

SUSTAINABLE

systems



SUSTAINABILITY

Mapei approach

Mapei has an eye on the future when creating products and offers innovative solutions for designing and constructing in an eco-sustainable way. This is a commitment that requires a sense of responsibility and the ability to make concrete choices in order to supply designers, contractors, workers and clients with solutions that are safe, reliable and long-lasting and that have the lowest impact possible on the environment.

Founded more than eighty years ago in Milan, Italy, Mapei has since been proposing solutions of excellence for chemical products for the building sector all around the world. Its products are used in both the construction of large-scale infrastructures and iconic works of architecture, as well as in the residential sector. A target achieved without ever forgetting that it is only a constant, open and transparent dialogue with our

contacts and clients that enables us to truly understand the real needs of the market and to provide innovative and sustainable responses.

Mapei pursues a concept of sustainability that encompasses a host of aspects in terms of living comfort and wellbeing. It firmly believes that the profits of a company should go hand in hand with ethics, respect for people and the creation of value for the territory.

It has always applied these principles to its strategy. And with this document, once again, the company wishes to underline this approach because, at times, simply doing something is not enough; you also need to share values and expectations. There are three cornerstones to sustainability according to Mapei: the planet, projects and people.



sustainable SOLUTIONS

The Mapei Sustainable Systems are made with the most durable products that have VOC content and VOC emissions certification, EPDs as well other Mapei sustainable

technologies. These initiatives can contribute to sustainable project certification such as Green Star by GBCA, Living Building Challenge (LBC), LEED by USGBC and BREEAM.



SUSTAINABLE

SYSTEM FOR THE INSTALLATION OF TILES OVER CONCRETE



concrete substrate

1



adhesive
Keraquick Maxi S1,
Keraflex Maxi S1, or Ultralite S1 Flex

2



grout
Ultracolor Plus

3



sealant
Mapesil AC or Mapesil LM

4

SUSTAINABLE

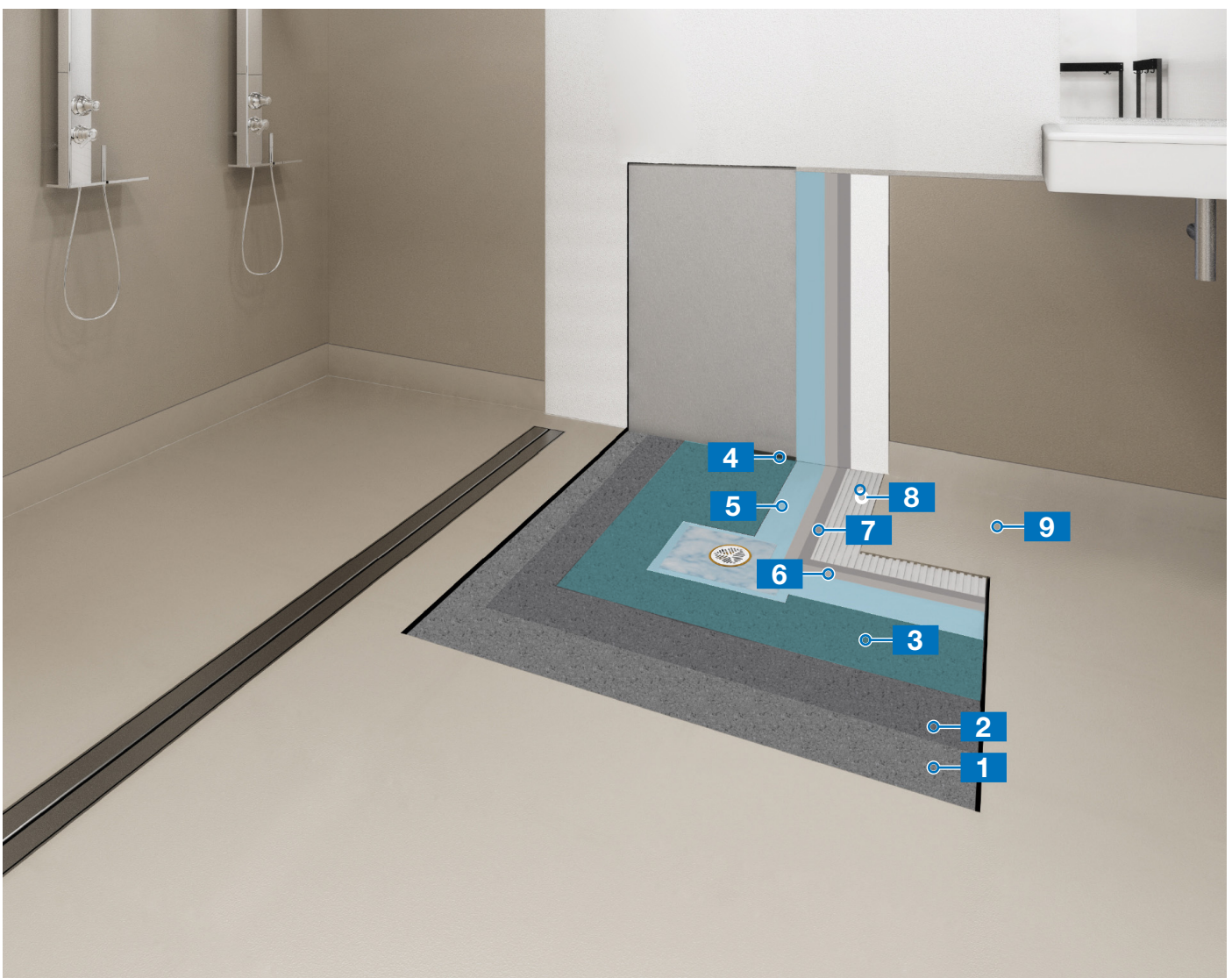
SYSTEM FOR THE INSTALLATION OF TILES IN WET AREAS



- | | | | | | | |
|--|---|---|---|--|--|---|
| 
concrete
substrate | 
screed
Topcem Pronto | 
adhesive sealant
Mapeflex PU 45 FT | 
waterproofing
membrane
Mapelastac
AquaDefense | 
adhesive
Keraquick Maxi S1,
Keraflex Maxi S1, or
Ultralite S1 Flex | 
grout
Ultracolor Plus | 
sealant
Mapesil AC or
Mapesil LM |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

SUSTAINABLE

SYSTEM FOR THE INSTALLATION OF VINYL SHEET IN INTERNAL WET AREAS



- | | | | | | | | | | | |
|---|---|---|---|---|--|---|---|---|---|-------------|
|  |  |  |  |  |  |  |  |  |  | |
| concrete substrate | bonded screed
Topcem Pronto | moisture vapour barrier
Mapeproof Primer | joint sealant
Mapeflex PU 45 FT | waterproofing membrane
Mapegum WPS | or
waterproofing membrane
Mapelastic AquaDefense | primer
Eco Prim T Plus | skim coating compound
Planiprep SC | adhesive
Adesilex G19
for floors | or
adhesive
Ultrabond Eco V4 Evolution
for walls | vinyl sheet |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | |

SUSTAINABLE

SYSTEM FOR THE INSTALLATION OF VINYL FLOOR COVERINGS OVER CONCRETE



properly prepared
concrete substrate

1



moisture vapour barrier
Mapeproof Primer

2



levelling compound
**Ultraplan, Ultraplan Eco or
Ultraplan Maxi**

3



adhesive
**Ultrabond Eco 380, Ultrabond Eco V4
Evolution or Ultrabond Eco VS90 Plus**

4

vinyl
floorcovering

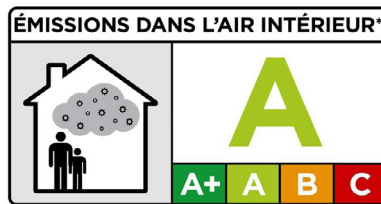
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Volatile Organic Compound (VOC) Testing

VOCs are chemicals that are emitted as gases from products such as adhesives, sealants and other chemical products for buildings. Mapei has developed solvent-free products with low content and emission of VOCs with the ability to guarantee good air quality inside the buildings where they are used, for the well-being of both those who use and apply the products and those who use the buildings.

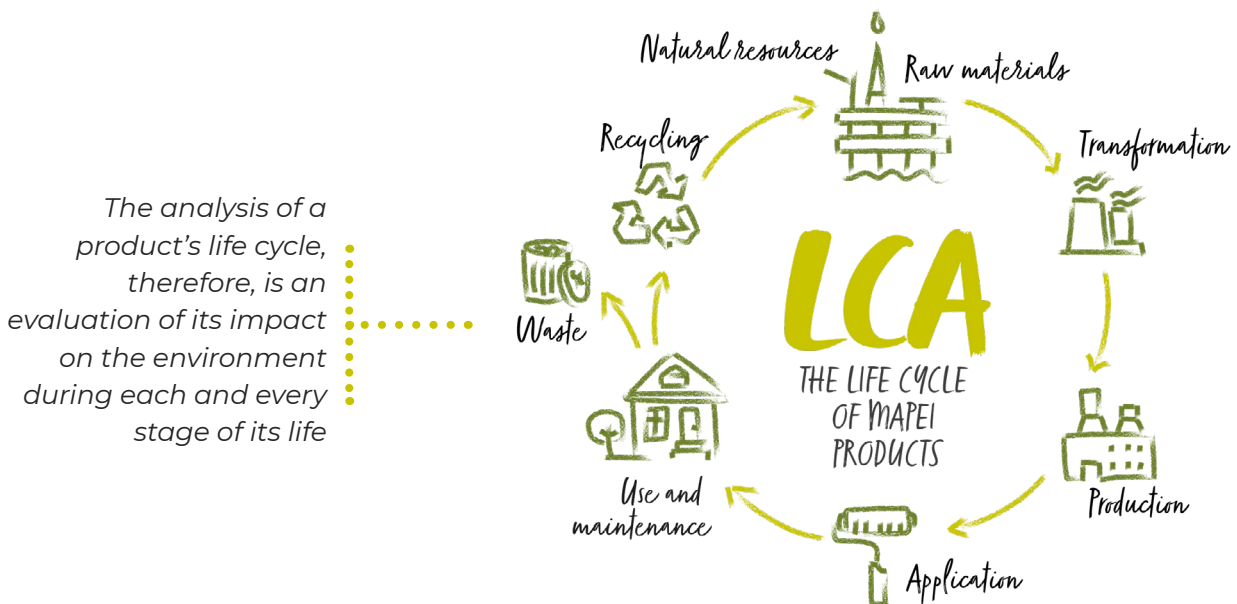
The products used in **Mapei's Sustainable Solutions** contribute towards several credits in a number of Green Star rating tools, thanks to their very low content and emission of VOC. The VOC content of the Mapei products can be found in their **Safety Data Sheet (SDS)**. Mapei products can be tested under different VOC emission test protocols and may have one or more VOC emission test certificates.





Environmental Product Declaration (EPD)

Mapei calculates the impacts its products have on the environment using the standardised **LCA (Life Cycle Assessment)** method, resulting in the issuing of an **Environmental Product Declaration (EPD)**.



EPDs are used to document the **effects a product has on the environment** throughout its entire life cycle and **Mapei** is in possession of this type of certification for many of its solutions. The impacts on the environment taken into consideration are numerous: from global warming to the depletion of our planet's natural resources to the influence they have on the ecosystem. For **Mapei** it is important to minimise any negative effects

its products have on the environment in order to make them more and more sustainable: and to achieve this scientifically it always measures their impact according to international standards. In the construction sector, EPDs are a fundamental element and help clients choose products with a low impact on the environment in order to meet the requirements of organisations and certification protocols for sustainable building.





Products with ZERO impact on climate change

Mapei promotes the **total offsetting of CO₂ emissions** during the life cycle of products by purchasing certified environmental credits to promote the implementation of **renewable energy** projects.

In Australia from 2022, Mapei Ultracolor Plus will be the **first ceramic grout** to become **completely carbon neutral**.

The Mapei Group's commitment to **combat climate change** has led the company to seek solutions with the lowest greenhouse gas emissions, such as Mapei's R&D departments constantly refining product formulas. Understanding that the journey to a sustainable future does not end here, Mapei has already taken steps towards **'zero' impact on climate change** by promoting the

total offsetting of CO₂ emissions during the life cycle of products by purchasing **certified environmental credits** to support the implementation of renewable energy projects.

The total CO₂ emissions generated (Measured in accordance with EN 15804) by the global production of **Mapei Ultracolor Plus** is being **completely offset**. Mapei customers can now confidently use Ultracolor Plus without concerns about its impact towards climate change.

This initiative is yet another showcase of Mapei's **commitment** to producing products with the lowest environmental impact and the group's **contribution to the UN Sustainable Development Goals (SDG)**.





Other Mapei Sustainable Solutions

To meet the new needs of the ceramic sector, Mapei has studied the **Ultralite range, deformable** adhesives, characteristics that make them the ideal choice for laying large format tiles. The special formulation created by the Mapei Research and Development Laboratories, with the addition of **glass microspheres** or **inert materials** of natural origin, gives the mix greater volume and a

unique consistency. In addition to making them lighter and easier to trowel, this allows you to lay up to **80% larger surfaces** with the same quantity of products compared to traditional adhesives of the same class. **Ultralite adhesives** are formulated with the well-being of users and the environment in mind.



The quality of grouts is essential for the cleanability and maintenance of surfaces. Mapei grouts with **DropEffect® technology** absorb less dirt and are **easy to clean** and their **colour remains stable** over the years. In fact, thanks to this special technology, they are less absorbent to liquids and are **water-repellent**. Liquids deposited on the surface are not absorbed but remain on the surface in the form of droplets, so joints are much easier to clean before stains are formed.

The proliferation of bacteria on the surface of grouts, especially in damp environments

such as bathrooms and saunas, may lead to the formation of moulds and fungi. In addition to causing an unsightly finish, these can be harmful for the health of final users. This is why the Mapei Research and Development has developed **BioBlock® technology**: molecules of special organic material distributed throughout the microstructures of the grout that **impede** the formation and proliferation of the microorganisms that cause **mould**. And in so doing, tiled surfaces are healthier and more hygienic and maintain their appearance and finish over the years.





Product Sustainability Solution Chart

PRODUCT	VOC CONTENT (G/L)	VOC EMISSIONS	EPD THE INTERNATIONAL EPD SYSTEM				
PRIMERS / MOISTURE VAPOUR BARRIERS							
Primer MF	29.9	CDPH	✓				
Mapeproof Primer	0	GEV EC1 Plus	✓				
Eco Prim Grip	0	GEV EC1 Plus	✓				
Primer G	0	GEV EC1 Plus	✓				
Eco Prim T Plus	19.6	GEV EC1 Plus	✓				
SCREEDS							
Topcem Pronto	0	GEV EC1 Plus	✓				
SELF-LEVELLING COMPOUNDS							
Ultraplan	0	GEV EC1 Plus	✓				
Ultraplan Eco	0	GEV EC1 Plus	✓				
Ultraplan Maxi	0	GEV EC1 Plus	✓				
SMOOTHING COMPOUNDS							
Planiprep SC	0	CDPH	✓				
WATERPROOFING MEMBRANES							
Mapegum WPS	5.1	GEV EC1 Plus	✓				
Mapelastac AquaDefense	54	CDPH	✓				
ADHESIVES							
Keraflex Maxi S1	5.4	GEV EC1 Plus	✓				
Keraquick Maxi S1	0	EC1 Plus	✓				
Ultrabond Eco 380	17	CDPH	✓				
Ultrabond Eco V4 Evolution	0	EC1 Plus	✓				
Ultrabond Eco VS90 Plus	0	EC1 Plus	✓				
Ultralite S1 Flex	3	EC1 Plus	✓*			✓	
SILICONE							
Mapesil AC	25.8	EC1 Plus	✓	✓			
Mapesil LM	50.6	EC1 Plus	✓	✓			
GROUT							
Ultracolor Plus	0	EC1 Plus	✓	✓	✓		✓

*EPD focused on European production. Values on this EPD can be used as an estimation for Australian Production.



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