. A compatibility test should be performed if the old coating is questionable.
ALEXSEAL Super Build 302 should be sealed with ALEXSEAL Finish Primer 442 prior to topcoating.

6. Trade names & Packaging

P3002	ALEXSEAL Super Build 302	1 QT & 1 Gal
C3052	ALEXSEAL Super Build 302 Converter	1 QT & 1 Gal
R3040	ALEXSEAL High Build Epoxy Reducer	1 QT & 1 Gal
A4030	ALEXSEAL Accelerator for Super Build 302	1 PT

7. Mixing ratio

1 part by volume	P3002	ALEXSEAL Super Build 302
1 part by volume	C3052	ALEXSEAL Super Build 302 Converter
10 to 25 % reduction (vol.)	R3040	ALEXSEAL High Build Epoxy Reducer

Example: 1 : 1 : $^1/_2$ = 25 % reduction for conventional spray application
Example: 1 : 1 : $^1/_4$ = 12.5 % reduction for airless spray application

The amount of reducer required may vary depending on the application conditions.

Professional Use Only

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8. Application

Viscosity	Zahn #2: ≈ 24 sec, DIN 4 cup 4mm: ≈ Airless 25-30 sec, Conventional 20-25 sec
Nozzle Size Gravity Gun	2.0 mm (0.079) - Conventional & HVLP
Nozzle Size Siphon Cup	1.2 to 1.6 mm (0.046 to 0.060) - Conventional & HVLP
Fluid Nozzle Size Pressure Pot	2.0 to 4.0 bar (30 to 60 PSI) - Conventional & HVLP
Pot Pressure	0.7 to 1.5 bar (10 to 22 PSI) - Conventional & HVLP
Airless Equipment	Tip 0.43 mm / 60° (0.017 / 60°) Inlet Pressure 3 to 5 bar (44 to 70 PSI)

Application by Spraying

Apply 2 to 3 coats to a wet film thickness (WFT) of 150 - 300 microns (6 - 12 mils) per coat. This will achieve a dry film thickness (DFT) of 150 - 300 microns (6 - 12 mils) for a 2 coat application, and 225 - 450 microns (9 - 15 mils) for a 3 coat application, using 20 % reduction. Minimum TSD before sanding shall be 150 microns (6 mils). Maximum recommended film thickness during a spray application is 3 coats totaling 960 microns (36 mils) WFT, or 500 microns (20 mils) DFT.

Accelerator

A4030 ALEXSEAL Super Build 302 Accelerator is used to reduce the drying time of ALEXSEAL Super Build 302. At the same time, use of A4030 ALEXSEAL Super Build 302 Accelerator reduces the pot life.

Per each 1 gallon of P3002 ALEXSEAL Super Build 302 base, a maximum of 1 pint (16 oz) of A4030 ALEXSEAL Super Build 302 Accelerator shall be added. Additional quantities of accelerator reduce pot life, and are not recommended. Mix ratio quantity for A4030 is for base quantity used in mixture.

9. Pot life and Drying

Optimal application environment range - min. 15°C (60°F) 40% RH, up to max. 30°C (85°F) 80% RH

Temperature for minimum recoat time	15°C (60°F)	20°C (68°F)	25°C (77°F)	30°C (85°F)	Max Dry Time
Pot Life - approx.	12 hrs	12 hrs	12 hrs	12 hrs	12 hrs
Pot Life - with accelerator	6 hrs	6 hrs	6 hrs	6 hrs	N/A
Fully Cured	21 days	18 days	14 days	10 days	N/A
Tape Dry - without accelerator	30 hrs	24 hrs	18 hrs	12 hrs	N/A
Tape Dry - with accelerator	24 hrs	18 hrs	12 hrs	10 hrs	N/A
Recoat with another coat of ALEXSEAL Super Build 302	4 hrs minimum	2 hrs minimum	1 hr minimum	1 hr minimum	24 hrs maximum
Overcoat with another product including 202, 212 303, 328, 414, 442 or 501. Preparation including sanding is required after max. time.	12 hrs minimum	12 hrs minimum	12 hrs minimum	12 hrs minimum	24 hrs maximum
Note: The above chart reflects approximate minimum and maximum time. Surface temperature, air flow, direct or non-direct sunlight, quantity and or choice of reducer, and film thickness will affect actual tack up, recoat, overcoat, and drying times during application. During the drying phase the minimum temperature is 15°C (60°F). Ideal temperature: 25°C (77°F). The minimum application condition should be 3°C (5.4°F) above dew point.					

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