







LUTHULI HOUSE MUSEUM GROUTVILLE

NEW WORK PAINTING SPECIFICATIONS DOCUMENT REFERENCE NO: LF 22779-10-13

HARBER & ASSOCIATES 24 October 2013







24 October 2013

Harber & Associates 60 High Street Overport

Attention : Rodney Harber
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Dear Rodney

RE: SPECIFICATIONS FOR PAINTING THE EXTERIOR & INTERIOR SURFACES AT LUTHULI HOUSE MUSEUM, 3233 NOKUKHANYA LUTHULI STREET, Groutville

With reference to the above mentioned project, we would like to offer the following recommendations for your consideration.

OVERVIEW:

- PLEASE NOTE: When YELLOW top coats are selected for New Work Application it is imperative to used Plascon Professional Plaster Primer PP950 (Alkai Burn Resistance Primer) in place of other plaster primers as Ph levels maybe exceptionally high on new or hairline crack plaster.
- PLEASE NOTE: This specification is only valid for 3 months from date of issue. Should the project not commence during this period it may be necessary to re-assess the project as further coating deterioration may have occurred and product upgrades may be necessary.
- Where necessary, waterproofing should be carried out by a waterproofing specialist.
- Only the areas mentioned in the scope of works must be coated.
- Plaster sand should comply with SABS 1090 requirements. Plaster mix must be applied at a minimum thickness of 10mm, curing to a hard and sound finish, free of soft and friable material. MPA strength must comply with SABS 0164-1 (10MPA=2,6:1 and 5MPA=4:1).
- The substrates to be coated must be handed over to the painting contractor in a good condition. Should crack repairs be necessary, please contact Plascon for a crack repair specification guideline.
- All the products mentioned in these specifications must be applied strictly in accordance with the relevant Product Data Sheets.
- Kansai Plascon reserve the right to change the suggested topcoat once the colour finalisation has taken place as dark colours show up all surface imperfections whereas a matt finish will mask minor surface imperfections.
- NB: The Moisture needs to be less 8% on the BD2 scale measure on by Dozer Hygrometer before applying the Primer.
- There is definitely moisture in the structure and seems to be isolated to certain areas. The interior walls are the most effected.
- The Mud walls when tapped in areas where there is cracking will need to be addressed and repaired with the correct products for the mud structure as they sound hollow.







It is recommended that imported light fast colourants/pigments be used for the bright, clean colours. These colours will change uniformly and a difference in the finishing colour will be noted after +- 1 year. Pantone colours should not be used but rather choose colours from the RAL or BS colour standards.

Colour change and chalking will take place at approximately 5% per year as per Florida standards. This however will not affect substrate protection.

To achieve full obliteration when using colours falling within the bright, clean colour spectrum, one coat of Plascon Colourprep Basecoat Water Based (CPW 1000) or one coat of Plascon Colourprep Basecoat Solvent Based (CPS 1000) must be applied after the application of Plaster Primer; alternatively multi–coats will be necessary to achieve full obliteration. This should be taken into consideration when specifying and pricing within this parameter.

Your consideration on the above proposal is appreciated and we look forward to a favourable response. Please do not hesitate to contact Plascon's Project Division should you need further information regarding the specification detail in this document.

Yours sincerely

HAZEL BLACKBEARD
PROJECT CO-ORDINATOR

LINDSAY FERGUSON
ARCHITECTURAL CONSULTANT







SPECIFICATIONS FOR PAINTING THE EXTERIOR & INTERIOR SURFACES AT

LUTHULI HOUSE MUSEUM 3233 NOKUKHANYA LUTHULI STREET GROUTVILLE

Contents

- Index/Scope of Work
- Contractors Quotation Requirements
- Project Action Sheet
- Specifications

DISCLAIMER

The recommendations contained herein are given in good faith and are meant to guide the user based on the information given to Plascon. Should, during the course of the redecoration program, circumstances arise in specific areas which require a change in the painting specifications to accommodate these circumstances; Plascon will provide the amended specifications.







INDEX/SCOPE OF WORK - EXTERIOR & INTERIOR

SPEC NO	SUBSTRATE TYPE	PRODUCT & PRODUCT CODE	WATER/SOLVENT BASED TEXTURE/FINISH	LIFE EXPEC- TANCY (years)	SUBSTRATE/S
1	Cement Plaster & Concrete	Professional Super Matt (PEM900)	Water based Matt finish	3	Exterior Walls
2	Mild Steel	Plascon Velvaglo Satin (VLO)	Solvent based Smooth finish	7	Exterior/Interior Mild Steel Windows and Frames
3	Galvanised Iron	Plascon Nuroof Cool Acrylic Roof Paint (TRP)	Water based Smooth finish	7	Exterior Galvanised Iron Roof Sheeting
4	Gypsum Board/Rhino Board	Professional Super Matt (PEM900)	Water based Matt finish	5	Exterior/Interior Gypsum Board Ceilings
5	Cement Plaster & Concrete	Professional Super Matt (PEM900)	Water based Matt finish	5	Interior Walls

AREAS TO BE EXCLUDED

All substrates not mentioned in this document

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SPECIFICATION SHEET NO: 1





NEW WORK/REPAINT: REPAINT – EXTERIOR

SUBSTRATE: Masonry (Mud Mixture) - Exterior Walls

PAINT FINISH: Professional Super Matt PRODUCT CODE: PEM900

(Smooth Finish - Waterbased, high cover, durable matt acrylic)

COLOUR: White plus Plascon colour system and other fan decks.

ENVIRONMENT: As per ISO 12944: Maintenance Cycle (Years)

C1 - Inland 3
 C3 - Industrial 2
 C5 - Coastal / Marine 3

Plascon Coating System	Application Method	Spreading Rate, m ²	WFT/ DFT µm (min & max)	Reducer / Cleaner	Overcoating time, h @23°C	Technical Data Sheet No:
Spot Prime: Professional Damp Plaster Paint (PSB600)	B, R or S	@ 35 µm Theo – 14 Prac – 10	WFT 39 - 78 DFT 20 - 40	Min. Turp. (AZH 1)	16	M-5
1st Coat: Professional Super Matt (PEM900)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 64 - 90 DFT 25 - 35	Water	2	L-42
2nd Coat: Professional Super Matt (PEM900)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 64-90 DFT 25-35	Water	2	L-42

SURFACE PREPARATION:

SUBSTRATE CONDITION AND MOISTURE CONTENT

Ensure surfaces are clean, dry and sound. Moisture content on cement plaster must not be more than 8% when measured on a Doser Hygrometer BD2 scale (or equivalent) and on concrete, not more than 5% using a BD4 scale.







FUNGAL AND ALGAE GROWTH - Sodium Hypochlorite Treatment

Scrub the affected areas using a solution of household bleach (3,5% sodium hypochlorite solution) mixed 1 part bleach to 2 parts water. After 1 hour or marked colour change (lighter), brush clean using a hard bristle brush. Then rinse thoroughly with fresh water to remove all traces of bleach and allow drying.

EFFLORESCENCE - Treatment

Light Efflorescence: Deposits should be removed dry brushing, then by wiping surface with a 5% white vinegar solution. Allow to react for 10 minutes and rinse with tap water.

Heavy Efflorescence: Eliminate source of moisture. Brush off efflorescence. Apply a solution of 50g calcium chloride to 5 litres water to affected areas and allow 48 hours reaction time before coating. Do not wash.

SUGAR SOAP CLEANING

Remove surface contaminants using Polycell Sugar Soap solution – 500g Polycell Sugar Soap Powder (501703) dissolved in 5 litres water or Polycell Sugar Soap Liquid (501801). For stubborn contaminants use hot water in the above mix (Sugar Soap Powder) and a bristle broom or scrubbing brush. Rinse with tap water to remove all traces of sugar soap and allow drying.

LOOSE AND FLAKING/PEELING PAINT- Dry Preparation

Remove loose and peeling paint back to a firm edge by scraping, sanding or other suitable means. Feather the edges with 100 grit sandpaper and ensure surface is dust free.

DELAMINATING PLASTER/HAMMER TESTING

Hammer test suspect areas for adhesion. Hollow sounding plaster must be removed. The surface must be sound clean and dry. Repair areas using prefer products for the Mud in the structure allow drying to product requirements.

APPLICATION:

- Spot prime bare and repaired areas with one coat of Professional Damp Plaster Paint (PSB600) to achieve complete obliteration, allowing 16 hours drying between coats.
- Apply two full coats of Professional Super Matt (PEM900) to achieve complete obliteration, allowing 2 hours drying between coats.

TABLE REFERENCES:

- Technical Data Sheet (TDS): User must always ensure that latest issue is used.
- B = Brush (ready for use), R = Roller (synthetic, min. 10mm pile) (ready for use), S = Airless spray (ready for use).
- Theoretical spreading rate quoted is for smooth non-porous substrates and does not include allowance for surface profile, porosity, wastage and uneven film application. Suitable allowance should be made according to type of work, method and skill of applicator. Practical spreading rate quoted is an average guide only - actual must be determined by user - see Preamble for formulation how to calculate.
- Overcoating times are at 23°C and 75% relative humidity. Longer times must be allowed under cooler and moist conditions. DO NOT paint during inclement weather and when temperature is below 10°C.
- Fading and chalking will occur to a greater or lesser degree depending on pigmentation and generic binder type.
- NB: Life expectancy may vary, depending on environmental conditions and stresses, within the macro/micro climate of the project.



These walls will need to be repaired with the correct products







SPECIFICATION SHEET NO: 2



NEW WORK/REPAINT: REPAINT – EXTERIOR/INTERIOR

SUBSTRATE: Metals - Mild Steel - Exterior/Interior Mild Steel Windows and Frames

PAINT FINISH: Plascon Velvaglo Satin PRODUCT CODE: VLO

(Smooth finish – solvent based, premium non-drip satin polyurethane enamel

COLOUR: White and standard colours as per colour card, plus Plascon colour system and

other fan decks.

ENVIRONMENT: As per ISO 12944: Maintenance Cycle (Years)

 C1 Inland
 2

 C3 Industrial
 2

 C5 Coastal / Marine
 2

Plascon Coating System	Application Method	Spreading Rate, m ²	WFT/DFT µm (min-max)	Reducer/ Cleaner	Overcoating time, h @23°C	Technical Data Sheet No:
Spot Prime: Professional Plascoprime 170 Zinc Phosphate Primer (UC170)	B, R or S	@ 45 µm Theo – 12 Prac – 7	WFT 75 - 94 DFT 40 - 50	Min. Turp. (AZH 1)	16	A-118
1st Coat: Plascon Velvaglo Satin (VLO)	B, R or S	@ 30 µm Theo – 15 Prac – 8	WFT56 - 89 DFT 25 - 35	Min. Turp. (AZH 1)	16	A-12
2nd Coat: Plascon Velvaglo Satin (VLO)	B, R or S	@ 30 µm Theo – 15 Prac – 8	WFT 56 - 89 DFT 25 - 35	Min. Turp. (AZH 1)	16	A-12

SURFACE PREPARATION:

PREVIOUSLY PAINTED SURFACES IN SOUND CONDITION - Polycell Sugar Soap Solution

Clean previously painted surfaces using a scrubbing brush with Polycell Sugar Soap solution – 500g Polycell Sugar Soap Powder (501703) dissolved in 5 litres water or Polycell Sugar Soap Liquid (50 18 01) to remove surface contaminants. Rinse with water to remove all traces of Sugar Soap and allow drying. Sand previously painted gloss surfaces to a matt finish and dust off.







OVERCOATING SOLVENT BASED ENAMEL WITH SOLVENT BASED ENAMEL

Remove surface contaminants using Polycell Sugar Soap solution – 500g Polycell Sugar Soap Powder (501703) dissolved in 5 litres water or Polycell Sugar Soap Liquid (501801). For stubborn contaminants use hot water in the above mix and a bristle broom or scrubbing brush. Rinse with tap water to remove all traces of sugar soap and allow drying. Sand paint to matt finish with 120 grit paper finishing with 220 grit paper. Dust off.

Ensure surfaces are clean, dry and sound.

Apply a coat of Professional All Purpose Undercoat (PU800) to entire area. Allow 16 hours to dry.

APPLICATION:

- Spot Prime with Professional Plascoprime 170 Zinc Phosphate Primer (UC170) to achieve a continuous film. Allow 16 hours to dry.
- Apply two full coats of Plascon Velvaglo Satin (VLO) to achieve complete obliteration, allowing 16 hours drying between coats.

- Technical Data Sheet (TDS): User must always ensure that latest issue is used.
- B = Brush (ready for use), R = Roller (synthetic, min. 10mm pile) (ready for use), S = Airless spray (ready for use).
- Theoretical spreading rate quoted is for smooth non-porous substrates and does not include allowance for surface profile, porosity, wastage and uneven film application. Suitable allowance should be made according to type of work, method and skill of applicator. Practical spreading rate quoted is an average guide only - actual must be determined by user - see Preamble for formulation how to calculate.
- Overcoating times are at 23°C and 75% relative humidity. Longer times must be allowed under cooler and moist conditions. DO NOT paint during inclement weather and when temperature is below 10°C.
- Fading and chalking will occur to a greater or lesser degree depending on pigmentation and generic binder type.
- NB: Life expectancy may vary, depending on environmental conditions and stresses, within the macro/micro climate of the project.







SPECIFICATION SHEET NO: 3



NEW WORK/REPAINT: REPAINT – EXTERIOR

SUBSTRATE: Metals - Galvanized Iron - Exterior Galvanised Iron Roof Sheeting

PAINT FINISH: Plascon Nuroof Acrylic Roof Paint PRODUCT CODE: TRP

(Smooth finish – water based, premium quality acrylic roof paint)

COLOUR: Standard colours per colour card.

ENVIRONMENT: As per ISO 12944: Maintenance Cycle (Years)

C1 - Inland 7
C3 - Industrial 7
C5 - Coastal / Marine 7

The life expectancy is determined by the original primer.

Plascon Coating System	Application Method	Spreading Rate, m ²	WFT/DFT µm (min-max)	Reducer / Cleaner	Overcoating time, h @23°C	Technical Data Sheet No:
Spot Prime: Professional Galvanized Iron Primer (GIP1)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 64 -102 DFT 25 - 40	Water	24	L-32
1st Coat: Plascon Nuroof Acrylic Roof Paint (TRP)	B, R or S	@ 55 µm Theo – 6 Prac – 4	WFT 109-156 DFT 35 - 50	Water	4	L-9
2nd Coat: Plascon Nuroof Acrylic Roof Paint (TRP)	B, R or S	@ 55 µm Theo – 6 Prac – 4	WFT 109-156 DFT 35 - 50	Water	4	L-9

SURFACE PREPARATION:

GALVANIZEDIRON IN GOOD CONDITION

Apply Plascon Galvanized Iron Cleaner (GIC1) to all bare galvanized areas by brush, broom or spray. Allow to react for 1 minute. Rinse off with tap water using bristle brooms or brushes or Scotch Brite pads to remove all surface contaminants. Check if surface is water-break free. If not, repeat the cleaning process. Allow to dry completely.







ZINC SALTS (WHITE RUST)

Scrub entire area with Plascon Metalcare Aquasolv Degreaser (GR1). Allow to react for 20 minutes. Remove Plascon Metalcare Aquasolv Degreaser (GR1) and surface contaminants by hydro blasting or with bristle scrubbing brushes and brooms or Scotch Brite pads in conjunction with tap water. Check if the surface is water break-free. If not, repeat process.

APPLICATION:

- Spot prime with Plascon Galvanized Iron Primer (GIP 1) to achieve a continuous film. Allow 2 hours to dry.
- Apply two full coats of Plascon Nuroof Acrylic Roof Paint (TRP) to achieve complete obliteration, allowing 1 hour drying between coats.

- Technical Data Sheet (TDS): User must always ensure that latest issue is used.
- B = Brush (ready for use), R = Roller (synthetic, min. 10mm pile) (ready for use), S = Airless spray (ready for use).
- Theoretical spreading rate quoted is for smooth non-porous substrates and does not include allowance for surface profile, porosity, wastage and uneven film application. Suitable allowance should be made according to type of work, method and skill of applicator. Practical spreading rate quoted is an average guide only - actual must be determined by user - see Preamble for formulation how to calculate.
- Overcoating times are at 23°C and 75% relative humidity. Longer times must be allowed under cooler and moist conditions. DO NOT paint during inclement weather and when temperature is below 10°C.
- Fading and chalking will occur to a greater or lesser degree depending on pigmentation and generic binder type.
- NB: Life expectancy may vary, depending on environmental conditions and stresses, within the macro/micro climate of the project.









SPECIFICATION SHEET NO: 4



NEW WORK/REPAINT: REPAINT – INTERIOR

SUBSTRATE: Building Boards – Gypsum Board - Exterior/Interior Gypsum Board Ceilings

PAINT FINISH: Professional Super Matt PRODUCT CODE: PEM900

(Smooth finish – water based, high cover, durable matt acrylic)

COLOUR: White plus Plascon colour system and other fan decks.

ENVIRONMENT: As per ISO 12944: Maintenance Cycle (Years)

 C1 Inland
 5

 C3 Industrial
 5

 C5 Coastal / Marine
 5

Plascon Coating System	Application Method	Spreading Rate, m ²	WFT/ DFT µm (min & max)	Reducer / Cleaner	Overcoating time, h @23°C	Technical Data Sheet No:
Spot Prime: Professional Gypsum and Plaster Primer (PP 700)	B, R or S	@ 40 µm Theo – 8.5 Prac – 5	WFT 103 -132 DFT 35 - 45	Min. Turps (AZH I)	16	A-54
2nd Coat: Professional Super Matt (PEM900)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 64-90 DFT 25-35	Water	1	L-42
3rd Coat: Professional Super Matt (PEM900)	B, R or S	@ 30 μm Theo – 13 Prac – 7	WFT 64-90 DFT 25-35	Water	1	L-42







SURFACE PREPARATION:

GENERAL

Ensure surfaces are clean, dry and sound, free from surface contaminants e.g. loose particles, dust, oil, etc. Moisture content less than 8% measured on a Dozer Hygrometer BD2 scale.

REMOVING LOOSE AND PEELING PAINT - DRY METHOD

Remove loose and peeling paint carefully with scraper and/or sanding, taking care not to damage the substrate.

REPAIRING DEFECTS - Polycell Polyfilla Interior (101002)

Prime defects with Professional Gypsum and Plaster Primer (PP700). Allow 16 hours to dry
Make good defects using Polycell Polyfilla Interior (101002). Allow at least 30 minutes to dry and sand smooth with 220 grit paper and dust
off.

APPLICATION:

- Spot prime bare and repaired areas with one coat of Professional Gypsum & Plaster Primer (PP700). Allow 16 hours to dry.
- Apply two full coats of Professional Super Matt (PEM900) to achieve complete obliteration, allowing 1 hours drying between coats.

- Technical Data Sheet (TDS): User must always ensure that latest issue is used.
- B = Brush (ready for use), R = Roller (synthetic, min. 10mm pile) (ready for use), S = Airless spray (ready for use).
- Theoretical spreading rate quoted is for smooth non-porous substrates and does not include allowance for surface profile, porosity, wastage and uneven film application. Suitable allowance should be made according to type of work, method and skill of applicator. Practical spreading rate quoted is an average guide only - actual must be determined by user - see Preamble for formulation how to calculate.
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- Fading and chalking will occur to a greater or lesser degree depending on pigmentation and generic binder type.
- NB: Life expectancy may vary, depending on environmental conditions and stresses, within the macro/micro climate of the project.







SPECIFICATION SHEET NO: 5





NEW WORK/REPAINT: REPAINT – INTERIOR

SUBSTRATE: Masonry (Mud Mixture) - Interior Walls

PAINT FINISH: Professional Super Matt PRODUCT CODE: PEM900

(Smooth Finish - Waterbased, high cover, durable matt acrylic)

COLOUR: White plus Plascon colour system and other fan decks.

ENVIRONMENT: As per ISO 12944: Maintenance Cycle (Years)

 C1 Inland
 3

 C3 Industrial
 2

 C5 Coastal / Marine
 3

Plascon Coating System	Application Method	Spreading Rate, m ²	WFT/ DFT µm (min & max)	Reducer / Cleaner	Overcoating time, h @23°C	Technical Data Sheet No:
Spot Prime: Professional Damp Plaster Paint (PSB600)	B, R or S	@ 35 μm Theo – 14 Prac – 10	WFT 39 - 78 DFT 20 - 40	Min. Turp. (AZH 1)	16	M-5
1st Coat: Professional Super Matt (PEM900)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 64 - 90 DFT 25 - 35	Water	2	L-42
2nd Coat: Professional Super Matt (PEM900)	B, R or S	@ 30 µm Theo – 13 Prac – 7	WFT 64 -90 DFT 25 - 35	Water	2	L-42

SURFACE PREPARATION:

SUBSTRATE CONDITION AND MOISTURE CONTENT

Ensure surfaces are clean, dry and sound. Moisture content on cement plaster must not be more than 8% when measured on a Doser Hygrometer BD2 scale (or equivalent) and on concrete, not more than 5% using a BD4 scale.







FUNGAL AND ALGAE GROWTH - Sodium Hypochlorite Treatment

Scrub the affected areas using a solution of household bleach (3,5% sodium hypochlorite solution) mixed 1 part bleach to 2 parts water. After 1 hour or marked colour change (lighter), brush clean using a hard bristle brush. Then rinse thoroughly with fresh water to remove all traces of bleach and allow drying.

EFFLORESCENCE - Treatment

Light Efflorescence: Deposits should be removed dry brushing, then by wiping surface with a 5% white vinegar solution. Allow to react for 10 minutes and rinse with tap water.

Heavy Efflorescence: Eliminate source of moisture. Brush off efflorescence. Apply a solution of 50g calcium chloride to 5 litres water to affected areas and allow 48 hours reaction time before coating. Do not wash.

SUGAR SOAP CLEANING

Remove surface contaminants using Polycell Sugar Soap solution – 500g Polycell Sugar Soap Powder (501703) dissolved in 5 litres water or Polycell Sugar Soap Liquid (501801). For stubborn contaminants use hot water in the above mix (Sugar Soap Powder) and a bristle broom or scrubbing brush. Rinse with tap water to remove all traces of sugar soap and allow drying.

LOOSE AND FLAKING/PEELING PAINT- Dry Preparation

Remove loose and peeling paint back to a firm edge by scraping, sanding or other suitable means. Feather the edges with 100 grit sandpaper and ensure surface is dust free.

DELAMINATING PLASTER/HAMMER TESTING

Hammer test suspect areas for adhesion. Hollow sounding plaster must be removed. The surface must be sound clean and dry. Repair areas using prefer products for the Mud in the structure allow drying to product requirements.

APPLICATION:

- Spot prime bare and repaired areas with one coat of Professional Damp Plaster Paint (PSB600) to achieve complete obliteration, allowing 16 hours drying between coats.
- Apply two full coats of Professional Super Matt (PEM900) to achieve complete obliteration, allowing 2 hours drying between coats.

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