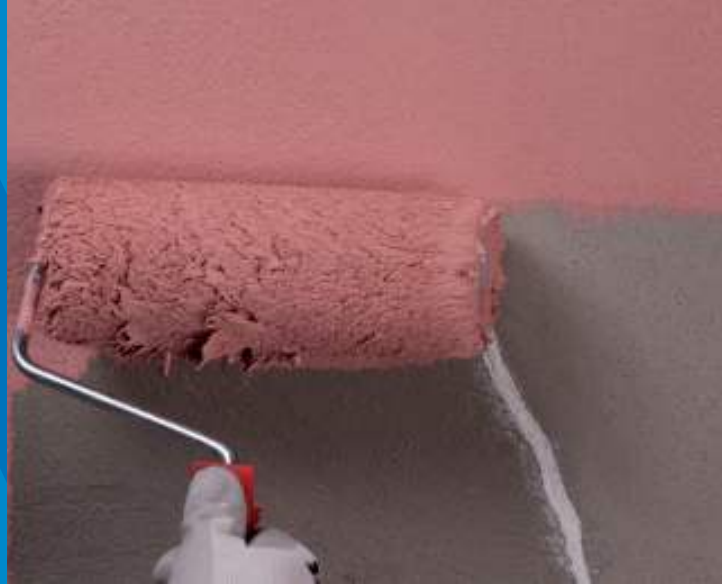
MAPEFLEX AC-P

Paintable acrylic sealant with a render-effect finish for movements up to 12.5%





WHERE TO USE

Mapeflex AC-P is used to seal internal and external expansion and construction joints subjected to a medium amount of movement and surface cracks in all types of absorbent building materials.
The "render effect" finish of **Mapeflex AC-P**, which is obtained by adding special white aggregates in a particular particle size, helps sealed joints blend in with substrates with a rough or coarse textured finish such as render, concrete and exposed brickwork.

Some application examples

- Seals between prefabricated concrete panels with movements up to 12.5% of the width of the joint.
- Seals between prefabricated concrete, wooden and plasterboard walls.
- Seals between concrete members, render, brick walls, cellular concrete, wood, natural stone, etc.
- Air and water-tight seals between wooden window frames and walls.
- Leak-proof elastic gaskets between doors, roller-blind housings and walls, adjacent walls, ceilings, wooden panels and insulating panels.
- Fillet seals between construction features (ledges, windows, window sills, stringcourses. etc.) in external thermal "cladding" systems.
- Sealing accidental surface cracks in internal and external vertical walls.

TECHNICAL CHARACTERISTICS

Mapeflex AC-P is a one-component sealant made from acrylic resins in water dispersion. It comes in the form of a thixotropic paste which is easy to apply in joints on both horizontal and vertical surfaces. After smoothing **Mapeflex AC-P** sealant, its surface has a "render effect" finish that helps it blend in with substrates with a rough or coarse textured finish.
Seals made using **Mapeflex AC-P** remain stable even after years of exposure to all types of weather conditions, industrial surroundings and temperature variations. They remain flexible at temperatures as low as -30°C and are resistant to temperatures up to +80°C (up to +100°C for short periods).
It has good resistance to accidental contact with diluted acids and alkalis.
However, because of the wide range of products and service conditions that may be encountered, carry out preliminary tests beforehand.
It also offers good resistance to water as long as it is not constantly immersed.
Mapeflex AC-P complies with EN 15651-1 norm ("*Sealants for façade elements*") with performance rating F-EXT-INT.

Before painting over **Mapeflex AC-P** with elastomeric paints, the sealant must be fully polymerised. We recommend carrying out preliminary tests to make sure the sealant and paint are compatible.

Adhesion

Mapeflex AC-P adheres well to all porous, absorbent surfaces such as concrete, wood, gypsum, render, brickwork, cellular cement, natural stone, etc.
It also adheres well if the surface is damp, but not wet, or if there is a film of non-stagnant water.
If joints sealed with **Mapeflex AC-P** are to be subjected to particularly severe service conditions, we recommend priming the walls of the joint (with **Mapeflex AC-P** diluted with water) just before applying the sealant.

RECOMMENDATIONS

- Do not use **Mapeflex AC-P** in joints with movements of more than 12.5% of their width. In such cases use **Mapeflex PU40** (paintable, low modulus elastic polyurethane sealant), **Mapesil LM** (low modulus, elastic, neutral silicone sealant with no plasticisers) or **Mapeflex PU 45 FT** (high modulus polyurethane adhesive and sealant).
- Do not apply **Mapeflex AC-P** for seals constantly immersed in water; use **Mapesil AC**.
- Do not apply **Mapeflex AC-P** on metallic or non-absorbent materials; use **Mapesil BM** (low modulus, elastic, neutral silicone sealant) or **Mapeflex PU 45 FT** (high modulus polyurethane adhesive and sealant).
- Do not use **Mapeflex AC-P** in joints subjected to foot traffic; use **Mapeflex PU 45 FT** (high modulus polyurethane adhesive and sealant), **Mapeflex PU50 SL** (low modulus, hi-flow polyurethane sealant) or **Mapeflex E-PU 21 SL** (high modulus, hi-flow epoxy-polyurethane sealant).
- Do not apply the product if there is rising damp or if it is about to rain.
- Do not apply the product if the temperature is lower than +5°C or if there is a risk of freezing weather. Protect from rain until fully polymerised (all water has evaporated).

APPLICATION PROCEDURE

Preparation and correct dimensioning of the joint

All the surfaces to be sealed must be sound and have no traces of dust, loose portions, oil, grease or old paint.
In order to function correctly, the sealant must be able to expand and contract freely once it has been applied in the joint. It is important, therefore, that:
it only adheres to the walls of the joint and not to the bottom;
the width of the joint is calculated correctly so that the product does not expand or contract more than 12.5% of the initial width of the joint at +23°C;
the section to be sealed must respect the width/depth ratios indicated in the table:

RATIO WIDTH/DEPTH OF SEALANT	
width of joint	depth of sealant
up to 10 mm	same as width
from 10 to 20 mm	10 mm in all cases
more than 20 mm	half the width

To set the depth of the **Mapeflex AC-P** sealant and prevent it adhering to the bottom of the joint, place **Mapefoam** closed-cell, foam polyethylene filler cord along the bottom of the joint.

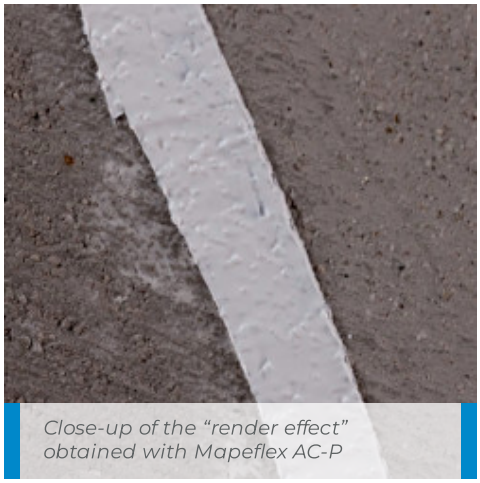
Application

Mapeflex AC-P is supplied in 310 ml cartridges.
To apply the sealant, cut off the tip of the threaded part of the cartridge and screw on the nozzle. Trim the tip of the nozzle at 45° according to the width of the joint, insert the cartridge into a suitable sealant gun and

extrude the sealant into the joint.
After applying **Mapeflex AC-P**, finish the surface with a suitable tool dipped in water before a skin forms on the surface.



Smoothing the surface with a trowel



Close-up of the "render effect" obtained with Mapeflex AC-P

CLEANING

Remove traces of **Mapeflex AC-P** from tools and surfaces with water. Once the product has completely set it may only be removed using mechanical means.

SETTING

Mapeflex AC-P becomes elastic when the water has evaporated. The amount of time required depends on the surrounding temperature and level of humidity. A 3-5 mm bead sets after 24 hours at +23°C and 50% R.H. Higher temperatures accelerate the setting process while thicker beads take longer to set.
Mapeflex AC-P must be protected against leaching for at least the first 24 hours after application.

PACKAGING

Mapesil AC-P is supplied in boxes of twelve 310 ml cartridges and is available in white.

STORAGE

The product remains stable for 24 months if stored in a dry, cool area, at a temperature between +5°C/+25°C. Protect **Mapeflex AC-P** from freezing conditions.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapeflex AC-P is not considered hazardous according to current norms and guidelines regarding the classification of mixtures. It is recommended to use protective gloves and goggles and to take the usual precautions for handling chemicals.
For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet.
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Classification according to EN 15651-1:	F-EXT-INT, class 12,5 P
Consistency:	paste

Colour:	white
Density (g/cm³):	1.66
Dry solids content (%):	80
APPLICATION DATA (at +23°C - 50% R.H.)	
Application temperature:	+5°C to +40°C
Time to form surface skin:	10-15 mins.
Setting rate:	3-5 mm/day
FINAL PERFORMANCE	
Shrinkage after setting (%):	approx. 20
Shore A hardness (DIN 53505):	15
Elongation at failure (DIN 53504 - S3a) (%):	300
Elongation in service (%):	12.5
Modulus of elasticity at 100% elongation (ISO 8339/A) (N/mm²):	0.20
Modulus of elasticity at 50% elongation:	0.11
ISO 11600:	F 12.5 P

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.
Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

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