PRODUCT DATA SHEET

PRO-STRUCT®

684/4 Muralflex

HIGH-BUILD PROTECTIVE BARRIER

LONG LIFE PROTECTION OF STRUCTURES
LOW DIRT RETENTION – EASY TO CLEAN
REDUCES RATE OF CONCRETE CARBONATION
EXCELLENT ADHESION AND CRACK BINDING PROPERTIES
ALLOWS WATER VAPOUR TO MOVE OUT OF CONCRETE

TYPICAL PROPERTIES AT 25°C

Finish	Semi-gloss
Colour	Refer to Acrylic colour chart
Type	Adhesion promoted acrylic
Volume Solids	40 to 42%
Theoretical Coverage **General Purpose** **Anti-Carbonation**	 7 to 9m²/litre/coat 2 coats at 5m²/litre/coat
Apply Over	Dust and oil-free masonry, concrete and galvanised steel surfaces
Apply By	Brush, roller or spray
Drying Time	3 to 4 Hours
Thinner	Water
Shelf Life	12 Months
Application Temperature Range	10 to 35°C
Carbon Dioxide Diffusion Resistance (RCO^2)	193m at 150µm dry
Water Vapour Diffusion RH_2O	Less than 4m
Predicted 15 years carbonation reduction	
Dense Concrete	Reduced by 10 times
Poor Quality Concrete	Reduced by 3 times
VOC Content	29g/l

PRODUCT DESCRIPTION:
A tough, durable, exterior high build coating designed to protect concrete, plaster, masonry, wood and primed metal surfaces from wear and extreme weather conditions. It is particularly recommended for surfaces in areas exposed to wet, high humidity, salt air and industrial fallout conditions, e.g. bridges, office blocks, flats, schools, hospitals, factories and hotels. Suitable as maintenance coatings and demarcation lines for asphalt and concrete surfaces exposed to light traffic conditions as found on pathways, driveways, recreational sports facilities and parking lots.

RESISTANCE:
Exceptional resistance to intense UV, water, hail, cyclic temperature changes and substrate alkali attack. Completely unaffected by industrial fallout and detergent washing.

SPECIFICATION:
Prepare surface and apply a minimum of 2 coats Pro-Struct 684/4 Muralflex High Build Protective Barrier in accordance with manufacturer's detailed instructions. For reducing concrete carbonation, 150µm dry film required.

SURFACE PREPARATION:
Prior to application, all surfaces are to be clean, dry and sound.

APPLICATION:
Cementitious substrate:
Prime with Pro-Struct 689 Masonry Primer at 6 to 8m²/litre/coat.

For general purpose application, apply 2 coats of Pro-Struct 684/4 Muralflex High Build Protective Barrier at 7 to 9m²/litre/coat, allowing 3 to 4 hours drying between coats.

For **Anti-carbonation Barrier**, apply 2 or more coats at 5m²/litre/coat to achieve a final dry film thickness of 150 microns.

Galvanised metal surfaces:
Patch prime corroded areas with Acrylast 3000.

Apply by suitable airless spray equipment 2 or more coats of Pro-Struct 684/4 Muralflex High Build Protective Barrier at 5 to 7m²/litre/coat, allowing 3 to 4 hours drying between coats.

STORAGE:
Store between 4° to 43°C.

APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

SURFACE PREPARATION:
Remove any oil or grease from surface to be coated, followed by a thorough rinse with clean potable water.

STEEL:
Apply over clean, dry, recommended primers. Remove all dirt, oil, grease and contaminants. For galvanised iron, prime with Acrylast 3000.

CONCRETE:
Remove laitance by abrasive blasting or other means. Prime concrete with Pro-Struct 689 and allow to dry for 3 to 4 hours before overcoating with Pro-Struct 684/4 Muralflex.

Do not coat concrete treated with hardening solutions unless test patches indicate satisfactory adhesion. Do not apply coating unless concrete has cured at least 28 days at 21°C and 50% RH or equivalent time.

MIXING:
Mix Pro-Struct 684/4 Muralflex to a smooth consistency with mechanical agitator such as a "Jiffy" mixer. Thin up to 5% by volume with clean potable water if required.

APPLICATION TEMPERATURES:

	Material	Surface	Ambient	Humidity
Normal	16-30°C	18-30°C	18-32°C	10-85%
Minimum	10°C	10°C	10°C	0%
Maximum	38°C	50°C	49°C	90%

Do not apply when the surface temperature is less than 2°C above the dew point. Water-based products are sensitive to moisture during curing. Do not apply if the temperatures are expected to drop below 10°C within 24 hours of application, or if rainfall is imminent.

Special thinning and application techniques may be required above or below normal conditions.

NOTE: High humidity will lengthen cure times due to slower water evaporation rate.

SPRAY:
The following spray equipment has been found suitable, and is available from manufacturers such as Binks, DeVilbiss and Graco

CONVENTIONAL:
Pressure pot equipped with dual regulators, 12mm minimum ID material hose, .086" fluid tip and appropriate air

AIRLESS:

Pump Ratio *	30:1 (min)
GPM Output	3.0 (min)
Material hose	10mm ID (min)
Tip Size	.015" to .019"
Output psi	1800 (124 Bar)
Filter size	60

* Teflon packings are recommended and are available from pump manufacturer

BRUSH:
Use synthetic bristle brush, applying with full strokes. Avoid excessive re-brushing.

ROLLER APPLICATION:
Use a medium nap mohair roller with phenolic core. Avoid re-rolling. Multiple coats may be required for uniform hiding when applied by brush or roller.

CAUTION: MAY CONTAIN FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRONIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NON-FERROUS TOOLS AND TO WEAR CONDUCTIVE AND NON-SPARKING SHOES.

PRO-STRUCT®

StonCor Africa

StonCor Africa (Pty) Ltd
Co. Reg. No. 1996/001848/07
Tel: +27 (0) 11 254 5500
Website: www.stoncor.co.za
E-mail: stoncorsa@stoncor.com

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DRYING TIMES:

	Between Coats	Final Cure
10°C	8 Hours	60 Hours
16°C	4 Hours	36 Hours
25°C	3 Hours	24 Hours
32°C	1 Hour	12 Hours

CLEAN-UP:
Use warm, soapy water. If material has dried or if equipment is to be used with solvent-based coatings, use Pro-Struct 105 Epoxy Brush Cleaner.

CAUTION:
Read and follow all caution statements on this product data sheet and on the material safety data sheets for this product.

Water-based product. Keep above 5°C. Employ normal workmanlike safety precautions. Keep container closed when not in use. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

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