



PERMANENT GRAFFITI BARRIER

1 SCOPE

A **permanent** clear or pigmented coating/system which may be readily cleaned free of graffiti using the nominated proprietary graffiti remover.

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

- A **permanent** clear or pigmented coating/system which may be readily cleaned free of graffiti using the nominated proprietary graffiti remover. The anti-graffiti coating/system shall not affect the substrate or underlying coating rendering it unsuitable for future overcoating. The coating/system shall retain its original appearance and cleanability characteristics after cleaning.
- This product is intended for application to a wide variety of construction substrates to prevent permanent disfigurement by graffiti. It is usually applied by spray although other application methods are acceptable.
- The manufacturer's instructions on their product data sheet (PDS) or technical data sheet (TDS) regarding surface preparation, i.e., surface treatment, removal of previous coatings, suitable fillers, tie coats and primers, must be strictly observed.
- This specification is primarily intended to reflect the coating's resistance to spray pack paints and may not necessarily reflect the resistance to felt tip pens.
- For a **temporary** clear or pigmented coating/system which is physically removed by the graffiti remover as part of the graffiti removal process and the coating/system re-applied to protect the substrate, refer to APAS specification AP-S1442.

3.2 Sub-Classes

- This specification incorporates the following sub-classes:
 - 1441/1:** Clear, exterior
 - 1441/2:** Pigmented, exterior
 - 1441/3:** Interior

3.3 Basis of this Specification

- This specification is not based on any known specification or standard.
- Products approved under this specification do not comply with any Paint Reference Number (PRN) of AS/NZS 2311 and AS/NZS 2312.

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 2312** – Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings

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®
 - AP-D181 Volatile Organic Compounds (VOC) Limits
 - AP-D192 Rules Governing APAS® Product Certification Scheme
 - AP-S0091 Enamel in Pressure Pack
 - AP-S1442 Temporary Graffiti Barrier

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

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

5 COMPOSITIONAL REQUIREMENTS

5.1 Binder

- The type of binder is not restricted by this specification and shall be chosen to impart the properties detailed in clause 8, Table 1 below.



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5.2 Volatiles

- The volatile portion shall typically (but not necessarily) be comprised of hydrocarbons.
- For VOC content restrictions, refer to APAS document AP-D181.

5.3 Pigmentation

- The pigmentation shall be chosen to impart the properties detailed in clause 8, Table 1 below.

5.4 Colour

- Products approved under sub-classes AP-S1441/2 and AP-S1441/3 are normally available in a wide range of colours.

6 PRODUCT APPROVAL REQUIREMENTS

6.1 General Requirements

- 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

- The product shall comply with **all** the requirements of clause 8, Table 1 below.
- 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

- The manufacturer's Safety Data Sheet (SDS) must be studied closely prior to using the product and complied with during use of the product.
- Since these products may contain flammable solvents, they should be stored away from all sources of heat or ignition. Containers should be resealed immediately after use and good ventilation provided during use to minimise the risk of fire or explosion and the long-term toxic effects of absorption of the vapour into the lungs.
- If used indoors, to ensure minimal exposure to solvent vapours, painting should not be carried out whilst the building is occupied. Exterior doors, windows and relevant interior connecting doors should be propped open to ensure adequate ventilation.
- Alternatively, forced air ventilation should be used to ensure adequate air changes.
- Care should be taken to avoid contact with the skin by the use of protective clothing and barrier cream. All pumping equipment should be adequately earthed. A full-face air fed respirator should be used when spraying.
- 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.
- The product shall comply with all requirements of clause 6.3 and 6.4 of APAS document AP-D192.

7 APPENDIX A

Method for Assessing Protection Against Graffiti

- All panel conditioning, coating application, curing and graffiti removal shall be carried out under routine drying conditions.
- Apply the coating (system) to a previously conditioned fibrous cement panel 300 x 150 mm, according to the coating manufacturer's instructions, and allow to cure for 7 days.
- Where the manufacturer's product literature clearly states that the product is only meant to be used on another type of substrate e.g. concrete, the test substrate in clause 7.2 may be changed to that substrate.
- Apply a black spray pack enamel (approved to APAS specification AP-S0091) at a nominal dry film thickness of 30µm to approximately 20% of the panel area and allow to dry for 96 hours.
- Attempt to remove the black spray pack enamel using the nominated graffiti remover and process in accordance with the manufacturer's instructions. Rinse panel free of remover/graffiti residues with water, wipe dry and assess coating cleanability/removal as below.
- Condition the test panel examined at 7.5 for a further 2 hours ± 5 minutes and repeat steps 7.4 and 7.5 ensuring the black spray pack enamel is applied to the same area of the test panel as previously.
- Repeat step 7.6 to provide a test sequence comprising 3 complete cycles of graffiti application and removal. Assess the effectiveness of removal of the graffiti and the effect of the process on the permanent barrier surface.



SPECIFICATION AP-S1441



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8 TABLE 1: PERFORMANCE PROPERTIES

TEST	AS/NZS 1580 METHOD	REQUIREMENTS
Preliminary Examination	103.1	No gelation, setting rating minimum 4 and shall be readily re-incorporated. No particles to be retained on a 250 µm sieve.
Application Properties - Conventional Spraying - Airless Spraying	205.2 205.4	When applied to the relevant substrate type in accordance with the manufacturer's application instructions, the coating shall provide a uniform finish free from defects. 1441/1: The appearance of the substrate shall remain essentially unchanged apart from a slight increase in gloss.
Surface Dry Condition	401.1	Maximum 6 hours.
Reincorporation after Storage	211.2	To comply with all the preceding requirements after 18 months storage at ambient temperature.
Colour	601.1	1441/1: The coating shall be colourless and when applied, shall impart no permanent colour to the surface or coating.
Protection Against Graffiti	Clause 7, Appendix A	The graffiti shall be completely removed from the permanent coating without damage to the coating and the substrate or painted surface left unchanged in appearance after 3 cycles of application and removal.
Resistance to Natural Weathering	457.1	1441/1 and 1441/2 only: A concrete paving slab coated in accordance with the manufacturer's application instructions shall allow no integrity failure after 24 months exposure at 45°N at a temperate site. In addition, the ratings for discolouration, chalking and colour change shall not exceed 2. At the completion of the durability test, the coating shall still comply with the test for protection against graffiti (refer clause 7, Appendix A).
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.



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9 APPENDIX B

Document History

Status: Current
Version: 11
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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 5.4• Updated background information in clause 2• Updated SUSMP information• Updated APAS website information
10	10-12-2020	<ul style="list-style-type: none">• Addition of Appendix B 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	20-04-2007	<ul style="list-style-type: none">• Clarified test requirement in Appendix A
8	03-11-2003	<ul style="list-style-type: none">• Deleted reference to GPC numbering and incorporated a general format update
7	02-02-2001	<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-P-144P)