

LONG LIFE TEXTURE COATING FOR CONCRETE AND MASONRY - EXTERIOR

1 SCOPE

This specification applies to coating systems for application to exterior masonry and off-form concrete on buildings, bridges and related structures to provide a decorative finish, having a maintenance free life of not less than 10 years.

2 BACKGROUND

- To obtain a broad overview of the Australian Paint Approval Scheme (APAS), refer to APAS document AP-D001.
- To obtain an overview of restricted ingredients in APAS certified products, refer to APAS document AP-D123.
- To obtain the current list of APAS participating manufacturers (and suppliers) and resellers, refer to APAS document AP-D152.
- To obtain an overview of how to participate in the APAS, refer to APAS document AP-D177.
- APAS approval to this specification may be gained by compliance with the requirements detailed in this specification and those in APAS document AP-D192.

3 DESCRIPTION AND GUIDE FOR USERS

3.1 General Requirements

- Coating systems for application to exterior masonry and off-form concrete on buildings, bridges and related structures to provide a decorative finish having a maintenance free life of not less than 10 years.
- The system may consist of a finish coat with or without a primer, pore filler or over-lacquer. However, where the use of a primer, sealer, filler or over-lacquer is recommended on the manufacturer's data sheet, these products will become part of the approved system.
- Sub-class AP-S0117/1:** A penetrating and/or filling primer formulated for application by airless spray or other suitable means at dry film builds not exceeding 50 µm. May be solvent or water based, interior or exterior use.
- Sub-class AP-S0117/2:** For application by airless spray or other suitable method to produce a smooth decorative finish to obliterate defects and profile in the substrate and also provide a continuous membrane which inhibits the passage of water vapour. Dry film thickness 500 - 1000µm.
- Sub-class AP-S0117/3:** For application by roller or airless spray to variously produce a smooth or low relief textured finish as preferred, essentially to provide a decorative finish and obliterate minor defects in the substrate and/or to provide a characteristic texture. Typical dry film thickness 150 - 500µm.
- Sub-class AP-S0117/4:** For application by trowel or other appropriate means to produce a high relief decorative finish to obliterate defects and profile in the substrate and provide a characteristic texture, pattern or other appearance. Dry film thickness typically 1 - 3mm.

- Sub-classes AP-S0117/2 and AP-S0117/3 do not contain any aggregates while AP-S0117/4 may contain aggregates having a particle size greater than 250µm.

3.2 Sub-Classes

- This specification incorporates the following sub-classes:
 - 0117/1:** Low build primer, solvent or water based, interior or exterior use
 - 0117/2:** Medium-high build, latex, smooth finish
 - 0117/3:** Medium build, latex, low profile finish
 - 0117/4:** High build, high profile finish

3.3 Basis of this Specification

- This specification is based on the following AS/NZS:
 - 0117/2 relates to AS/NZS 4548.3
 - 0117/3 relates to AS/NZS 4548.2 or 3
 - 0117/4 relates to AS/NZS 4548.4
- Some of the products covered by this specification may correspond to Paint Reference Number (PRN) B38 of AS/NZS 2311.

4 REFERENCED DOCUMENTS

- The following standards are referenced in this document:
 - AS/NZS 1580** – Paints and related materials: Methods of test
 - AS/NZS 2311** – Guide to the painting of buildings
 - AS/NZS 4548.2** – Guide for long-life coatings for concrete and masonry – Latex finish coatings – High build, low profile
 - AS/NZS 4548.3** – Guide for long-life coatings for concrete and masonry – Latex – Textured coatings – Non-aggregate
 - AS/NZS 4548.4** – Guide for long-life coatings for concrete and masonry – Latex – Textured coatings – Aggregate filled

These documents may be purchased through the Reference Standards Australia website:

<https://www.standards.org.au/>

- The Poisons Standard June 2021:** Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) No. 33, Part 2: Control on Medicines and Poisons, Section Seven / Appendix I Paint or Tinters

This document is available from the Australian Government Federal Register of Legislation web site at:

<https://www.legislation.gov.au/Details/F2021L00650>

- The following APAS documents are referenced in this document:
 - AP-D001 Rules Governing How APAS® Operates
 - AP-D123 Restrictions on Ingredients in Product Formulations
 - AP-D152 APAS® Participating Manufacturers and Resellers
 - AP-D177 Rules Governing How Product Manufacturers participate in APAS®



LONG LIFE TEXTURE COATING FOR CONCRETE AND MASONRY - EXTERIOR

- v. AP-D181 Volatile Organic Compounds (VOC) Limits
- vi. AP-D192 Rules Governing APAS® Product Certification Scheme

All APAS documents are available for download from the APAS website: <https://vs.csiro.au/apas/documents/>

5 COMPOSITIONAL REQUIREMENTS

5.1 Binder

- a) The following are the types of binders typically associated with the specific sub-classes:
 - i. **0117/1:** Not specified. Binder shall be chosen to impart the required system properties.
 - ii. **0117/2:** Pigmented latex based on pure acrylic or styrene acrylic copolymer.
 - iii. **0117/3:** Pigmented latex based on pure acrylic or styrene acrylic copolymer.
 - iv. **0117/4:** Not restricted and may variously comprise either latex, cementitious, epoxy, polyester or other binder. The product may be a two-pack material.

5.2 Volatiles

- a) The volatile component shall typically be comprised of water, although some approved products may be solvent based.
- b) For VOC content restrictions, refer to APAS document AP-D181.

5.3 Pigmentation

- a) The pigmentation shall be chosen to impart the properties detailed in clause 7, Table 1 below.

5.4 Colour

- a) The colour range acceptable under this specification is normally limited to white and light tints off white but in some cases, additional bases such as deep or accent may be required.
- b) Tinting of these products shall only be permitted by the manufacturer unless the manufacturer has in place special arrangements with for example, certain retail outlets, for ensuring colour uniformity within and between containers of tinted product. In batch sized lots, some manufacturers may supply factory mixed colours on special order.
- c) Additional finishing colours may be obtained by overcoating with products such as gloss latex paints approved to APAS specification AP-S0280/1.

6 PRODUCT APPROVAL REQUIREMENTS

6.1 General Requirements

- a) The product and its application for approval shall comply with the relevant requirements of APAS document AP-D192 during the life of the approval.

6.2 Technical Requirements

- a) The product shall comply with **all** the requirements of clause 7, Table 1 below.
- b) Unless otherwise specified, the test panels shall be of autoclaved fibrous cement as specified in AS/NZS 1580.104.1 and shall be prepared by a method appropriate to the product type, in accordance with the manufacturer's directions.
- c) Subject to compliance with all the requirements of this specification, the level of Approval appropriate to the application shall be given to the system.

6.3 Health and Safety Requirements

- a) The manufacturer's Safety Data Sheet (SDS) must be studied closely prior to using the product and complied with during use of the product.
- b) A full-face air fed respirator should be used when spraying AP-S0117/1 solvent-based materials. Appropriate respiratory protection procedures and practices should be followed when spraying AP-S0117/2, AP-S0117/3 and AP-S0117/4 products.
- c) If the product contains a flammable solvent, the paint should be stored away from all sources of heat or ignition
- d) Products intended for sale in Australia shall comply with all the requirements of the SUSMP. Products intended for sale in other countries shall comply with all local WHS and environmental requirements.
- e) The product shall comply with all requirements of clause 6.3 and 6.4 of APAS document AP-D192.



SPECIFICATION AP-S0117



LONG LIFE TEXTURE COATING FOR CONCRETE AND MASONRY - EXTERIOR

7 TABLE 1: PERFORMANCE PROPERTIES

TEST	AS/NZS 1580 METHOD	REQUIREMENTS
Testing for ALL sub-classes		
General Requirements	AS/NZS 4548	Shall comply with all the requirements of clause 4 Typical Properties and Characteristics of the applicable standard: 0117/2: AS/NZS 4548.3 0117/3: AS/NZS 4548.2 or 3 according to type 0117/4: AS/NZS 4548.4 All results shall be reported.
Specialised Application Properties (for example, trowel)		Where the manufacturer's instructions call for specialised application techniques, the coating system shall produce a film of the requisite thickness, uniform in colour, gloss and finish and consistent with the manufacturer's specification. Application technique shall be briefly detailed.
Hard dry condition	-	The hard-dry time shall be consistent with the manufacturer's stated time.
Reincorporation after Storage	211.2	After 18 months storage at ambient temperature, the settling rating shall not fall below 4 and the product shall be readily re-incorporated. The product shall have satisfactory application properties as per above.
Erosion	Mass loss and ack calculation	After 48 months exposure at a temperate site at 45°N, the total dry film build present shall not be less than 80% of the total original dry film build exposed.
VOC Content	APAS AP-D181	Refer to APAS document AP-D181 for method and limits. If the APAS specification is not listed on AP-D181, a declaration of VOC content is still required .
Additional testing for sub-classes 0117/2 and 0117/3 only		
Non-volatile Content by Volume (Volume Solids)	301.2	0117/2: ≥ 40%. 0117/3: ≥ 44%. • Volume solids may be determined theoretically from raw material data except where solid constituents incorporate sealed air voids.
Pigmentation Levels		0117/2: Pigment/binder ratio by mass not greater than 1.5. Pigment volume concentration not greater than 35%. 0117/3: Pigment/binder ratio by mass not greater than 4.0. Pigment volume concentration not greater than 60% .
Consistency	214.x	Method and result to be recorded.
Recoating Properties	404.1	A further coat applied to a panel after 7 days drying shall comply with parts 8 (f) and 8 (g) of the test method.



SPECIFICATION AP-S0117



LONG LIFE TEXTURE COATING FOR CONCRETE AND MASONRY - EXTERIOR

8 APPENDIX A

Document History

Status: Current
Version: 11
Date Published: 27-08-2021

Document Version No.:	Date Published:	Summary of Changes:
11	27-08-2021	<ul style="list-style-type: none">• General format change to clause 1, 3.1 and 6.3• Updated background information in clause 2• Updated SUSMP information• Updated APAS website information
10	13-11-2020	<ul style="list-style-type: none">• Addition of Appendix A Document History and removal of the Editorial Note previously used in specification versions• Updated document to the current format• Updated internal and external document references• Inclusion of VOC Content requirement to Table 1 Performance Properties• Addition of "People + Product = Protection" to Footer
9	17-12-2007	<ul style="list-style-type: none">• Added sub-class 0117/1 as a primer for texture systems
8	14-11-2003	<ul style="list-style-type: none">• Incorporated reference to testing to AS/NZS 4548• Incorporated a general format update
7	21-05-2003	<ul style="list-style-type: none">• Deleted reference to GPC numbering and incorporated a general format update
6	23-02-2001	<ul style="list-style-type: none">• Initiated the second stage of the move to new specification numbering with prominence given to the new number (previously GPC-C-117)