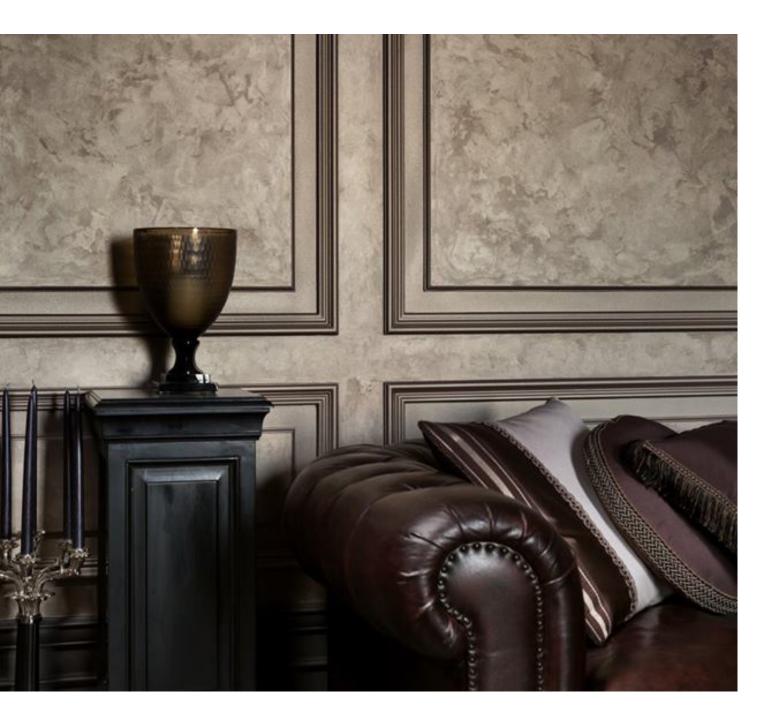


TECHNICAL DOCUMENT

# ARCHITECTURAL COATINGS - PERLATA





TECHNICAL DOCUMENT

# CONTENTS

| 1. | PRC                    | DOUCT DESCRIPTION                       | 3 |
|----|------------------------|---|---|
| 2. | TES                    | Τ ΟΑΤΑ                                  | 3 |
|    | 2.1.                   | FIRE TESTING                            | 3 |
|    | 2.2.                   | VOLATILE ORGANIC COMPOUND (VOC) TESTING | 4 |
|    | 2.3.                   | MOULD/MILDEW RESISTANCE                 | 5 |
|    | 2.4.                   | ENVIRONMENTAL PRODUCT DECLARATION (EPD) | 6 |
|    | 2.5.                   | HEALTH PRODUCT DECLARATION (HPD)        | 6 |
|    | 2.6.                   | LIVING BUILDING CHALLENGE (LBC)         | 6 |
| 3. | SUI.                   | TABLE SUBSTRATES                        | 6 |
|    | 3.1.                   | PLASTERED SURFACES                      | 6 |
|    | 3.2.                   | NEW CONCRETE, BRICKWORK AND BLOCKWORK   | 7 |
|    | 3.3.                   | DRY-LINED SURFACE                       | 7 |
|    | 3.4.                   | WOOD AND COMPOSITE WOOD BOARD SURFACE   | 7 |
|    | 3.5.                   | EXISTING WALLS                          | 7 |
|    | 3.6.                   | TIMING OF WORK                          | 7 |
| 4. | . CARE AND MAINTENANCE |   |   |
|    | 4.1.                   | CLEANING SURFACE DIRT AND GRIME         | 8 |
|    | 4.2.                   | REPAIRS                                 | 8 |
| 5. | WAI                    | RRANTY                                  | 8 |



**TECHNICAL DOCUMENT** 

# ARCHITECTURAL COATINGS -PERLATA

# **1. PRODUCT DESCRIPTION**

Armourcoat Perlata is a water based decorative wall coating specially formulated with pearlescent pigments to create an elegant finish with a subtle surface shimmer. Armourcoat Perlata is available in a wide range of colours which are suitable for both modern and classical interiors.

Armourcoat Perlata is created using Armourcoat Basecolor paint and two or three coats of Perlata decorative paint.

#### Properties

- Available in three bases of White pearl silver, gold and Bronze
- Can be tinted to a wide range of colours using a silver, gold or bronze base
- The Perlata system includes a preparative basecoat, Armourcoat Basecolor and an optional protective topcoat, Clearseal Gloss
- Can be used in bathrooms and swimming pool areas
- Perlata is formulated to prevent mould, mildew and bacterial growth
- No Measurable VOC content
- No Off gassing
- Environmental Product Declaration (pending)
- Health Product Declaration
- LBC Red List Compliant

# 2. TEST DATA

Armourcoat Perlata has been subjected to a wide range of Fire, VOC, durability, and other performance testing.

#### 2.1. FIRE TESTING

#### 2.1.1. UK Fire Test Results

Independent tests were carried out in the UK for classification of reaction to fire performance in accordance with BS 476 Part 6 & 7.

# FIRE CLASSIFICATION

Class 0



#### 2.1.2. American Fire Test Results

Test carried out in accordance with ASTM E84 - 14, Standard Test Method for Surface Burning Characteristics of Building Materials.

| TEST TYPE                   | RESULT |
|-----------------------------|--------|
| Flame Spread Index          | 5      |
| Smoke Development Index     | 0      |
| Flame Spread Classification | A      |

# 2.2. VOLATILE ORGANIC COMPOUND (VOC) TESTING

#### 2.2.1. VOC Content testing

A sample of Armourcoat Perlata was tested by an accredited European laboratory (Eurofins) to ISO 11890-2, Standard Practise for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.

#### **Test Result**

| TEST METHOD | VOC (G/L) | VOC (LBS/GAL) | LIMIT OF<br>DETECTION (G/L) |
|-------------|-----------|---------------|-----------------------------|
| ISO 11890-2 | <1        | <1            | 1                           |

#### **Evaluation of result**

| TEST METHOD | CONCLUSION | VERSION OR PROTOCOL  |
|-------------|------------|----------------------|
| Decopaint   | Pass       | Directive 2004/42/CE |

#### 2.2.2. VOC Emissions Testing

A sample of Armourcoat Perlata was tested by Eurofins to a wide range of emissions standards including EN 16516, ISO 16000-6, French and Italian VOC regulations.



#### **Evaluation of results**

| REGULATION<br>OR PROTOCOL | CONCLUSION         | VERSION OF REGULATION<br>OR PROTOCOL   |
|---------------------------|--------------------|--|
| French VOC Regulation     | A+                 | Decree of March 2011 (DEVL1101903D) and Arrêté<br>of April 2011 (DEVL1104875A) modified in February<br>2012 (DEVL1133129A) |
| French CMR Components     | Pass               | Regulation of April and May 2009 (DEVP0908633A<br>and DEVP0910046A)  |
| Italian CAM Edilizia      | Pass               | DM 23 giugno 2022 n. 256, GURI n. 183 del 6 agosto<br>2022   |
| ABG/AgBB                  | Pass               | Ausschuss zur gesundheitlichen Bewertung von<br>Bauprodukten (June 2021)   |
| Belgian Regulation        | Pass               | Royal decree of May 2014 (C-2014/24239)  |
| Indoor Air Comfort®       | Pass               | Indoor Air Comfort 8.0 of June 2022  |
| Indoor Air Comfort Gold®  | Pass               | Indoor Air Comfort GOLD 8.0 of June 2022   |
| BREEAM International      | Exemplary<br>Level | BREEAM International New Construction v2.0 (2016)  |
| LEED v4.1 BETA            | Pass               | February 2021  |

#### 2.2.3. Environments Building Certification

LEED ASTM D2369- 2020 V 4.1 certified as a 'Low emitting Materials'

BREEAM International – Exemplary status for VOC Emissions

Full Certificates supplied on Request.

#### 2.3. MOULD/MILDEW RESISTANCE

ASTM D 3273 Standard Test Method for Resistance to Growth of Mould on the Surface of Interior Coatings in an Environmental Chamber.

ASTM D 3274 Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation.

| PLASTER               | FINISH | POST<br>TREATMENT | FRONT PANEL | BACK PANEL |
|-----------------------|--------|-------------------|-------------|------------|
| Armourcoat<br>Perlata | PLS    | -                 | 10/10/10    | 10/10/10   |

\*Rating system: 1 is very poor. 10 is no growth.

Testing was carried out by an accredited American testing laboratory.



#### 2.4. ENVIRONMENTAL PRODUCT DECLARATION (EPD)

A full LCA has been conducted on the Perlata system and is currently in the process of being independently verified.

#### 2.5. HEALTH PRODUCT DECLARATION (HPD)

Armourcoat Perleta does not contain any REACH materials that are listed as materials of very High Concern.

A full Health product declaration has been carried out for this product and is available here: <u>https://hpdrepository.hpd-collaborative.org/Pages/Results.aspx#k=armourcoat</u>

### 2.6. LIVING BUILDING CHALLENGE (LBC)

Living Building Challenge (LBC) Red List Approved is a status indicating that a product is in compliance with the requirements of the LBC Challenge. Armourcoat Perlata has met this challenge and contains no materials that appear on the LBC Red List - March 2022.

### **3. SUITABLE SUBSTRATES**

#### Preparation and Application should be carried out generally in accordance with BS 6150: 2006.

Most common substrates are suitable for Armourcoat Perlata products. Application generally has the same substrate requirements as water-based paints.

Ensure all substrates to be coated are thoroughly clean and dry.

Ensure that both internal and external corners are clean cut and true. External angles must not be formed using paper tape beads. Walls must have an even surface with any board joints flush. The products are only thin coatings therefore poorly constructed and prepared substrates will negatively affect the final appearance. Silicone and mastic products are not appropriate for coverage with Armourcoat Perlata products.

#### 3.1. PLASTERED SURFACES

Plastered surfaces must be completely dry and installed as per manufacturers guidelines. When plastering, good site practice should be followed as set out in **BS5492: 1990 Code of Practise for Internal Plastering.** Once the plaster is completely dry, prime the surface with a good quality plaster sealer/consolidator such as Dulux Plaster Sealer. This will promote adhesion of all subsequent layers and ensure a clean masking tape removal should there be a need to tape directly to the Armourcoat Perlata surface.



### 3.2. NEW CONCRETE, BRICKWORK AND BLOCKWORK

New concrete, brickwork and blockwork backgrounds must be plastered with a gypsum plaster to straighten the walls horizontally and vertically to achieve a true, flat surface and skimmed with a finish plaster. Prime the surface as discussed in 3.1 and allow to dry fully.

#### 3.3. DRY-LINED SURFACE

Dry-lined surfaces should be finished as ready for painting; taped, jointed and primed with a suitable mist coat of the relevant Armourcoat Basecolor. Corner, shadow, feature and movement profiles should be fixed and jointed-in as normal.

#### 3.4. WOOD AND COMPOSITE WOOD BOARD SURFACE

Prior to the application of any Armourcoat Perlata products, ensure that all materials are totally dry and then apply a suitable wood primer. Follow the primer manufacturers guidelines on drying times before overcoating.

#### 3.5. EXISTING WALLS

Existing walls must have any defective areas cut out back to a sound substrate. These areas must then be filled with plaster to create a flush surface. Ensure that existing wallpaper or paint is sound by attaching a piece of masking tape to the surface and pulling it off rapidly. If the paint or paper are removed by the tape, or if the paper is lifting anywhere, it will need to be stripped back to a sound surface. Gloss paint or any shiny surface will need to be roughened up by sanding the surface with 40 grit abrasive paper. If the wall is dusty and not covered with absorbent wallpaper, prime the whole wall with diluted R13 resin and allow to dry fully or use an alkali stabilising solution if appropriate. If there has been staining of an old wall, the wall will need to be treated with a suitable stain blocking primer.

#### 3.6. TIMING OF WORK

As decorative finishing is the final stage of any project, the application should be programmed as late as possible in the contract, ideally after installation of lighting. Heavily trafficked areas should be protected until completion of construction work. All products demonstrate reasonable/good strength, but this builds up gradually over a period of 2 weeks depending on conditions as it dries. The product will be touch dry but not hard on the same day of application.



# 4. CARE AND MAINTENANCE

#### 4.1. CLEANING SURFACE DIRT AND GRIME

Mix a small quantity of liquid detergent or soap into a bucket of clean water. Work from top to bottom of dirty area using a well-soaked soft cloth, sponge, very soft bristle brush or low-pressure garden mist sprayer. Do not use scouring pads, industrial strength cleaners or solvents since these may damage the film.

Do not allow cleaning solution to dry on the wall. Where possible blot the wall dry with an absorbent towel or sponge. Armourcoat Perlata decorative coatings will be unaffected by mild detergents but may soften slightly with prolonged cleaning. It is recommended that a small area is test cleaned to check for a satisfactory result.

#### 4.2. REPAIRS

Armourcoat Perlata decorative coatings are tough and durable coatings but can be damaged. In the event of damage please contact the installer for technical assistance, instructions and patching material.

Light damage may be repaired. Heavy damage may require the wall to be re-coated to avoid seams. To refurbish an area coated with Armourcoat Perlata products, either simply re-coat or paint over to achieve a consistent finish again. Some products within the range may require a light sand prior to overcoating.

#### 5. WARRANTY

1-year materials warranty for interior use.