WATSTOP®

THE TOTAL BARRIER
AGAINST RISING DAMP AND
WATER INFILTRATION

EXCELLENT, VERSATILE PROTECTION

INDEX

WATER AND ITS BARRIERS

Water is a critical element for any type of building as it plays a role in the structural ageing process, affecting the quality, durability, living comfort and healthiness of environments. Masonry can be affected by damp from above as well as from rising damp, which is why waterproofing is a necessary, delicate and strategic action of preventive maintenance and structural protection.

In this context, rising damp represents one of the most insidious forms of attack by water, coupled with all those situations that require urgent action but prevent direct intervention on the source of water infiltration with measures comparable to grease or wax.

Cases in point include garages, cellars, tunnels, lift shafts, underground rooms and retaining walls. A whole array of spaces that require products formulated to tackle specific problems.

WATSTOP REPRESENTS A UNIQUE AND EXCELLENT SOLUTION TO THIS SERIES OF CRITICAL SITUATIONS: it is formulated to encapsulate rising damp, to create a vapour barrier on damp supports, to be used for positive and negative waterproofing and to act as an osmotic on retaining walls.

COMPONENTS

WATstop is a three-component epoxy resin and is formulated with an epoxy resin (Part A) combined with a catalyst (Part B) and special cement (Part C).

Also available in **white**

THESE THREE ELEMENTS COMBINED DETERMINE THE END PROPERTIES OF THE PRODUCT AND ITS HIGHLY VERSATILE USE:

PART A

(EPOXY RESIN): in combination with the catalyst, it creates a universal barrier against water, providing **the thixotropic property that allows application of WATstop on vertical as well as horizontal surfaces**; in addition, again in conjunction with the catalyst, it guarantees perfect adhesion to any type of support, making **WATstop suitable for subsequent application of any kind of coating**.

PART B

(CATALYST): **it allows the product to cure** perfectly even in extreme climatic conditions and in case of application on damp surfaces or in the presence of rising damp.

PART C

(SPECIAL CEMENT): black or white in colour, **it gives the product the mechanical strength required to withstand hydrostatic pressure, it facilitates rapid drying and guarantees excellent hardness and durability**.

FIELDS OF USE

The unique distinguishing feature of WATstop is its intrinsic versatility and ability to provide optimal protection solutions for different types of problems.

Thanks to this multifaceted capacity to provide problem-solving solutions, WATstop can be used as:

VAPOUR BARRIER:

it can be applied to all surfaces and supports at risk of rising damp, ensuring optimal adhesion of materials for subsequent application.

RISING DAMP ENCAPSULATION:

in the presence of rising damp on interior or exterior walls (horizontal or vertical), application just a few millimetres thick creates a barrier that can be directly coated with plasters, smoothers or paint

WATERPROOFING AGAINST NEGATIVE WATER INFILTRATION:

in all situations where positive side waterproofing is not possible, WATstop can definitively block water infiltration and damp on the negative side.

POSITIVE AND NEGATIVE HYDROSTATIC PRESSURE

The concept of hydrostatic pressure is very important in waterproofing because it affects the properties of the products involved.

POSITIVE HYDROSTATIC PRESSURE

We talk about positive pressure when the water - or any other liquid - exerts pressure directly on the surface of the waterproofing layer. In this case, the surface must be intrinsically waterproof, meaning it has the structural ability to prevent water infiltration. One such case is the **waterproofing of a swimming pool**, applied to the inside of the pool, or the waterproofing of the eaves of a roof.

NEGATIVE HYDROSTATIC PRESSURE

Negative pressure, or counterthrust, occurs when a liquid exerts pressure on the interface between the waterproofing layer and the support to which it has been applied. It is clear, in this case, that the waterproofing product's strength of adhesion to the support is a key intrinsic property. Examples of negative side waterproofing include **lift shafts and retaining walls**.

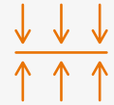
CHARACTERISTICS AND ADVANTAGES

IN PARTICULAR, WATSTOP ALSO OFFERS UNBEATABLE PROTECTION AGAINST DAMP THANKS TO SEVERAL SPECIFIC PROPERTIES WHICH SET IT APART FROM OTHER TYPES OF WATERPROOFING TECHNOLOGY.

In addition to its waterproofing capabilities, **WATstop has excellent consolidating and filling properties** and the product is easy to plaster, paint and tile over, confirming its **outstanding versatility and adaptability to countless different types of applications**.

TOTAL WATERPROOFING
WATstop creates a universal barrier against water infiltration, guaranteeing positive and negative waterproofing.

PERFECT ADHESION
The combination of mortar and catalyst allows WATstop to adhere perfectly to any kind of surface, including damp supports, acting as a universal adhesion primer.



LOW THICKNESS
Unlike other technologies, WATstop guarantees excellent performance even at low thicknesses thanks to the use of a next-generation resin.

APPLICABLE INDOORS AND OUTDOORS
The product can be applied both indoors and outdoors, on horizontal and vertical surfaces, without any variation in performance or application outcome.

APPLICABLE ALL YEAR ROUND
The catalyst allows the product to cure even in critical climatic conditions, enabling application any time of year within a temperature range of +5 to +35 °C

QUICK AND EASY APPLICATION
Once mixed and catalysed, the product is quick and easy to apply: by roller, squeegee, brush or, for large surface areas, by airless spray.

PERFORMANCE AND APPLICATION METHODS

WATstop's performance and its natural ability to tackle and definitely overcome problems linked to damp and water infiltration, is substantiated by the technical data on product performance detailed below.

The product's versatility is also reflected in the range of application methods. Indeed, WATstop can be applied by roller, squeegee, brush and, in the case of large surface areas, by airless spray equipment.

TECHNICAL DATA

Coverage:
1 kg/m² as a vapour barrier and osmotic
2 kg/m² as waterproofing in negative pressure

Application:

PERFORMANCE

POSITIVE PRESSURE WATERPROOFING

9.5 atm

NEGATIVE PRESSURE WATERPROOFING

9.5 atm

VAPOUR BARRIER

μ = 13361

ADHESION TO CEMENT SUPPORTS

2.5 N/mm²

SYSTEM: SUPPORTS, COVERAGE AND COATINGS

Excellent adhesion capacity is one of the key strong points of **WATstop, which ensures maximum bonding to different types of** support:

- Cement / concrete substrates
- Plasters
- Stone
- Wood
- Tiles
- Metals

Depending on the level and characteristics of the damp to be treated, WATstop can be applied as follows

VAPOUR BARRIER	DAMP ENCAPSULATION	WATERPROOFING IN NEGATIVE PRESSURE
1 kg/m²	2 kg/m²	2 kg/m²

Thanks to its excellent adhesion to different types of support, WATstop is **an ideal bonding primer for different types of coatings and covering materials**.

- Plasters
- Screeds
- Smoothers
- Paint
- Tile adhesive
- Liquid waterproofing
- Liquid coatings

SOLUTIONS

THE SUPERB VERSATILITY OF WATSTOP ALLOWS THE PRODUCT TO MEET MANY DIFFERENT WATERPROOFING REQUIREMENTS:

VAPOUR BARRIER AND ADHESION PRIMER

- Tiled finish
- Waterproofing system finish
- Sport Flooring finish

RISING DAMP ENCAPSULATION

- Outdoors
- Indoors

WATERPROOFING OF UNDERGROUND STRUCTURES

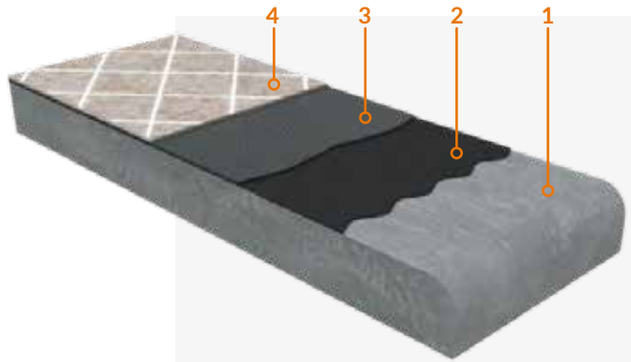
SYSTEMS FOR RETAINING WALLS

VAPOUR BARRIER AND ADHESION PRIMER

1. **SUPPORT:**
   Reinforced Concrete
   Concrete

2. **PRODUCT:**
   WATstop

3. **FINISH:**
   Tiles
   Waterproofing System
   Sport Flooring System

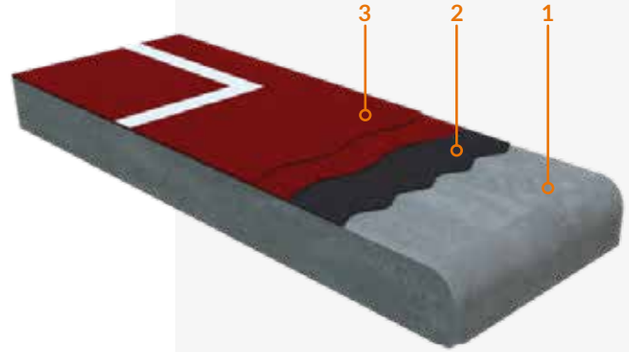


TILED FINISH

1. SUPPORT
2. WATSTOP
3. TILE ADHESIVE
4. FLOORING

WATERPROOFING SYSTEM FINISH

1. SUPPORT
2. WATSTOP
3. WATERPROOFING SYSTEM



SPORT FLOORING FINISH

1. SUPPORT
2. WATSTOP
3. SPORT FLOORING SYSTEM

RISING DAMP ENCAPSULATION

1. **SUPPORT:**
   Wall with rising damp
2. **PRODUCT:**
   WATstop
3. **FINISH:**
   Plaster
   Smoother
   Paint

1. **SUPPORT:**
   Wall with rising damp
2. **PRODUCT:**
   WATstop
3. **FINISH:**
   Plaster
   Smoother
   Paint

WATERPROOFING FOR UNDERGROUND STRUCTURES

The use of WATstop for waterproofing underground structures represents a valid, low-thickness alternative compared to the use of traditional osmotic systems.

1. **SUPPORT:**
   Wall or floor
2. **PRODUCT:**
   WATstop
3. **FINISH:**
   Coating for wall or floor

DEHUMIDIFICATION SYSTEM FOR RETAINING WALLS

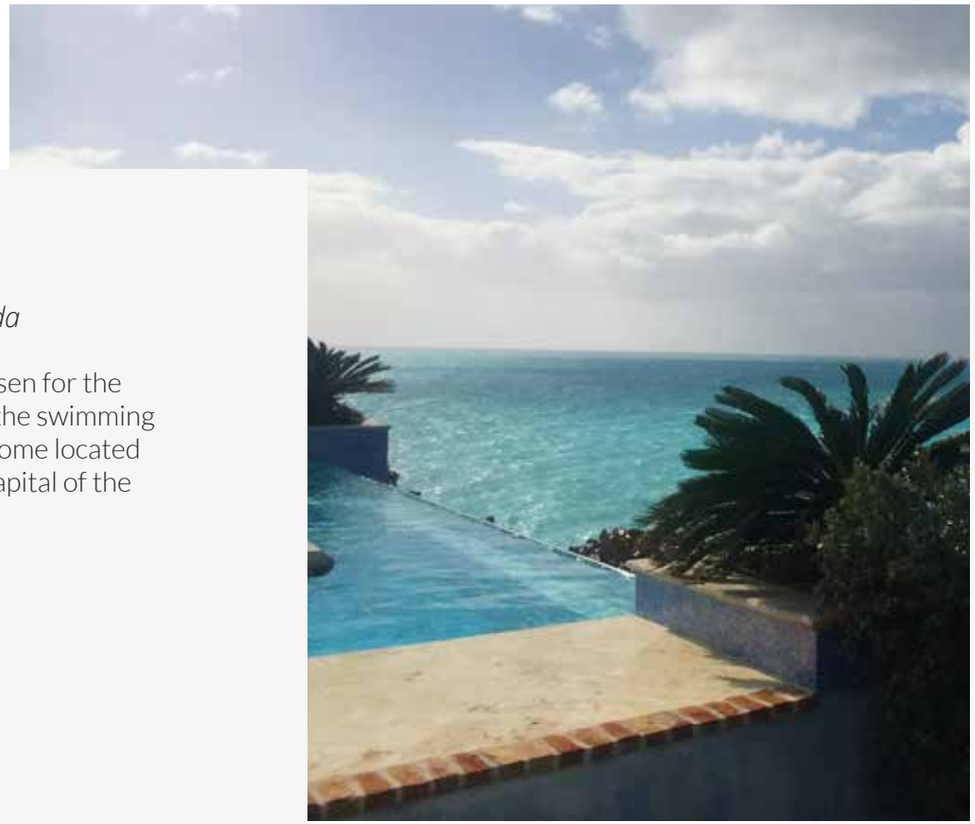
In case of retaining walls, the first step is the evaluation of **the condition of the masonry**.

> IN THE EVENT OF SIGNIFICANTLY UNEVEN MASONRY REQUIRING REDRESS, THE SURFACE CAN BE LEVELLED WITH **DIATHONITE REGULARISATION** OR WITH **CALCE STORICA** MORTAR.

Application of **WATstop** follows and the work is complete with the smoother **Argatherm**

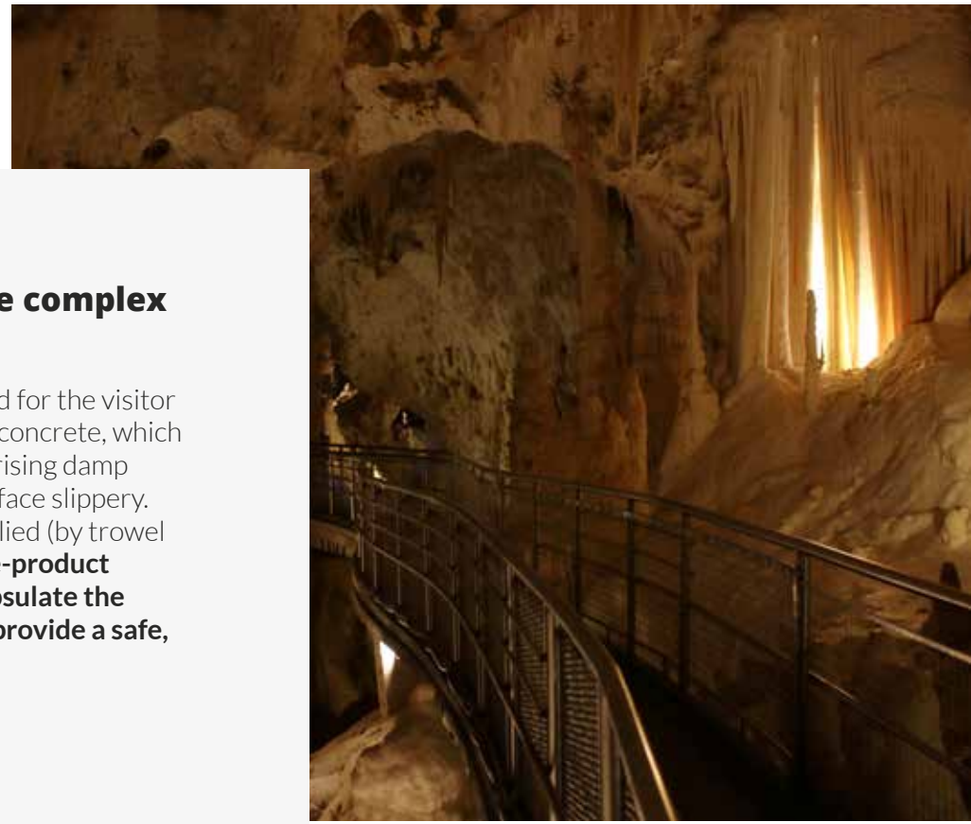
1. RETAINING WALL
2. WATSTOP
3. DIATHONITE DEUMIX+
4. ARGATHERM SMOOTHER

SUCCESSFUL PROJECTS



Private pool
Hamilton, Bermuda

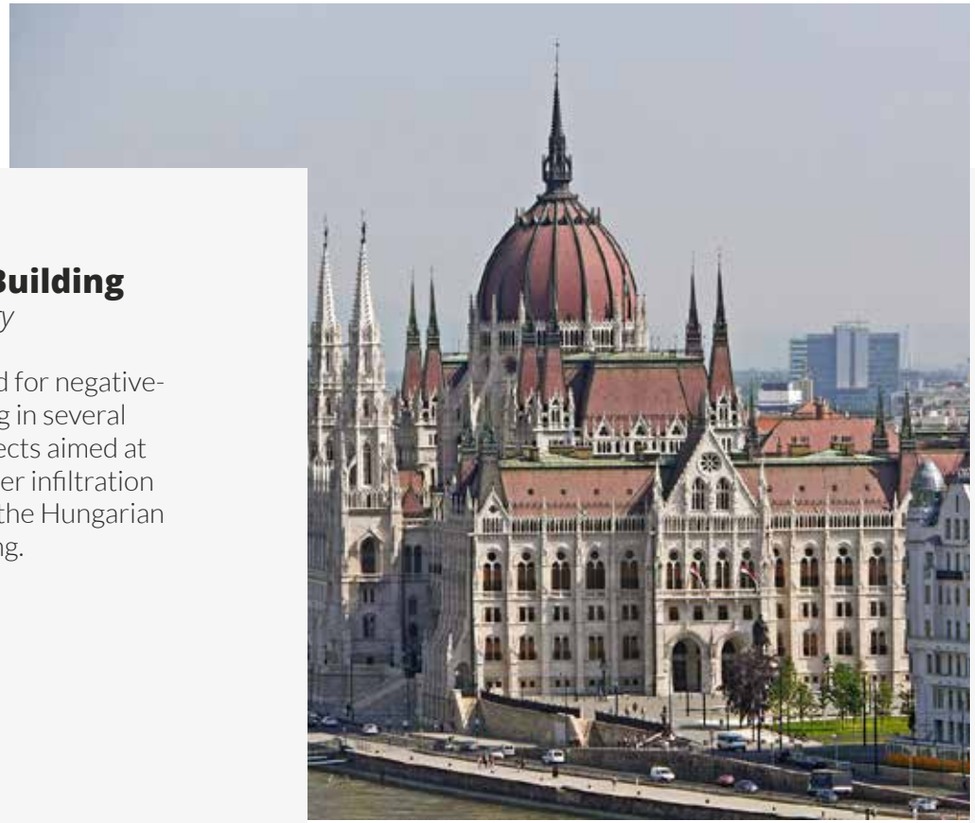
WATstop was chosen for the waterproofing of the swimming pool of a private home located in Hamilton, the capital of the Bermuda Islands.



Frasassi cave complex
Genga, Italy

WATstop was used for the visitor walkways built of concrete, which were affected by rising damp that made the surface slippery. WATstop was applied (by trowel and rolls) as **a one-product solution to encapsulate the rising damp and provide a safe, non-slip surface.**

SUCCESSFUL PROJECTS



Parliament Building
Budapest, Hungary

WATstop was used for negative-side waterproofing in several maintenance projects aimed at encapsulating water infiltration in the old walls of the Hungarian Parliament Building.

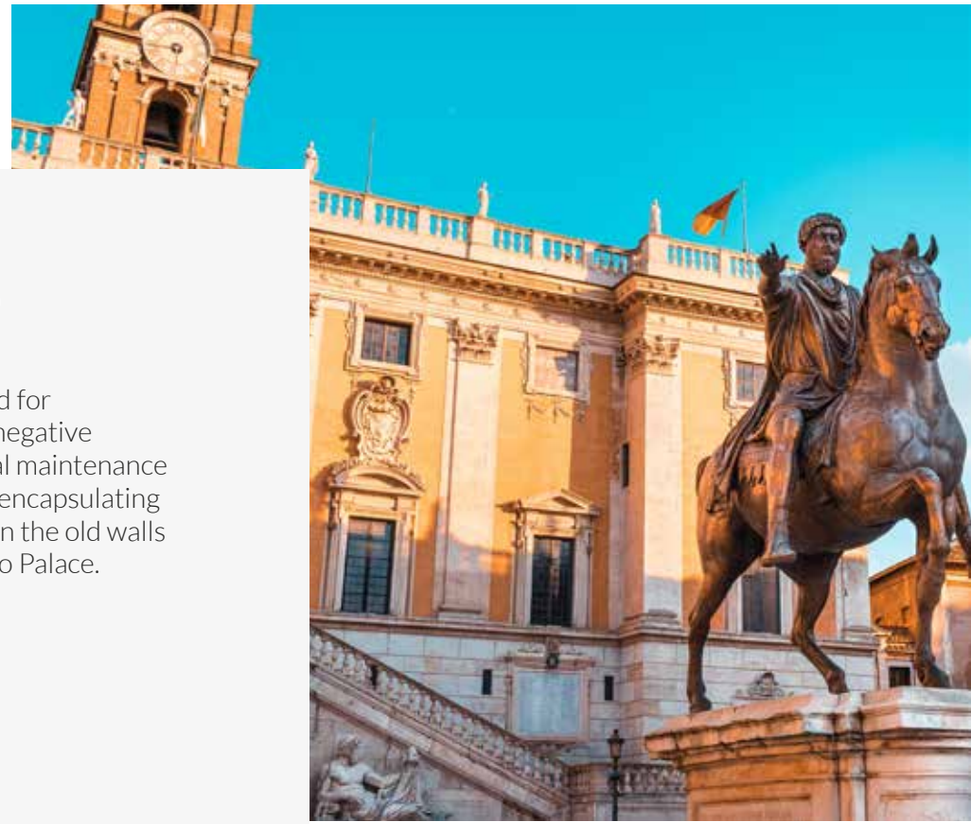
Fortress of San Salvador de la Punta
Havana, Cuba

WATstop was used in restoration work on the ancient fortress at the entrance to the bay in Havana, Cuba. The project involved waterproofing and encapsulation of rising damp on old granite block walls affected by crumbling and extensive damp.

SUCCESSFUL PROJECTS

Church of San Nicolò
Fabriano, Italy

The improvement project regarded two masonry columns at the start of the church's central nave, with the objective being to tackle the rising damp problem that had led to significant and unsightly areas of detached plaster.



Campidoglio
Rome, Italy

WATstop was used for waterproofing in negative pressure in several maintenance projects aimed at encapsulating water infiltration in the old walls of the Campidoglio Palace.

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DIASEN
Sassoferrato, Italy
diasen@diasen.com

DIASEN FRANCE
Sablet, France
france@diasen.com

DIASEN IBÉRICA
7005 -177 Évora, Portugal
iberica@diasen.com

DIASEN SERBIA
Belgrade, Serbia
easterneurope@diasen.com

DIASEN USA
Newnan, GA, 30263
usa@diasen.com

DIASEN ASIA
Singapore
singapore@diasen.com

DIASEN MIDDLE EAST
Sharjah, F.Z.E. - U.A.E.
me@diasen.com

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www.diasen.com