

# **External Insulation Finishing System**

# WalAce EIFS s y s t e m

WalAce MORTAR WalAce ANCILLARY UnoFin ACRYLIC BASECOAT UnoFin ACRYLIC TEXTURE UnoFin ACRYLIC MOSAICO

# Pidilite Puma

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# About Us

# **PIDILITE INDUSTRIES**

Has been the pioneer and market leader in adhesives and sealants, construction chemicals, art and craft products and polymer emulsions in India. Pidilite started in 1959 manufacturing only white glue – Fevicol and has now grown to cater to various other categories including paint chemicals, automotive chemicals, art materials and stationery, fabric care, maintenance chemicals, industrial adhesives, industrial and textile resins, and organic pigment preparations.

# **GRUPO PUMA**

Is a leading company in the construction sector integrated by 28 production and distribution centers located throughout Spain, Portugal, France, Costa Rica, Morocco, and Algeria. An organization that uses selected raw materials and the newest technology to manufacture products of the highest quality at competitive prices. Grupopuma offers an extensive range of products that covers multiple areas of the construction sector: tile adhesives, ceramic tile grouts, one coat mortars, coating mortars, special mortars, flooring mortars, additives, primers, paint, and insulation and waterproofing systems.

# PIDILITE GRUPOPUMA MANUFACTURING LIMTED

Joint Venture between Pidilite Industries Ltd & Grupopuma Spain in the field of Advanced Technical Mortars. These products and systems are the result of a team of researchers that works day after day to develop new methods and formulas to improve their inherent properties, minimize the cost, reduce the environmental impact, and enable easier application.



# External Insulation Finishing System

# **Thermal Insulation**

Around a third of the world's energy use goes to buildings. Of this usage, more than 60% is used to heat and cool buildings. By externally insulating the building envelope, we can prevent the entry of heat into the structure which results in the reduction of HVAC energy consumption and increases the efficiency of end-user by improving the thermal comfort conditions. Also, with several state governments in India mandating the Energy Conservation Building Code (mostly for commercial buildings) and Eco-Niwas (for residential buildings) guidelines, insulating the envelope has now become more of a need than a want. The energy efficiency criterion in green buildings is mostly being designed considering the performance method for the whole building which can be met by either opting for active measures or passive

# Walace EIFS system

As part of a sector that is evolving and imposing new construction standards with the aim of improving the energy efficiency of the buildings, PIDILITE GRUPO PUMA, as part of their commitment to society and the environment, offers WalAce EIFS systems, thus clearly materializing their commitment towards construction of sustainable and energy efficient built environment. WalAce EIFS systems provide better insulation which in turn reduces energy consumption and carbon footprint thereby enhancing building's lifecycle. WalAce EIFS measures or a combination of both. Active measures include the usage of special A/C's, chillers, and lightings which have a very high initial cost and a shorter life span resulting in very low ROI. Passive measures for energy efficiency include insulating the building envelope to reduce the heat ingress into the structure, thereby reducing the cooling load & total energy consumed resulting in the reduction of energy costs. When ROI is considered over a longer period, passive measures are always more economical. However, in India, passive measures have not been adopted widely, especially for the walls. Pidilite presents these passive energy-efficient solutions which are long-term, more sustainable, and gives very high design freedom to the architects.

system has been designed to offer both thermal comfort as well as energy saving and therefore a financial saving. The system is suitable for both new buildings and for rehabilitation of existing buildings which can significantly improve the thermal performance as well as the aesthetics of the buildings. WalAce EIFS systems are available in vibrant colours and textures which will help the architects to experiment with their designs.



# Advantages Of The Walace EIFS system

### 1. Increase of internal thermal inertia

The walls are externally protected by the layer of thermal insulation, thereby drastically reducing the amount of heat entering inside, thus reducing the need for air conditioning.

### 2. Respect for the environment and energy saving

The system reduces the energy needs for air conditioning, and therefore limits the consumption of fossil fuels. The system counts on GLOBAL EPD\*, conforming to the regulation EN 15804, which allows a favourable score on a certificate of durability for a building. \*Environmental Product Declarations (EPD).

### 3. Reduction of the risk of condensation

The system is rainwater-proof, but permeable to water vapour (Breathable). Complete systems Grupo Puma offers the complete system of each one of the long-term solutions • Speed and simplicity of execution The same installing company may carry out the insulation of the façade, its waterproofing as well as its decorative finish.

### 4. Creative design

The varied range of finishes allows a greater flexibility for designing a vibrant and creative external façade.

### 5. Quality guarantee

The systems are European approved with the ETE\* certificate issued by the Eduardo Torroja Construction Institute (\*) Document of European technical evaluation, recognised by all the member States of the European Community.

### 6. Fire behaviour

According to the ETC (DB SI), the system has a classification of reaction to fire, at least B-s3, d0 or greater, indicated by the regulation UNE-EN 13501-1. The system also complies to the guidelines as per National Building Code of India 2016\*.

### 7. Ideal for the thermal rehabilitation of the façade

As the system is installed externally, it does not utilise any internal usable space. Hence, it is ideal for retrofication of existing facades to improve the thermal performance of the façade and make it aesthetically vibrant.

### 8. Complete systems

Pidilite Grupo Puma offers the complete composite system including the insulation panels, adhesive/mortar, profiles and ancillary items along with the final finishes.

### 9. Speed and simplicity of execution

The same installing applicator will carry out the insulation of the façade, its waterproofing as well as its decorative finish thereby bringing more transparency and accountability.

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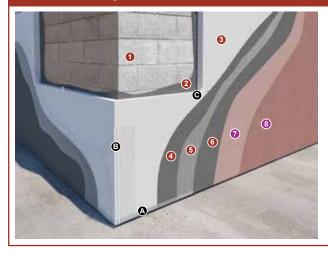
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# WalAce SYSTEMS

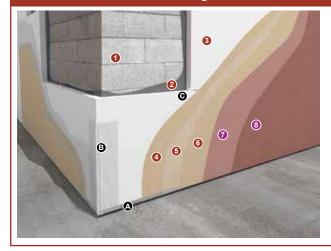
# WalAce System



# A. WalAce ANCILLARY Starter ProfileB. WalAce ANCILLARY PVC Angle Profile with mesh

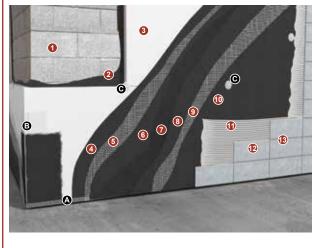
- C. WalAce ANCILLARY Anchor Plug
- 1. Basic Substrate
- 2. WalAce MORTAR
- 3. WalAce Insulation Panel
- 4. WalAce MORTAR
- 5. WalAce ANCILLARY Mesh
- 6. WalAce MORTAR
- 7. UnoFin ACRYLIC BASECOAT
- 8. UnoFin ACRYLIC TEXTURE

# WalAce Flexible System

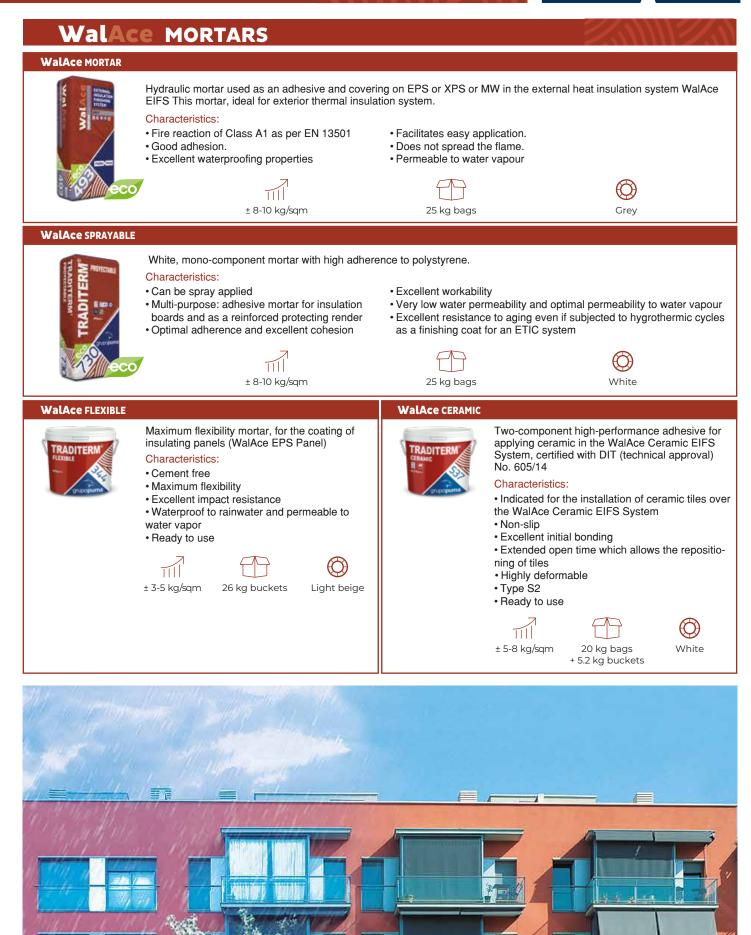


- A. WalAce ANCILLARY Starter Profile
- B. WalAce ANCILLARY PVC Angle Profile with mesh
- C. WalAce ANCILLARY Anchor Plug
- 1. Basic Substrate
- 2. WalAce FLEXIBLE
- 3. WalAce Insulation Panel
- 4. WalAce FLEXIBLE
- 5. WalAce ANCILLARY Mesh
- 6. WalAce FLEXIBLE
- 7. UnoFin ACRYLIC BASECOAT
- 8. UnoFin ACRYLIC FLEXIBLE

# WalAce Ceramic System



- A. WalAce ANCILLARY Starter Profile
- B. WalAce ANCILLARY PVC Angle Profile with mesh
- C. WalAce ANCILLARY Anchor Plug
- 1. Basic Substrate
- 2. WalAce MORTAR
- 3. WalAce Insulation Panel
- 4. WalAce MORTAR
- 5. WalAce ANCILLARY Mesh
- 6. WalAce MORTAR
- 7. WalAce MORTAR
- 8. WalAce MORTAR
- 9. WalAce ANCILLARY Mesh
- 10. WalAce MORTAR 11. WalAce Ceramic
- 12. Ceramic Tile
- 12. Morcemcolor Plus Flexible



# WalAce PANELS

# EPS PANEL



Insulation panel made of expanded polystyrene.

### Characteristics:

- · Light and manageable material
- Easy to cut
- Permeable to water vapor (Breathable)
- Thermal Conductivity of 0.034 0.036 W/mK
- Available in range of sizes and thicknesses as per U-Factor requirement.

# WalAce XPS PANEL

- Thermal insulation panel made of extruded polystyrene. Characteristics: • CFC &HCFC Free • Maximum deformability
  - · Impermeable to rainwater
  - Excellent impact resistance
  - Thermal Conductivity of 0.029 0.031-W/mK
  - Size 1.2 m x 0.6m
  - · Available in range of thicknesses as per
  - U-Factor requirement.

### WalAce STONE WOOL PANEL



Thermal insulation panel made of stone wool used for thermal, acoustic, and fire safe insulation, having density of 140 kg/m and is completely non-combustible of Class A1 as per EN 13501-1.

Characteristics:

- Non-combustible with Class A1 classification as per EN 13501-1
- Free from CFC, HCFC & HFC's
- · Excellent sound absorption
- Thermal Conductivity of 0.034 0.036 W/mK
- Size 1.2 m x 0.6m
- · Available in range of thicknesses as per U-Factor requirement

# WalAce PANELS - Thickness selection\*

# As per prescriptive method of ECBC 2017 Guidelines

Type of Climate	Wall assembly U-Factor Requirement in W/m <sup>2</sup> K	EPS Insulation thickness in mm for a K Value of 0.036 W/mK	XPS insulation thickness in mm for a K Value of 0.030 W/mK	Stone wool insulation thickness in mm for a K Value of 0.036 W/mK
ECBC Compliant B	uilding	-		-
Composite	0.40	75 mm	75 mm	75 mm
Hot and Dry	0.40	75 mm	75 mm	75 mm
Warm and Humid	0.40	75 mm	75 mm	75 mm
Temperate	0.55	50 mm	50 mm	50 mm
Cold	0.34	90 mm	75 mm	90 mm
ECBC + Compliant	Building			
Composite	0.34	90 mm	75 mm	90 mm
Hot and Dry	0.34	90 mm	75 mm	90 mm
Warm and Humid	0.34	90 mm	75 mm	90 mm
Temperate	0.55	50 mm	50 mm	50 mm
Cold	0.22	150 mm	125 mm	150 mm
Super ECBC Comp	liant Building			
Composite	0.22	150 mm	125 mm	150 mm
Hot and Dry	0.22	150 mm	125 mm	150 mm
Warm and Humid	0.22	150 mm	125 mm	150 mm
Temperate	0.22	150 mm	125 mm	150 mm
Cold	0.22	150 mm	125 mm	150 mm

\*The insulation thickness has been arrived at by considering wall assembly with Brick wall and the same thickness holds good for solid block masonry or concrete wall. For any other assembly design kindly contact Pidilite Grupopuma technical team for customised thickness design

### WalAce ANCILLARY WalAce ANCILLARY Mesh WalAce ANCILLARY Anchor $WalAce^{\circledast}$ Anchors are made up of polypropylene material and are used to fix the $WalAce^{\circledast}$ insulation WalAce® ANCILLARY MESH consists of double weave threads, essential for reinforcing the WalAce® EIFS system. panels to the substrate. It comes in various lengths are per the Insulation thickness of WalAce® system. Characteristics: Characteristics: 160 GSM Alkali resistant Fibreglass mesh • It is recommended in the application of WalAce® • The anchor is a set of two components nail and cap which is made of Polypropylene to avoid the EIFS system as it provides greater resistance and thermal bridging in the walls stability to the system Easy to apply Prevents the appearance of cracks in WalAce<sup>®</sup> · Ensures perfect fastening of the panels to the Mortar which are caused due to temperature substrate. differences or movement of the insulation panels. • European approval according to ETA-16/0509 · Excellent traction resistance and improves overall Resistant to corrosion impact resistance of the entire system · Available in various lengths depending on the thickness of the insulation panel WalAce ANCILLARY Aluminium Starter Profile WalAce ANCILLARY PVC Corner Reinforcement wih Mesh Starter profile is installed at the bottom of the Corner reinforcement profile made of perforated WalAce<sup>®</sup> System. It protects and reinforces the PVC profile with Fiberglass mesh, used in the base. Used as a guide for the aligning the insulation WalAce System at the outer corners of the walls. panels. The incorporation of the mesh into the profile, gives Characteristics: an ease of application and maintain alignment of the Marks the start of the WalAce® System Protects edges. and reinforces the base of the WalAce® System. Characteristics: • Serves as a guide for alignment of the insulation · Profile with anti-alkaline treatment. panels. Available in various widths to accommodate thickness of insulation panels · Does not rusts. WalAce ANCILLARY Window Finishing Profile WalAce ANCILLARY Guttering Profile with Mesh Window finishing profile is a PVC based profile with Window finishing profile is a PVC based profile with anti-alkali fibreglass mesh used as protection at the anti-alkali fibreglass mesh used as protection at the corners of windows in the façade. corners of windows in the façade. Characteristics: Characteristics: · Profile with anti-alkaline treatment. · Profile with anti-alkaline treatment. WalAce ANCILLARY Crowning Profile WalAce ANCILLARY Joint Treatment Profile Crowning profile is installed at the top termination of Specially designed PVC profile with anti-alkaline the WalAce® System. It protects and reinforces the fibreglass mesh and flexible band for expansion joint top end of the system. treatment. Designed as a solution where the WalAce EIFS is going to be installed. Characteristics: · Available in various widths to accommodate Characteristics: thickness of insulation panels Designed as a solution for existing expansion joints in the substrate where the external WalAce EIFS is Does not rusts. going to be installed. WalAce ANCILLARY Mounting Kit Complete kit for mounting the base starter profile.



Characteristics: •75 screws 6x60 mm

- 10 base starter profile connectors
- 50 base starter profile levellers 3 mm



# WalAce System FINISHING OPTIONS

# **UnoFin** ACRYLIC

# **UnoFin ACRYLIC BASECOAT**



- Colour base (Primer) for acrylic mortar based on acrylic resin, mineral pigments and organic and inorganic additives.
- Characteristics:
- High-guality acrylic base.
- Improves adhesion, facilitates application, evens out the absorption properties of the surface material, and provides an initial coat of colour.
- Enhances the performance of the finishing acrylic mortar.
- Helps in maintaining a high permeability to water vapor.
- Excellent ease of application, workability, and adhesion to the surface.

± 0.2 - 0.25 kg/sqm	20 kg bucket

Range of colours

Range of colours

Range of colours

(on request)

## **UnoFin** ACRYLIC TEXTURE



# Characteristics: · For waterproofing and decorating the exterior walls.

· Quick and easy application. Excellent adhesion to typical construction surfaces. · Waterproof, washable, and resistant to mold and mildew.

Synthetic mineral plaster based on acrylic resin.

mineral pigments and organic and inorganic additives.

- · Resistant to aging.
- Coat thickness from 2 to 3 mm.
- · Available in Thin/ Medium/thick/Grated finishes

25 kg bucket







**UnoFin ACRYLIC MOSAICO** 

# Ready to use synthetic-mineral render with stone finish Characteristics:

Range of colours

· Ready to use synthetic mineral render for waterproofing and decorating façades, especially designed for reinforcing skirting boards (baseboards) in the WalAce® System. · Provides additional resistance against impacts and punctures

• Formulated with additives that prevents and delay the apparition of algae and molds

ΠII





synthetic-mineral water-repellent



# ± 4 - 5 kg/sqm

### Ready to use synthetic-mineral render with elastic properties ORCEMCR Characteristics:

**UnoFin ACRYLIC FLEXIBLE** 

- Suitable for waterproofing and decorating external walls.
- With elastic and deformable properties.
- · Waterproof finish.

± 2 - 3 kg/sqm

Characteristics:

of molds and algae.

± 2 - 3 kg/sqm

render

facades.

**UnoFin ACRYLIC SILICATO** 

- Decorative finish for the WalAce® System.
- · Formulated with additives capable of preventing
- and delaying the appearance of molds and algae.

20 ka bucket

Ready to use highly breathable synthetic-mineral

Waterproofing and decoration of all types of

· Highly breathable and formulated with additives

12 kg bucket

capable of preventing and delaying the appearance

• Decorative coating in WalAce® System.

· Ideal for the rehabilitation of facades.

### **UnoFin ACRYLIC SILOXANO** Ready to use



· Waterproofing and decoration of all types of facades.

 Decorative coating for the WalAce<sup>®</sup> System. · Formulated with additives capable of preventing and delaying the appearance of molds and algae. Incorporates hydrophobic properties that prevent the temporary absorption of moisture and reduces the dirtiness caused by it.

ΠII ± 2 - 3 kg/sqm



# **UnoFin ACRYLIC SILICONA**



Ready to synthetic-mineral waterproofing render Characteristics:

 Waterproofing and decoration of all types of facades. • Decorative coating in WalAce® System. Highly breathable and formulated with additives capable of preventing and delaying the appearance of molds and algae.

ΠH





± 2 - 3 kg/sqm

25 kg bucket

Range of colours (on request)





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# WalAce EIFS system

# Pidilite Puma

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# A JOINT VENTURE

