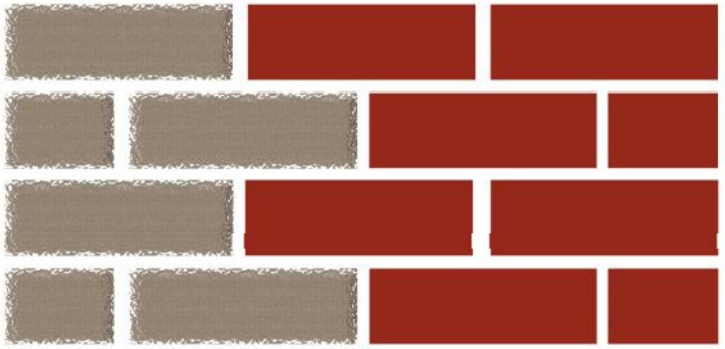
HUMIBLOCK



THE DEFINITIVE SOLUTION TO MOISTURE PROBLEMS IN WALLS

RISING DAMP: A FEW FACTS

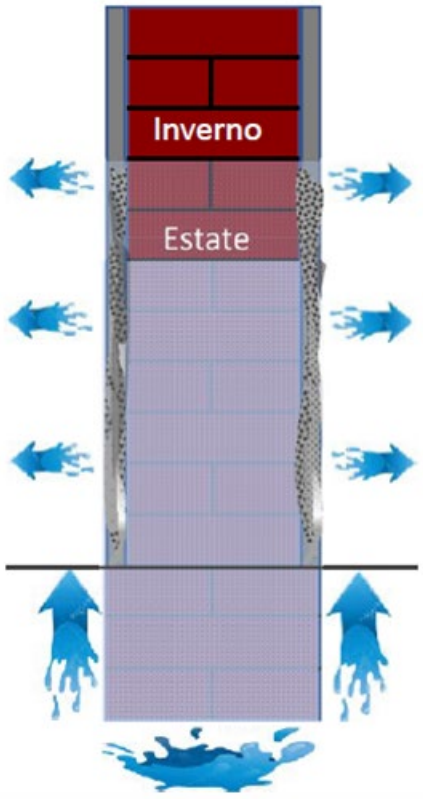
"Rising damp" refers to the upward movement of moisture in the form of water from the ground through permeable building materials such as bricks, concrete, and non-specific plasters. The moisture rises by capillary action because any type of masonry contains microscopic cavities that allow tiny water droplets to move upwards, displacing the air.

This naturally poses serious issues for building materials, property aesthetics, and human health.

Moisture dissolves soluble salts in construction materials, such as calcium sulfate, and can also carry soluble salts from its source. When moisture evaporates through a permeable surface, these salts deposit, forming layers on or within the evaporative surface. With large evaporative surfaces, the salt appears as harmless powder; if evaporation is localized or excessive, it results in concentrated salt deposits or efflorescence.

When evaporation occurs within materials, expanding crystals can cause cracking, chipping, and swelling. This decay typically affects porous bricks, masonry, and plaster.

WITHOUT HUMIBLOCK
UNCONTROLLED EVAPORATION



Marginal evaporation leads to a distinctive "wave mark" pattern typical of salt deposition.

When occurring at the base of a wall, this wave mark is considered a diagnostic feature of rising damp. These salt accumulations may remain even when the water penetration that originally caused them has long disappeared. Water ingress may have occurred due to causes other than rising damp. Rising damp is confirmed when masonry deterioration is continuously growing and expanding.

Front view of brick

Side view of brick

The most common source of moisture at the base of walls is caused by unsealed foundations and/or inadequate drainage.

This issue is prevalent in many buildings due to a combination of factors such as fluctuations in groundwater levels, defects in drainage systems from construction or caused by building settlement, and the increased use of concrete or finishes around buildings without proper slope consideration.

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Water buildup near foundations may also result from pipe leaks or temporary/chronic flooding.

Using Humiblock addresses and prevents damage caused by such conditions with significantly lower costs than alternative solutions, due to reduced processing times and minimal application thickness.

It also comes with a 10-year warranty.

Too often, the following rule is underestimated:

the moisture conditions of walls can be significantly increased by condensation.

This occurs when warm, moisture-laden air cools down to the dew point (the temperature at which moisture condenses into tiny droplets) upon contact with a cold surface.

Such cold surfaces are commonly found when the insulation value of the external wall is reduced due to water penetration, or when a "Thermal Insulation System" (commonly called "thermal coating") has not been properly installed, leading to "thermal bridges" that create spots in the masonry that are colder than their surroundings.

Moreover, intermittent heating use creates favorable conditions for additional condensation on these cold and damp surfaces, especially in ground floor rooms, basements, corners, and north-facing walls.

These phenomena can add to rising damp or external moisture infiltration, further worsening the problem..

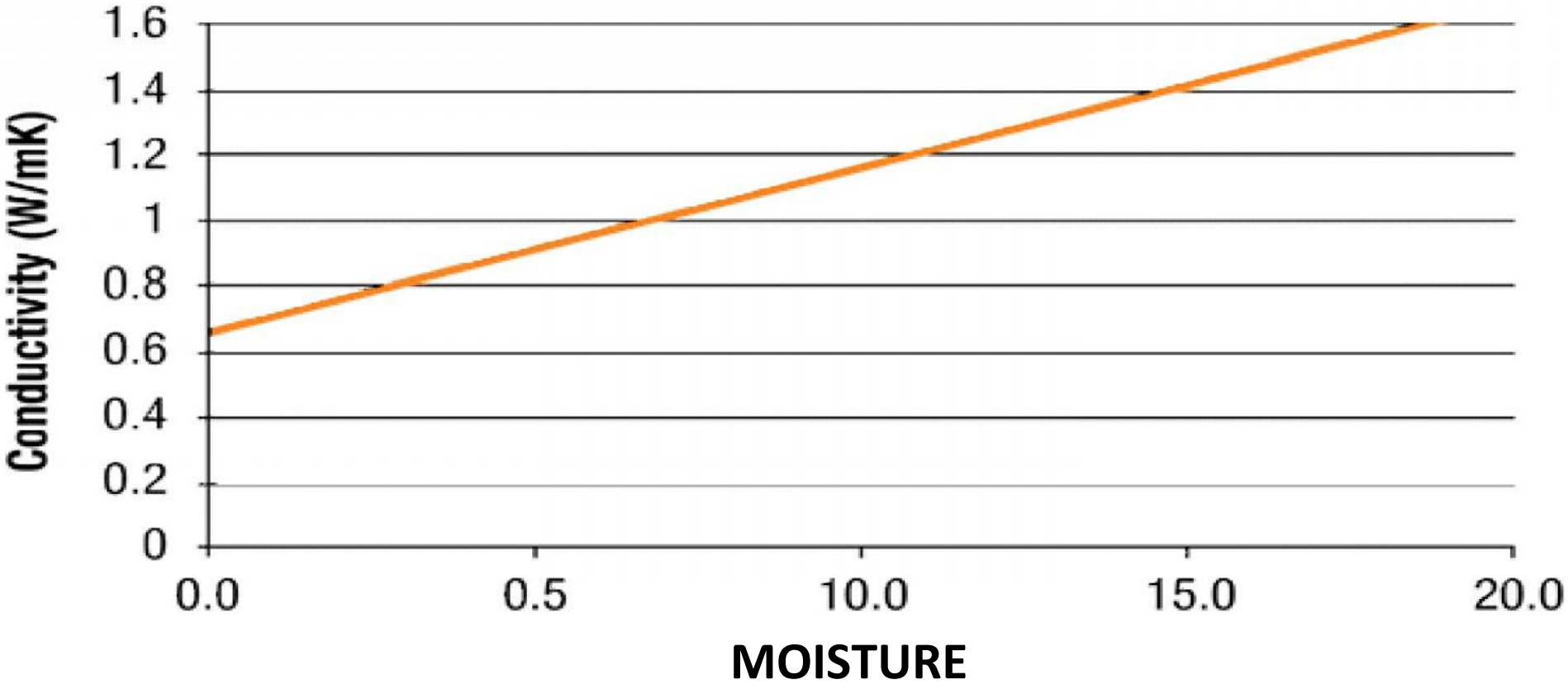
Even low concentrations of hygroscopic salts, seemingly minor and barely visible, can absorb moisture from the air, especially when relative humidity is high.

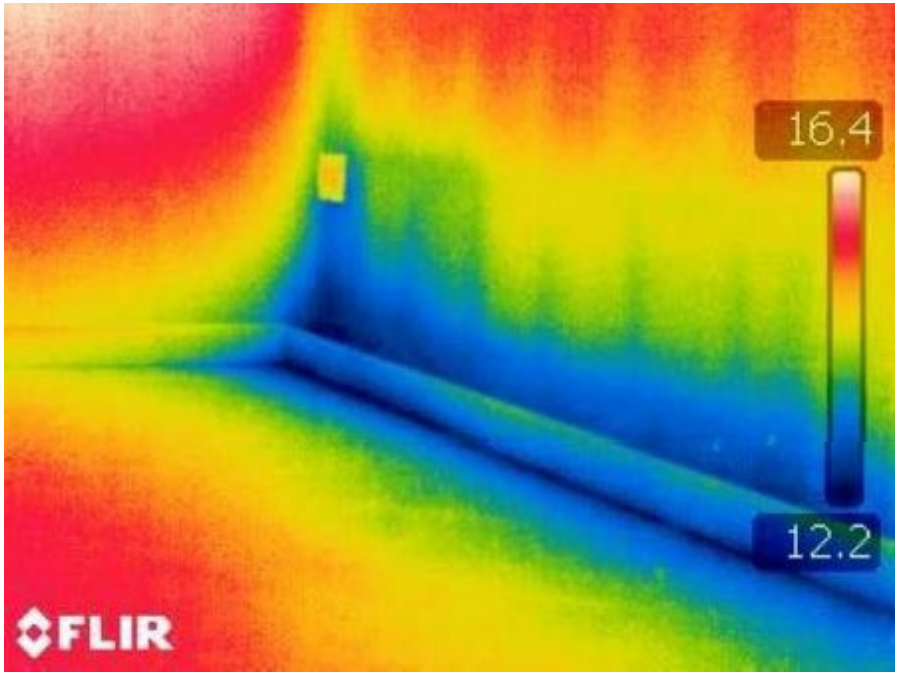
In a room that is occasionally unoccupied, with fluctuating levels of relative humidity, this can lead to the appearance of salt deposits on the surface ("cyclical efflorescence and deliquescence"), resulting in damage to surface materials and creating conditions for a progressive increase in moisture.

Naturally, over time, the damage will worsen, living comfort will decline, and restoration costs will rise.

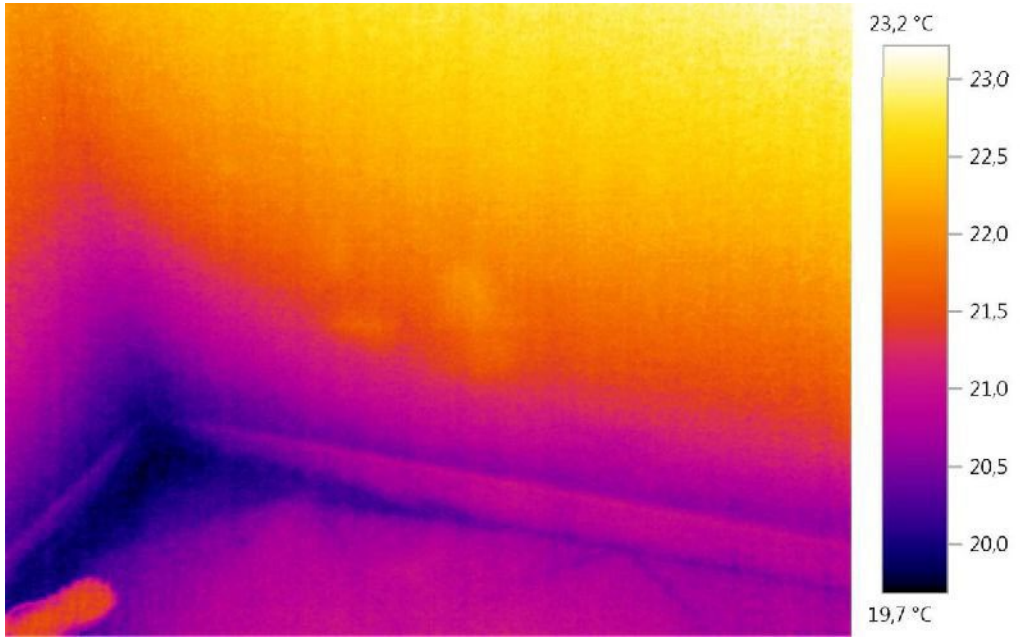
Moisture and Thermal Conductivity: A Dangerous Relationship

As the moisture content in walls increases, there is always a corresponding rise in thermal conductivity and a deterioration of the thermal performance of the masonry..



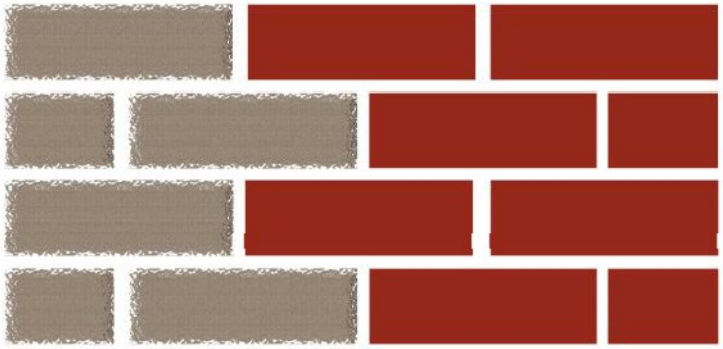


An increase in wall moisture always corresponds to a rise in thermal conductivity…



…and a deterioration of the thermal performance of the masonry itself. As a result, energy consumption for heating increases, and indoor comfort and health conditions are significantly compromised.

HUMIBLOCK



LA SOLUZIONE DEFINITIVA AL PROBLEMA DELL'UMIDITA' NELLE MURATURE.

HOW IT WORKS

HUMIBLOCK is a white, fiber-reinforced, inorganic and odorless skim coat, specifically formulated for the restoration, dehumidification, and/or waterproofing of masonry surfaces, including retaining walls and below-ground structures.

It can be applied on both interior and exterior surfaces to treat rising damp and/or hydrostatic pressure, whether positive or negative.

HUMIBLOCK is particularly effective in cases of capillary rising damp, infiltrations, and seepage.

It prevents the formation of mold and condensation.

HUMIBLOCK leverages an innovative physico-chemical principle: controlled reverse osmosis.

Water present in the microcavities and capillaries of the masonry is naturally drawn toward the product due to an osmotic gradient generated by the skim coat's formulation.

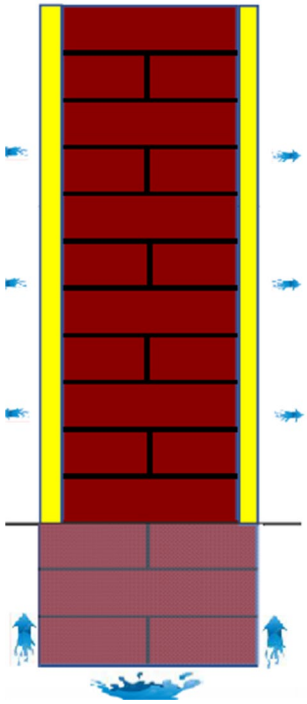
Once absorbed, the moisture is trapped within the mass of the product, which acts like an active sponge: it retains the water, reduces its pressure, and prevents it from rising toward the plaster or surface finish, allowing for a slow and steady evaporation.

Meanwhile, nanotechnological silicon-ceramic fillers chemically bond with the substrate, saturating the pores and consolidating the surface. The result is a waterproof yet breathable barrier, stable over time and resistant even under high humidity or strong hydrostatic pressure conditio

It comes with a consistency specifically designed only for trowel application; it is not suitable for brush or roller application.

Preparation in the dedicated ready-to-use bucket and the application process are particularly simple and clean, requiring minimal preparation and completion time, thus improving overall efficiency.

WITH HUMIBLOCK
CONTROLLED EVAPORATION
HEALTHY PLASTER



APPLICATION FIELDS

Waterproofing of swimming pools, cisterns, tanks, etc., is always advisable—if not essential—and HUMIBLOCK is the ideal solution.

When it is possible to apply the waterproofing layer on the side in direct contact with water (which is preferable), it is referred to as positive-side waterproofing.

Conversely, when the waterproofing is applied on the side opposite to the water exposure, it is known as negative-side waterproofing.

A typical example of negative waterproofing is the application of the product on the interior face of a retaining wall in a basement..

H U M I B L O C K

APPLICATION FIELDS

HUMIBLOCK solves problems related to terraces, garages, cellars, stairwells, attics, swimming pools, cisterns, tanks, vats, sewers, and water collection or treatment systems.

It can be applied both exposed (**its 0.6 mm grain size** gives it the appearance of a fine, aesthetically pleasing plaster) and beneath tiles or other types of finishes, on both floors and walls.

The nanotechnological silicon-ceramic component makes it highly effective and extremely durable, also providing an excellent substrate for construction adhesives.

In practice, wherever a cement-based material can be used, **HUMIBLOCK** can be applied.

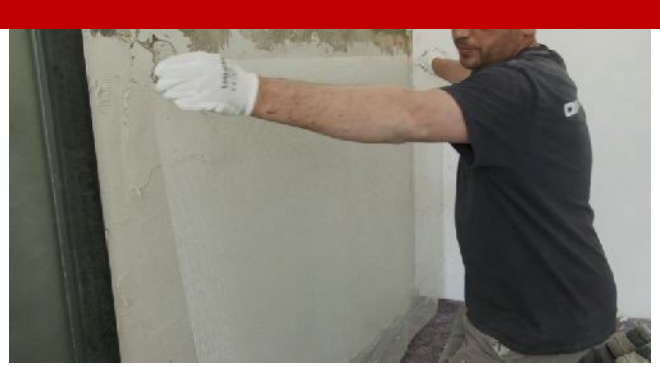
SOLVE THE PROBLEM IN 4 STEPS

STEP 1: REMOVE OR GRIND DOWN THE OLD SUBSTRATE.
STEP 2: WET THE SUBSTRATE AND MIX THE PRODUCT THOROUGHLY.
STEP 3: APPLY THE PRODUCT IN TWO COATS WITH REINFORCEMENT MESH.
STEP 4: FINISH THE SURFACE USING A DAMP TROWEL.

If needed, use HUMIBLOCK FINITURA for a smoother finish, and HUMIBLOCK AQUABLOCK to stop active water leaks on the substrate



WANT TO SEE HOW IT WORKS? ASK FOR THE APPLICATION VIDEO!

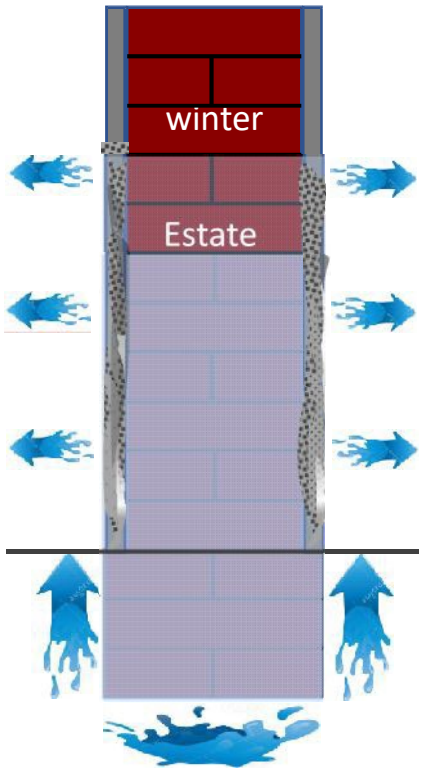

I THE ADVANTAGES OF HUMIBLOCK

- No need to remove existing plaster if it is cohesive and solid.
- No demolition waste to dispose of.
- No long drying times.
- Very fast processing and application times.
- Easy to apply.
- Strong and elastic, thanks to reinforcement mesh.
- Anti-shrinkage function.
- Long-lasting durability.
- 10-year warranty.
- Excellent performance for both rising damp and positive/negative hydrostatic pressure.
- Ready-to-use product with a convenient mixing bucket – no dust, no bags, no mess.

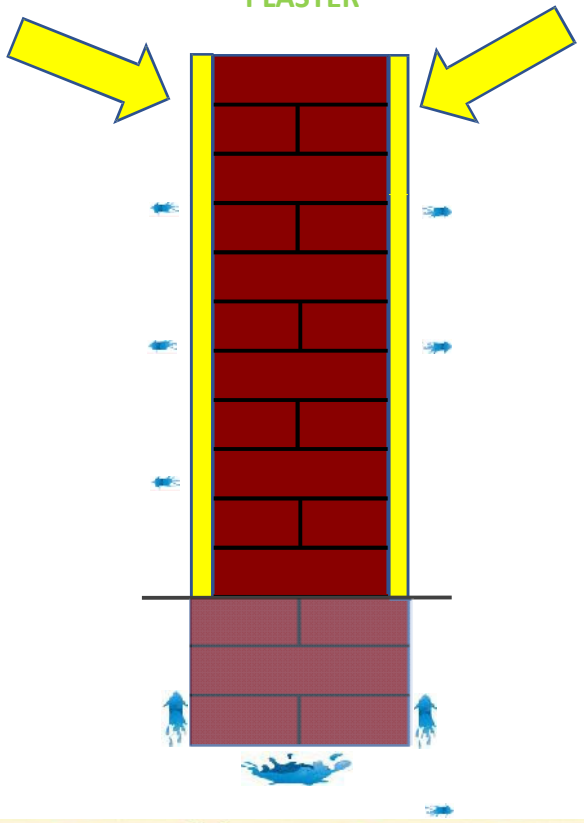
HUMIBLOCK AGAINST RISING DAMP

THE ULTIMATE SOLUTION TO THE PROBLEM OF RISING DAMP

WITHOUT HUMIBLOCK
UNCONTROLLED EVAPORATION
DAMAGED PLASTER

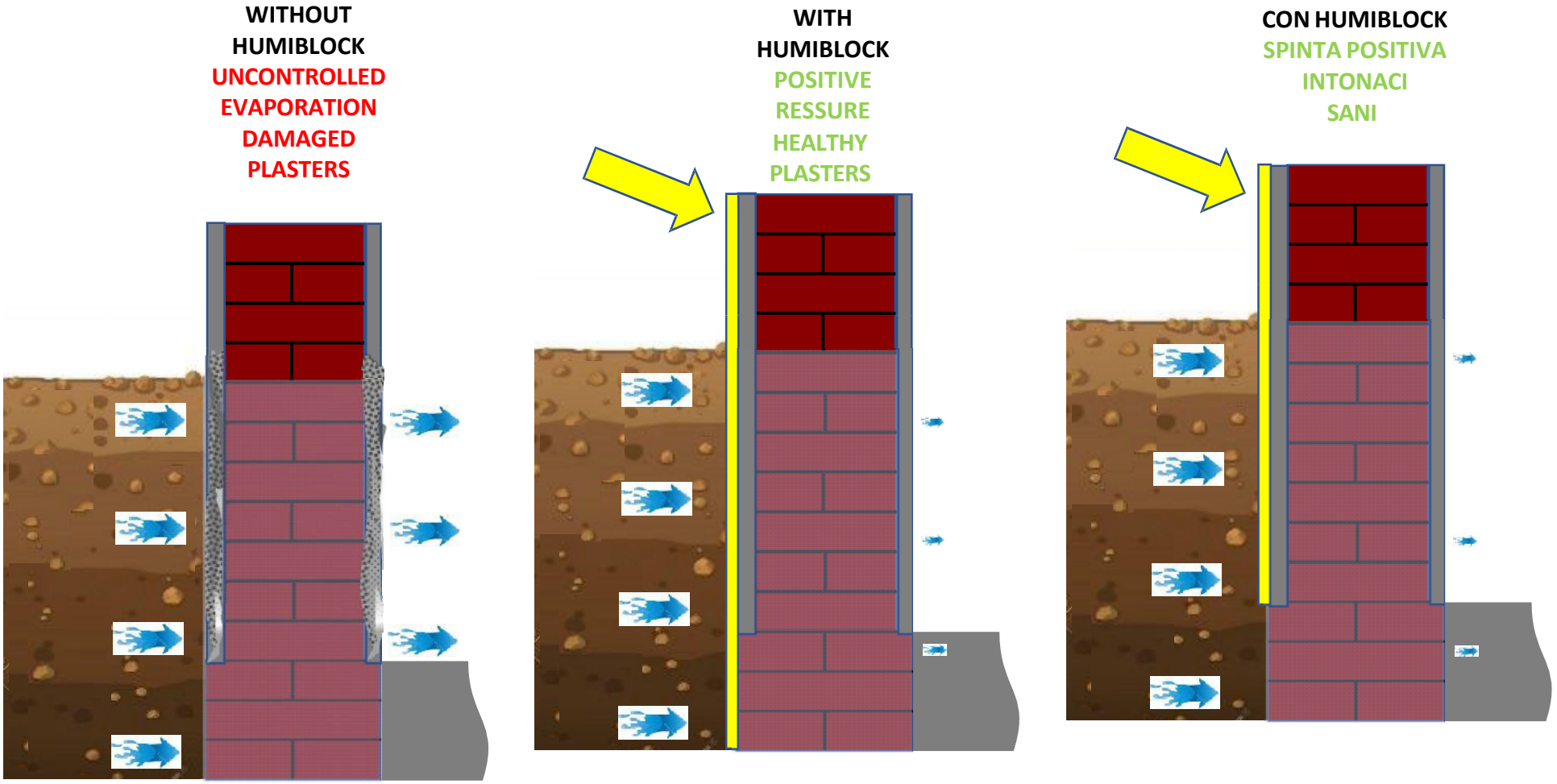


WITH HUMIBLOCK
CONTROLLED EVAPORATION
HEALTHY PLASTER



POSITIVE PRESSURE

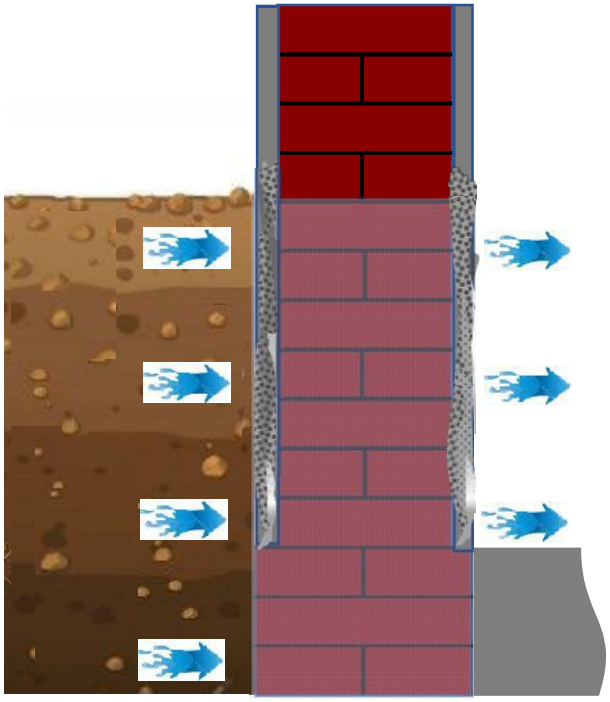
On new constructions or where excavation is possible, it is best to also protect the foundation.



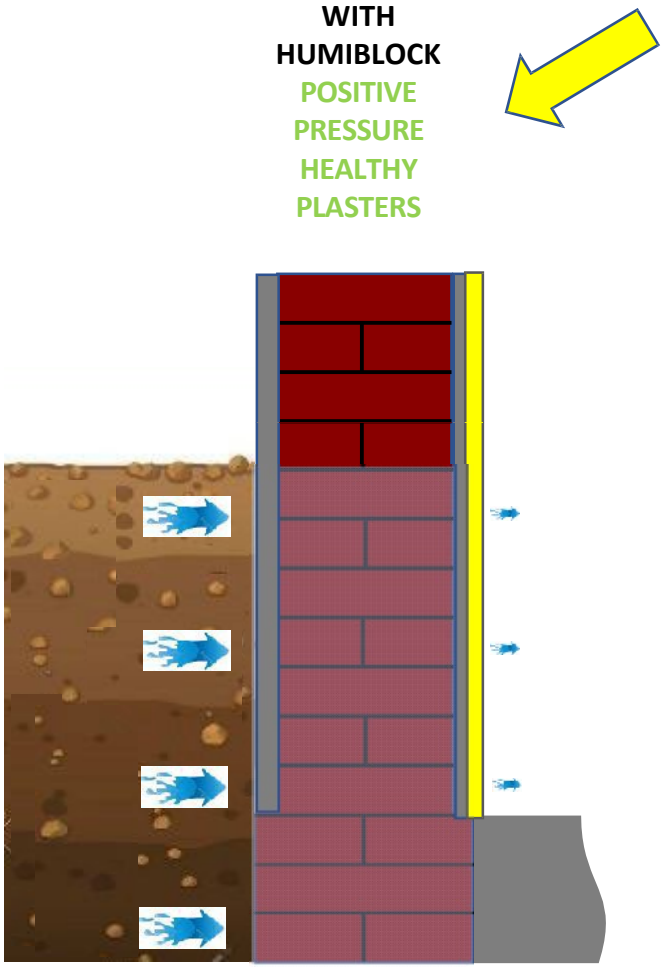
NEGATIVE PRESSURE

When working from the inside on existing structures, carefully remove all damaged plaster.
If moisture is also seeping through the floor, cover the foundation and/or the entire flooring surface

WITHOUT HUMIBLOCK
UNCONTROLLED EVAPORATION
DAMAGED PLASTERS



WITH HUMIBLOCK
POSITIVE PRESSURE
HEALTHY PLASTERS



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POSITIVE PRESSURE
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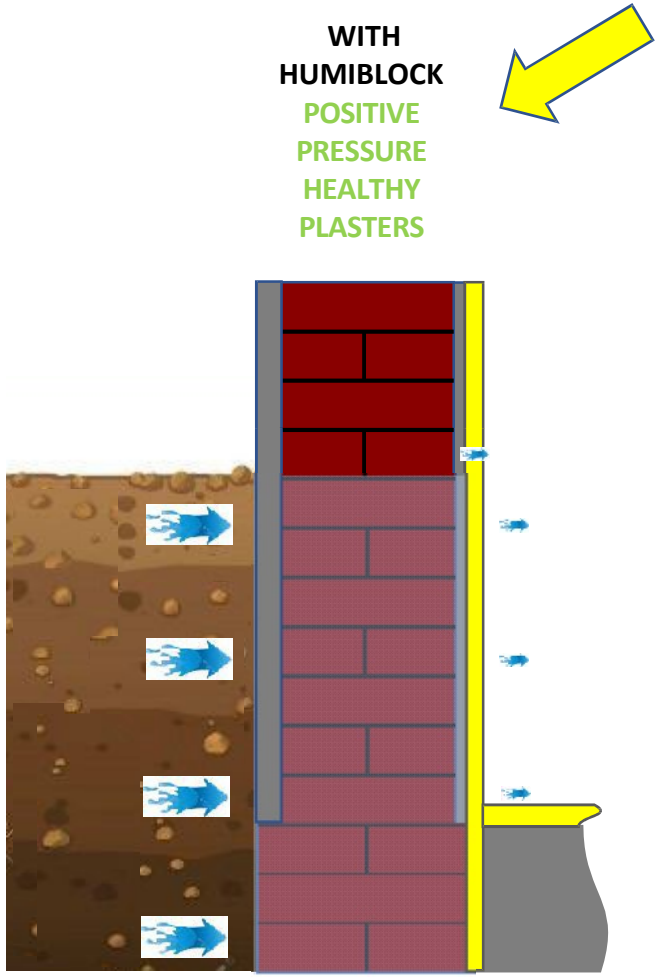

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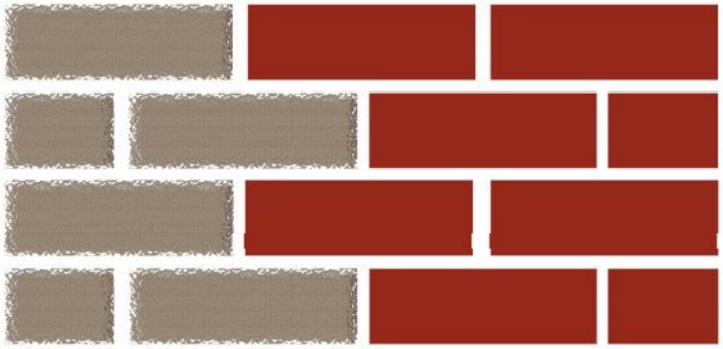

THE DEFINITIVE SOLUTION TO MOISTURE PROBLEMS IN MASONRY

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