



KEIM ROOM CLIMATE SYSTEMS.

HEALTHY . INTERIOR . LIVING .



FOR YOU IT IS A COSY FEELING ...



... BUT FOR THE CRAFTSMAN IT IS JUST BUILDING PHYSICS!

A person who intends to build or renovate according to an up-to-date concept does not only expect functional living spaces in accordance with the actual structural engineering standards but also a cosy home for the entire family.

The right basis for a wall would be a render plus coating with good moisture-regulating features. There will be no problem with damp walls if the temperature of the inside of an outer wall remains within a favourable range. You don't have to be afraid of mould even when the windows are light and the ventilation habits very individual. Enjoy the comfort in a healthy ambiance.

Your painter knows how to preserve a healthy living climate without moist walls and thus no mould. Have him consult you in detail.

What would be important?

- Higher inside surface temperature of an outer wall
- Breathable inside wall surfaces
- Attractive appearance and colour design

START WITH THE SURFACE!

Proper materials are crucial for a comfortable atmosphere at home without moist walls and mould risk. KEIM has the right solution for any need and wall. Base is always KEIM Mycal-Por, a mineral specialty render providing dry walls. It regulates the room moisture as required and with the appropriate render thickness and compensates fluctuations. Condensation moisture on the wall will be absorbed and distributed so that there is no living condition for mould cultures. First of all, mould is a problem of the surface.

Also the regulation of the room moisture is performed via the wall surface. Panel systems cannot develop their potential without the suitable render and coating. Water absorption and release would be restricted – and the promised moisture regulation, breathability and capillary activity could not be kept.

With the proper render, namely KEIM Mycal-Por starts any good investment into your new feeling-good living. Most diverse design options will convince you on top.



YOU



YOUR PAINTER KNOWS WHAT YOU NEED!

There are many reasons to refinish interior spaces and to improve the wall structure. Often times mould is the reason, sometimes an uncomfortable Feeling or the wish to save heating costs. Just as varied are the measures you could take. But the goal is always the same: A noticeable improvement of the climate inside. A healthy living climate is also the best mould protection.

EFFECTIVE PROPHYLAXIS, SUSTAINABLE RENOVATION – WALLS THAT MAKE YOU FEEL GOOD

**PROVEN SYSTEMATIC SOLUTIONS:
HYDROACTIVE – MINERAL – BIOCIDES-FREE**

EASY MOULD REMEDIATION

- Coating with KEIM Mycal-Top
- The render is replaced by KEIM Mycal-Por + coating with KEIM Mycal-Top

PERMANENT MOULD PROTECTION

- Render KEIM Mycal-Por + coating with KEIM Mycal-Top
- Wall system with KEIM Mycal-Render carrier plates + KEIM Mycal-Por + coating with KEIM Mycal-Top

MORE COMFORT

(Thickness ≤ 6 cm)

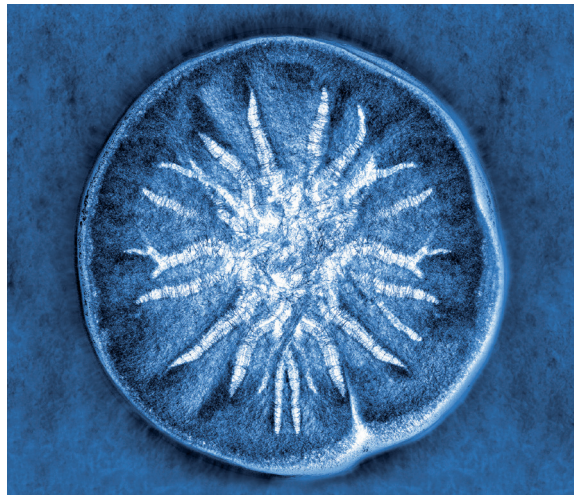
- Wall system with KEIM Mycal-Lava + KEIM Mycal-Por + suitable coating like Mycal-Por

IMPROVED THERMAL PROTECTION

(Thickness ≥ 8 cm)

- Interior insulation system with iPor-Insulation panels + KEIM Mycal-Por + suitable coating like KEIM Biosil, KEIM Innostar, KEIM Innopord oder KEIM Innotop

KEIM Room climate systems provide different products in various combinations offering individually coordinated design options.





ROOM CLIMATE WITH SYSTEM



LIGHT MOULD FORMATION

Over the years mould formation can happen. Often times the infested places are not bigger than the page of a newspaper (0.4 m²). A lot of times the reason cannot be found and the health risk is low. In such a case surfaces or building parts do not require to be replaced. A professional treatment is all what it needs. To begin with the surface has to be thoroughly cleaned with an appropriate mould remover, followed by a special coating that efficiently protects from mould.

SERIOUS MOULD INFESTATION

For any larger damage, however, it is indispensable to carefully research the cause and to plan further measures. Here should be the focus on health protection of persons performing the measures, even when only partial surfaces have to be treated. In any case it is important to clean surfaces affected by mould completely or to replace them. A treatment will not be successful if the mould is not totally eliminated.

IT'S THAT SIMPLE:

- The first step is to apply KEIM Mycal-Fix to the surfaces infested in order to bind the spores completely. The highest risk during the remediation would be the escaping spores from the treatment area.
- Afterwards, you clean the surfaces thoroughly with KEIM Mycal-Ex.
- If necessary or requested apply KEIM Mycal-Por with a render layer thickness of approx. 4 - 6 mm to the treated surfaces. In this way, surface condensation in critical places would be absorbed through the coating and distributed in the render where it dries and thus mould wouldn't find a breeding ground.
- Possibly loose partial areas or with mould infested have to be removed and repaired considering the common safety regulations.
- Finally paint the surface twice with KEIM Mycal-Top

WHY MYCAL-TOP?

Mycal-Top optimises the excellent Features of an interior silicate paint to be an efficient mould protector without any biocidal substances added.

- The interior walls remain absolutely dry thanks to the special permeability of the coating.
- A natural anti-mould property is KEIM Mycal-Top's high alkalinity.
- The inorganic structure does not provide any nutrient base for spores.
- A natural mineral in Mycal-Top enhances the mould protection and avoids infestation.
- Pollutants are additionally decomposed by photocatalytically active pigments.
- Officially recommended by Sentinel-Haus-Institut.



**SENTINEL HAUS
INSTITUT**

WHY MYCAL-POR?

Mycal-Por is the ideal render for any interior application to improve the climate inside.

- Mycal-Por is capillary-active and compensates moisture fluctuations in the room.
- Mycal-Por absorbs surplus moisture from the inside and releases it again quite fast.
- Also suitable for gluing and reinforcing.
- Mortar group CS 1
- Grain size: 0 - 0.6 mm

ROOM CLIMATE PANELS

The range of KEIM room climate panels offers four different insulation or climate panels.

Each with specific properties and coordinated for your individual renovation requirement:

- More comfort
- Protection from mould infestation
- No more thermal bridges
- Less energy and heating costs thanks to an interior insulation
- better indoor climate
- resource-conscious

You will always get an interior wall system that is very easy to install and that will excel by breathability and capillary-active, mineral and healthy-for-living features. Furthermore, KEIM room climate systems provide enhanced safety. They do not accumulate moisture and they don't release pollutants into the room air and plus, they are incombustible.



**In a nutshell:
The system is unbeatably
simple. Only one mortar,
one panel and one coating!**

A careful planning of your renovation considering every existing weak point makes sure that you will receive a convincing result and that a long-term comfort and healthy room atmosphere will move into your living space. We will be happy to assist you!

KEIM ROOM CLIMATE SYSTEMS MODULAR SYSTEM FOR HEALTHY LIVING

KEIM ROOM CLIMATE SYSTEMS					
Structure/system	Lime render and special coating	Calcium silicate climate panel 25 mm	Perlite climate panel 25 mm / 30 mm	Aerated concrete insulation panel ≥ 50 mm	Perlite insulation panel ≥ 50 mm
Coating	KEIM Mycal-Top	KEIM Mycal-Top	silicate interior paints like KEIM Mycal-Top, KEIM Biosil or KEIM Innopro		
Finish render	KEIM Mycal-Por	KEIM Mycal-Por			
Adhesive		KEIM Mycal-Por			
Panel		KEIM Mycal-CS	KEIM Mycal-Lava	KEIM iPor-Novo	KEIM Mycal-Lava
Adhesive		KEIM Mycal-Por			
FUNCTION					
Increase in surface temperature		•	••	••••	••••
Thermal protection		•	••	••••	••••
Decrease of condensation	••	•••	••••	•••	•••••
Mould protection	••	•••	••••	•••	•••••
Buffering and capillary moisture balance	••	•••	••••	••	•••••
Even, healthy room air humidity	••	•••	••••	••	•••••

SUBSTRATE PRECONDITION

Dry, no mould, no dust, if required pretreatment or priming. Prewet absorbing substrates.

> CUTTING

Depending on the thickness with a cutter or saw. The saw dust that occurs is harmless to health. But anyway: Avoid sawing in confined rooms and protect the respiratory tract.

> GLUING

By using the floating-buttering method for a cavity-free gluing as far as possible. Do not fill the panel joints with adhesive in between. Perform an air-tight design of all connection joints with an edge insulation strip or joint sealing tape. Use Mycal-Por. If required use reveal panels or insulation wedges.

> REINFORCING

If required sand uneven panel joints. Prime according to technical data sheet. Apply Mycal-Por onto the panels using a notched trowel. Embed glass fibre mesh with an overlap of 10 cm. Position the mesh in the upper third. For a subsequent facing with tiles it is recommended to fix the mesh with suitable screw anchors right through the mesh.

> DESIGN

Simply a smooth finish with Mycal-Por plus a coloured KEIM silicate paint coat. Any technique of render application or painting design is best suited to satisfy any desired finish. Light-weight loads can be easily fixed directly into the reinforced render layer. Loads up to 5 kg need to be anchored into the bearing masonry with appropriate anchors.



Size	416 mm x 625 mm
Panel thickness	25 mm / 30 mm
Rated value of thermal conductivity d = 25 mm d = 30 mm	0.055 W/mK 0.050 W/mK
μ-value	5 - 6
Water absorption value	1.76 kg / m ² √s
Building material class	A1 - incombustible



Size	625 mm x 1000 mm
Panel thickness	25 mm
Rated value of thermal conductivity	0.065 W/mK
μ-value	3
Water absorption value	0.95 kg / m ² s ⁻¹
Building material class	A1 - incombustible

KEIM Mycal-CS-Laibungsplatte (reveal panel)	
Size	500 mm x 250 mm
Panel thickness	15 mm
Rated value of thermal conductivity	0.065 W/mK

KEIM Mycal-CS-Dämmkeil (insulation wedge)	
Size	500 mm x 1250 mm
Panel thickness	8 / 30 mm
Rated value of thermal conductivity	0.065 W/mK



Size	416 mm x 625 mm
Panel thickness	50, 60, 80 mm
Rated value of thermal conductivity	0.045 W/mK
μ-value	5 - 6
Water absorption value	1.98 kg / m ² √s
Building material class	A1 - incombustible



Size	390 mm x 600 mm
Panel thickness	50 mm - 200 mm
Rated value of thermal conductivity d = 50 mm d = 60 - 200 mm	0.045 W/mK 0.042 W/mK
μ-value	2 - 3
Water absorption value	0.02 kg / m ² √s
Building material class	A1 - incombustible

KEIM Mycal-Laibungsplatte (reveal panel)	
Size	600 mm x 250 mm
Panel thickness	20, 30, 40 mm
Rated value of thermal conductivity	0.047 W/mK

KEIM iPor-Dämmkeil (insulation wedge)	
Size	500 mm x 390 mm
Panel thickness	20 / 60 mm
Rated value of thermal conductivity	0.042 W/mK



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