A GUIDE TO CHOOSING THE RIGHT *LIME*-BASED PRODUCTS FOR RESTORING MASONRY

MAPEI®

ADHESIVES · SEALANTS · CHEMICAL PRODUCTS FOR BUILDING
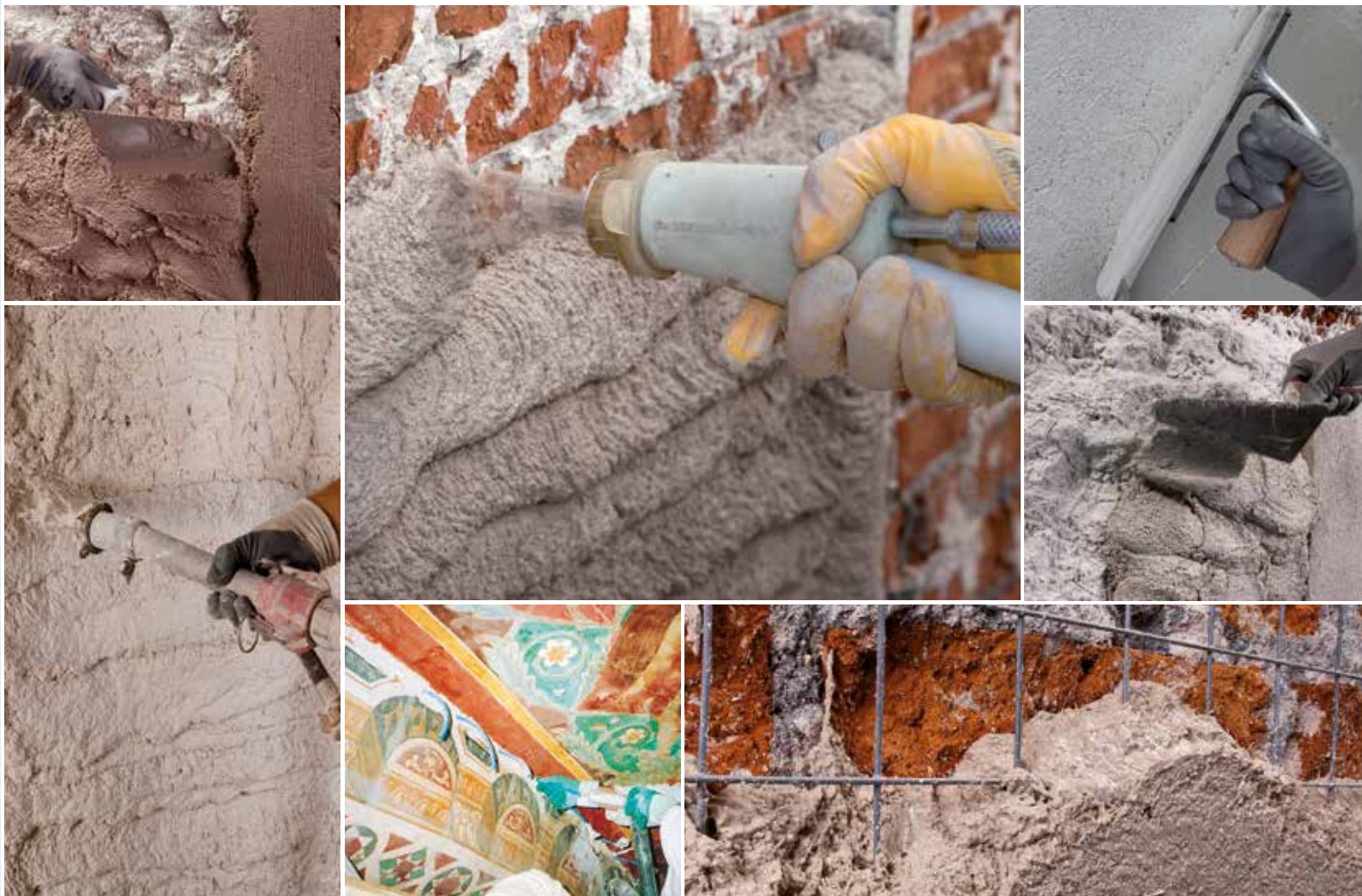
Mape-Antique Range

A guide to choosing the right LIME-based products and systems for restoring masonry

To meet the latest requirements of the modern design and construction sectors, Mapei has a complete range of **lime**-based products, **cement-free**, available which combine ease of use with innovative performance characteristics. *Mape-Antique* is the ideal range for restructuring, restoring, dehumidifying and rendering buildings using eco-sustainable systems, and is suitable for both new build and existing masonry, including listed buildings and those of historical or artistic interest.

The advantages of choosing *Mape-Antique*:

- Eco-sustainable
- Certified
- Lime-based
- Cement-free
- Easy to apply
- High performance characteristics
- Transpirant
- Healthy surroundings

Tradition meets innovation

Mape-Antique rediscovers and exalts the performance of lime in combination with natural pozzolan and terracotta in formulations with completely original characteristics.

The products in the *Mape-Antique* range have physical and mechanical characteristics similar to those of masonry and rendering mortars used in the past, making them more compatible with any type of structure. At the same time, they are chemically and physically resistant particularly to the aggressive actions of external elements, such as those produced by the surrounding environment, and to internal elements, such as soluble salts and humidity.

Most of the products in the *Mape-Antique* range are highly transpirant and porous, with a much higher capacity to encourage the evaporation of water from the masonry compared with traditional cementitious or lime-cement rendering mortars. This process allows damp structures to dry and provide healthier, more comfortable surroundings.

EMICODE marking certification

Characteristic product details

Colours available

CE Marking

Reference standard

Type and classification of the product

Helps to gain credits for LEED certification of buildings

Identifies the type of substrate (masonry) on which the product may be applied

Product advantages

With diagrams to identify:
- where to apply the product
- how to apply the product
- application temperature range
- amount of water required
- min and max applicable thickness
- workability time

Quantity

Mapei bags have a lot to say for themselves

Mapei pays attention to every aspect that helps a more professional, efficient exchange of information: which is why the packaging of the products is particularly important, with pictograms containing the most useful information for more correct, reliable use.

Mapei system, complete with finishing products

Mapei finishing products: working in synergy with the *Mape-Antique* restoration range

Mapei's finishing products, which may be used in total synergy with the entire range of *Mape-Antique* products, provide a "complete system" of renders and finishes products available in the true sense of the word: primers, coloured basecoats and fillers and coloured silicate and siloxane paints and coating products.

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Mape-Antique range: ideal for designers, easy and precise for those who use it

The characteristics of the *Mape-Antique* range of products, and the way they integrate to form a complete system for the restoration of masonry buildings, are an answer to the most demanding expectations of designers and users alike, and contribute to the well-being of both existing and new construction. The variety of *Mape-Antique* products available provide a precise method to tackle any type of problem, with targeted performance characteristics which always comply with specifications and certification regarding quality and eco-sustainability.
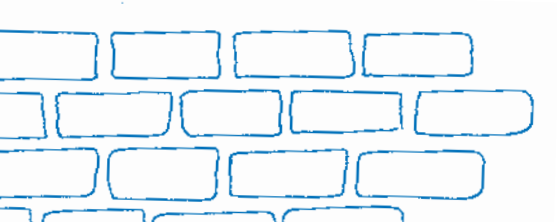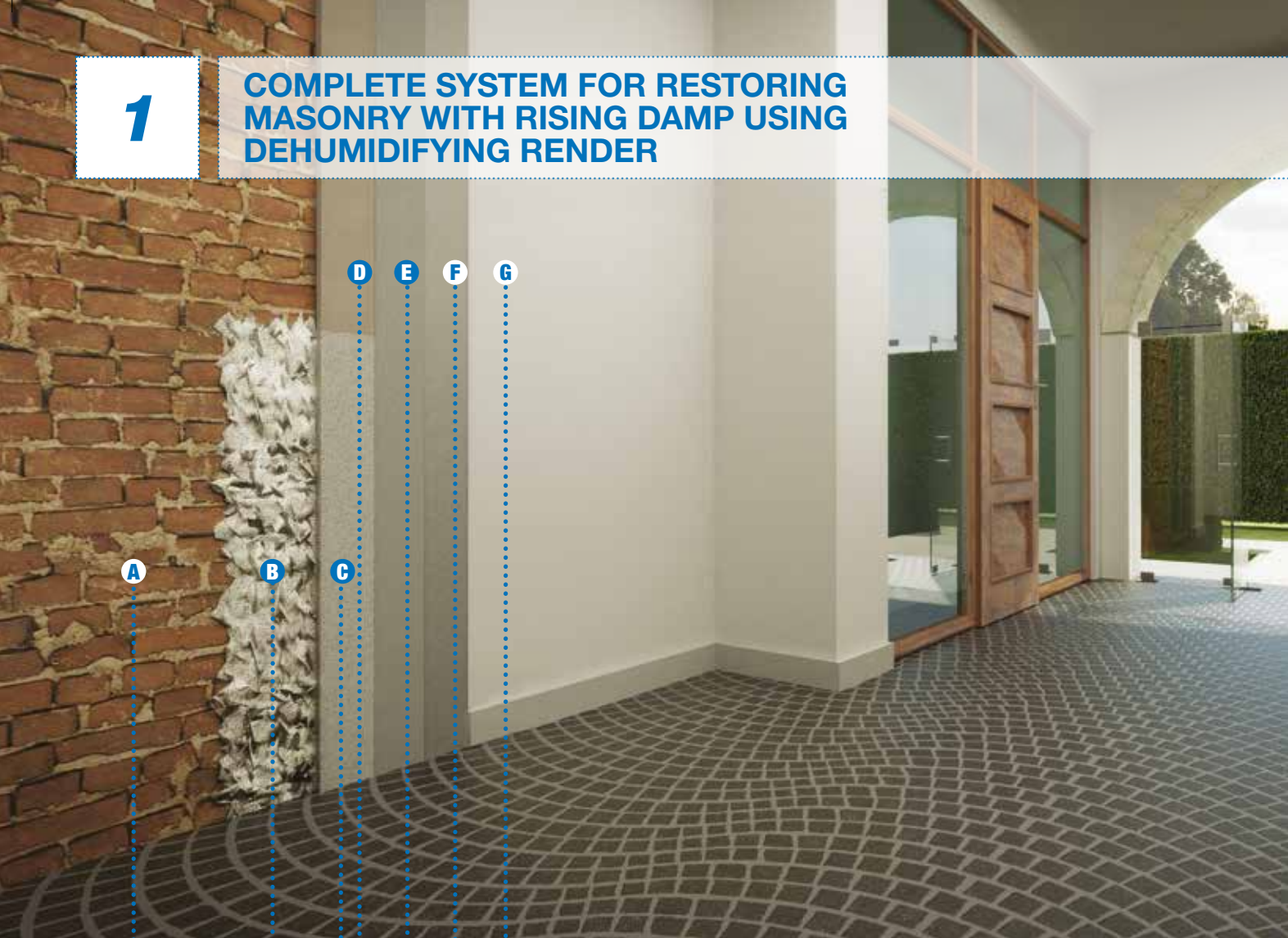
Mape-Antique range: properties

- Similar mechanical strength to the one of traditional hydrated lime and hydraulic lime-based systems.
- Elastic and mechanical properties compatible with the buildings existing materials.
- Similar workability to the highest quality hydrated lime-based systems.
- Highly transpirant and porous, with the capacity to eliminate the risk of condensation forming on the surface, meaning healthier, more comfortable surroundings.
- High resistance to soluble salts thanks to the chemical reaction between the lime and the Eco-Pozzolan, which "consumes" any "free lime" very quickly.
- No alkali-aggregate reaction.
- Negligible thermal conductivity due to the low level of "free lime", which also eliminates the formation of efflorescence.
- May be pigmented on site with coloured powders or oxides.

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A	B	C	D	E	F	G
Brickwork masonry	Scratch-coat mortar	Dehumidifying render	Transpirant render	Coarse texture plaster	Silicate undercoat	Silicate paint

Application of dehumidifying render

Mape-Antique Rinzaffo
Scratch-coat mortar (approx. 5 mm thick)

Mape-Antique MC
Dehumidifying render (applied by trowel)
(≥ 20 mm thick)

Or

Mape-Antique MC Macchina
Dehumidifying render (applied with a rendering machine)
(≥ 20 mm thick)

Application of transpirant render above the damp area
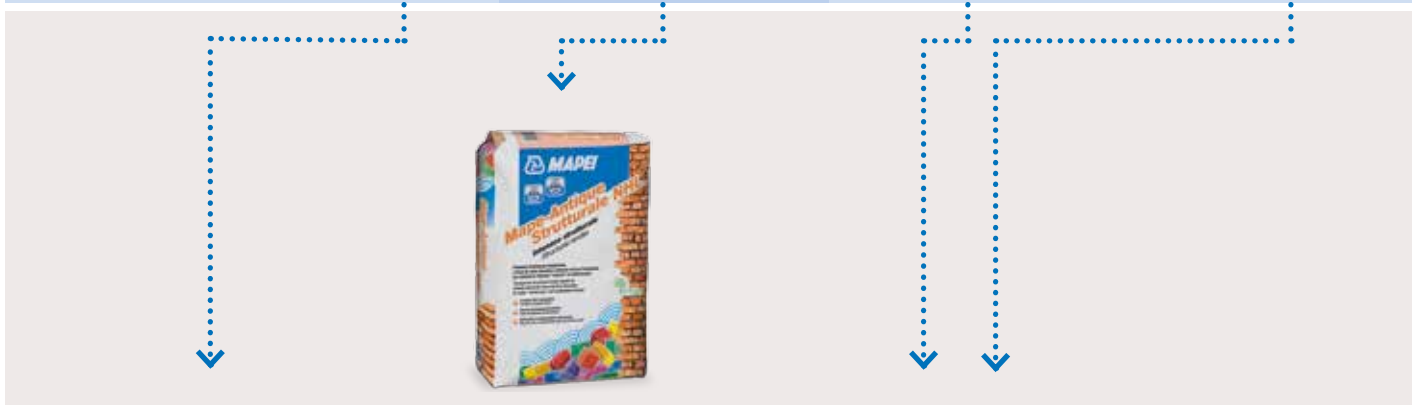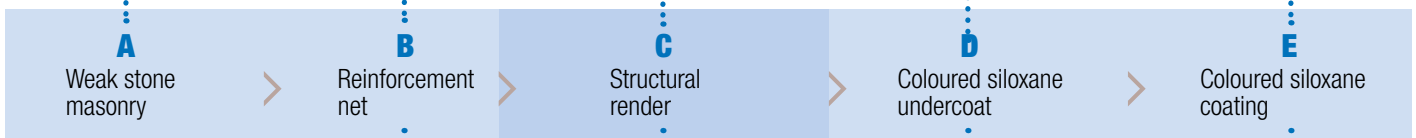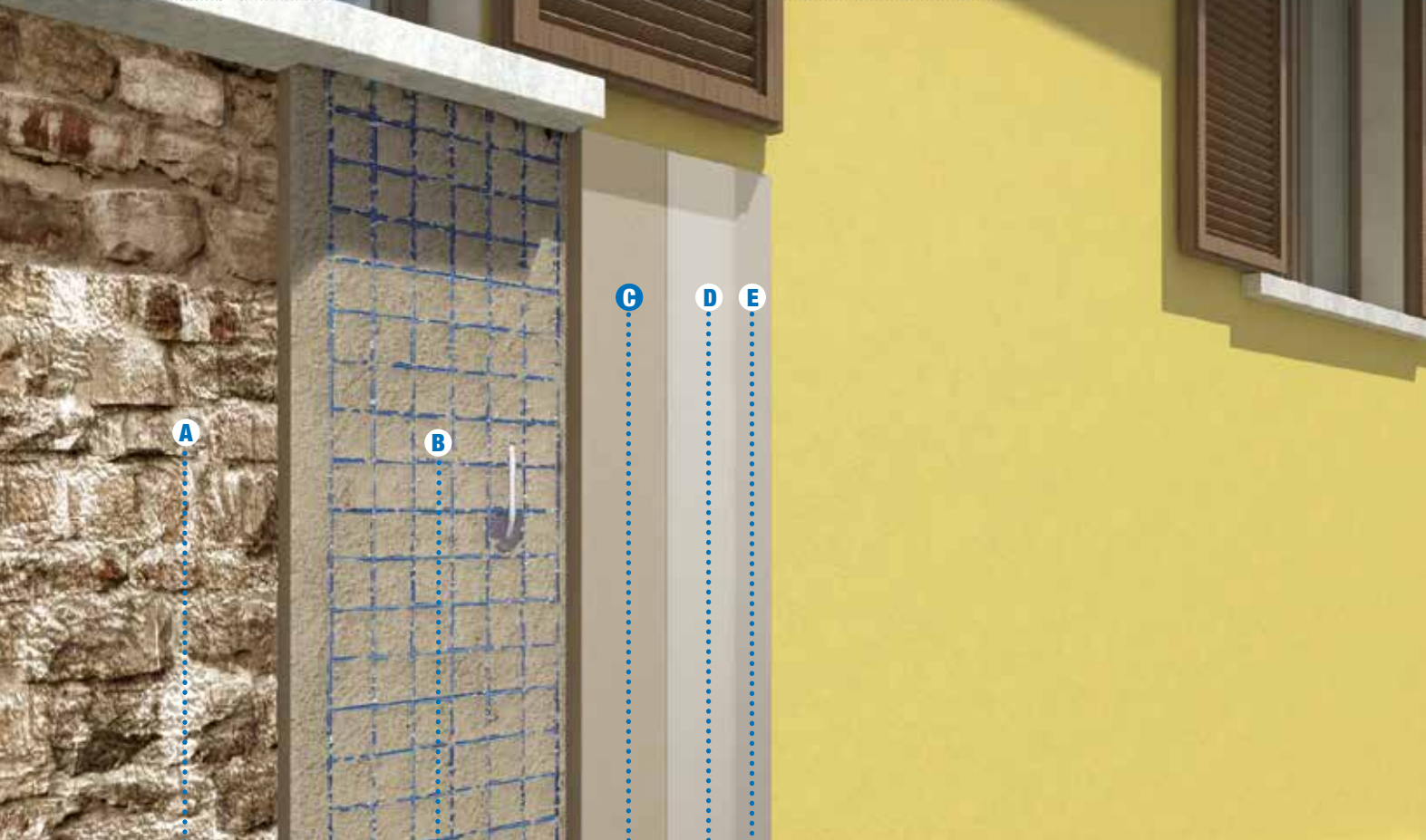
Mape-Antique Intonaco NHL
Transpirant render

Skim coat on the surfaces

Mape-Antique FC Grosso
Large-texture render
(approx. 2 mm thick)

Application of coloured finishing coat

Silexcolor Primer
Silicate primer

Silexcolor Paint
Silicate paint

Or

Silancolor Primer
Siloxane primer

Silancolor Paint
Siloxane paint

A		B		C		D		E
Weak stone masonry	>	Reinforcement net	>	Structural render	>	Coloured siloxane undercoat	>	Coloured siloxane coating

Mapenet EM 40
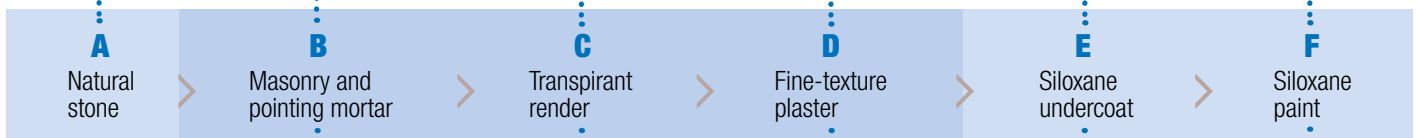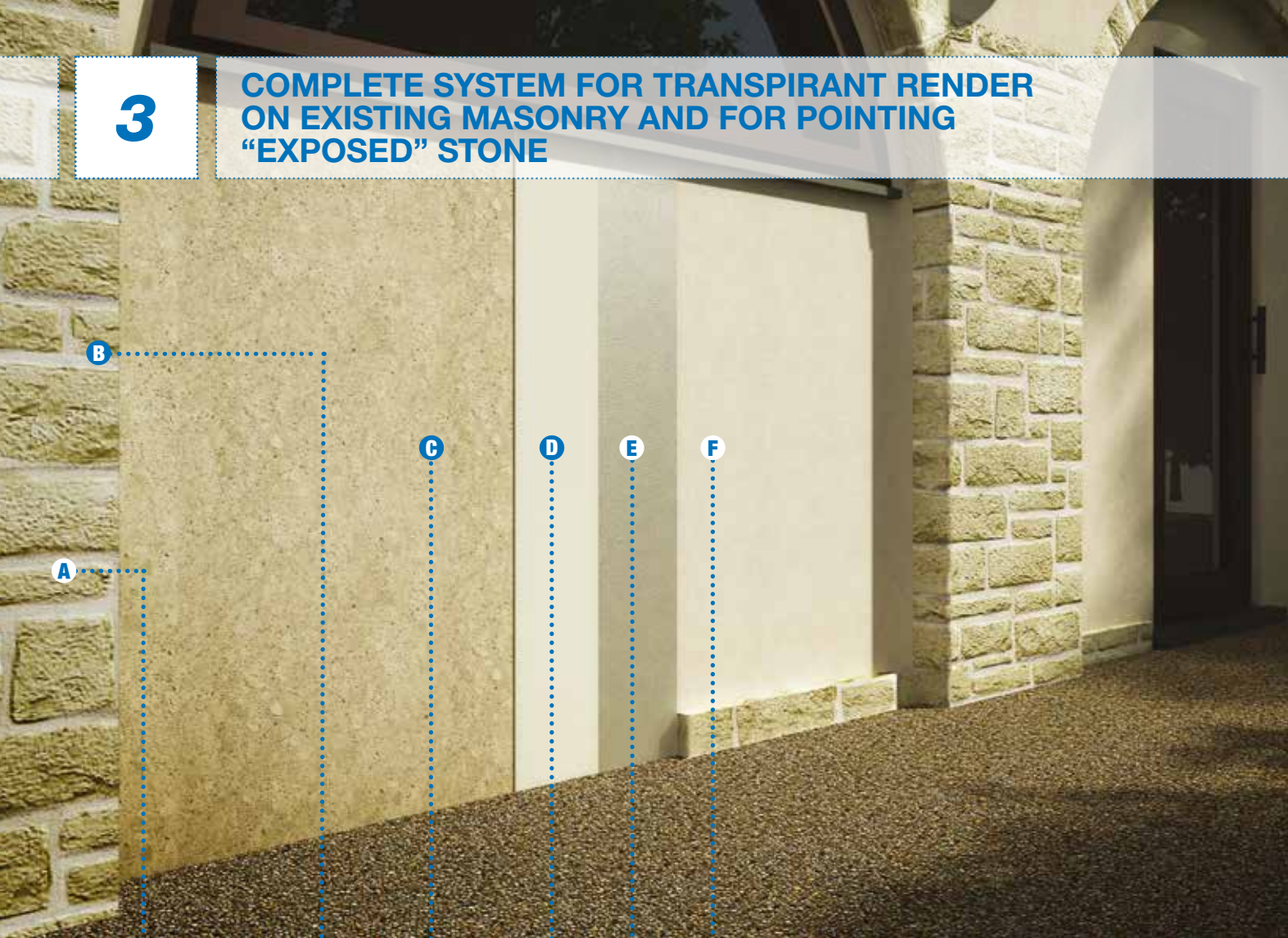Structural glass fibre mesh
Or
Zinc-plated mesh

Application of "reinforced" structural render
Mape-Antique Strutturale NHL
Structural render

Application of coloured finishing coat
Silancolor Base Coat
Coloured siloxane undercoat
Silancolor Tonachino
Coloured siloxane coating

Or
Silexcolor Base Coat
Coloured silicate undercoat
Silexcolor Tonachino
Coloured silicate coating

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A	B	C	D	E	F
Natural stone	Masonry and pointing mortar	Transpirant render	Fine-texture plaster	Siloxane undercoat	Siloxane paint

Pointing an "exposed" stone wall
Mape-Antique Allettamento
Masonry and pointing mortar

Application of transpirant render
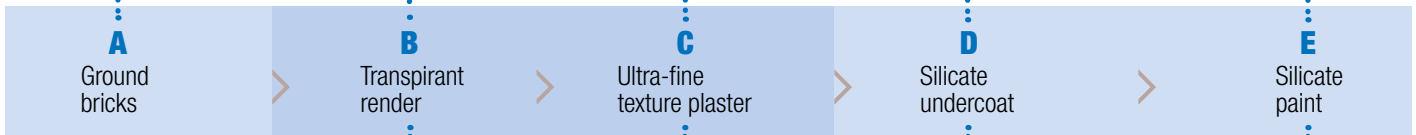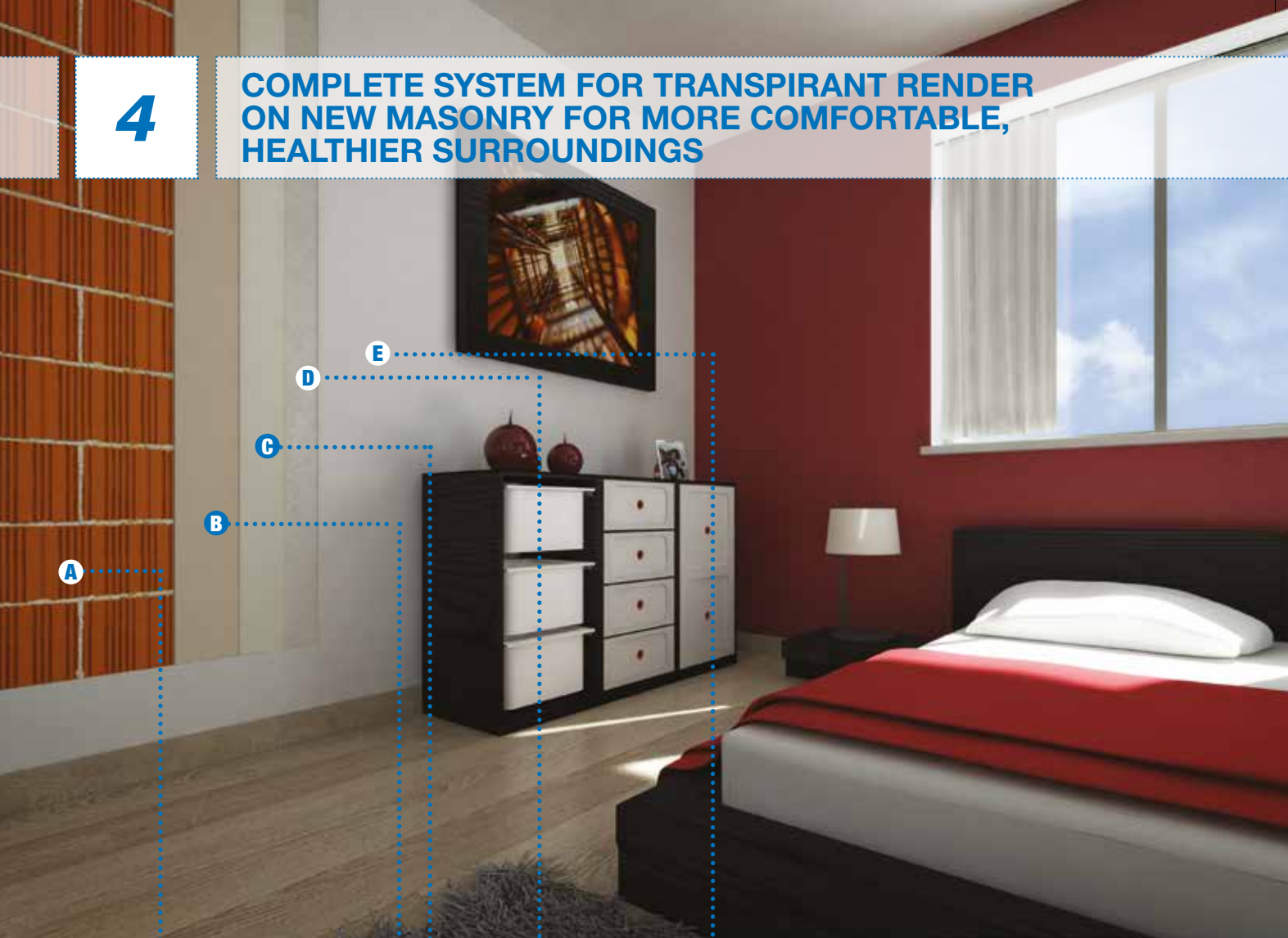**Mape-Antique Intonaco NHL**
Transpirant render

Skim coat on the surfaces
Mape-Antique FC Civile
Fine-texture render
(approx. 2 mm thick)

Application of coloured finishing coat
Silancolor Primer
Siloxane primer

Silancolor Paint
Siloxane paint

Or

Silexcolor Primer
Silicate primer

Silexcolor Paint
Silicate paint

COMPLETE SYSTEM FOR TRANSPIRANT RENDER ON NEW MASONRY FOR MORE COMFORTABLE, HEALTHIER SURROUNDINGS

A	B	C	D	E
Ground bricks	Transpirant render	Ultra-fine texture plaster	Silicate undercoat	Silicate paint

Application of transpirant render
Mape-Antique Intonaco NHL
Transpirant render

Skim coat on the surfaces
Mape-Antique FC Ultrafine
Ultra-fine texture render
(approx. 1 mm thick)

Application of coloured finishing coat
Silexcolor Primer
Silicate primer

Silexcolor Paint
Silicate paint

Or

Silancolor Primer
Siloxane primer

Silancolor Paint
Siloxane paint

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MORTAR FOR TRANSPIRANT AND STRUCTURAL RENDER

Mape-Antique Intonaco NHL
▶ Transpirant base render based on natural hydraulic lime and Eco-Pozzolan, for application on existing masonry, including that of historical interest, and on new construction

Mape-Antique Strutturale NHL
▶ High-performance mortar for transpirant render and masonry work, based on natural hydraulic lime and Eco-Pozzolan, particularly suitable for making "reinforced" and installation mortar

MASONRY MORTAR

Mape-Antique Colabile
▶ Salt-resistant, hi-flow, masonry mortar, based on natural hydraulic lime and Eco-Pozzolan, for reconditioning and consolidating masonry

Mape-Antique Allettamento
▶ Salt-resistant masonry mortar, based on natural hydraulic lime and Eco-Pozzolan, for installation layers and pointing on "natural finish" masonry

Mape-Antique Strutturale NHL
▶ High-performance mortar for transpirant render and masonry work, based on natural hydraulic lime and Eco-Pozzolan, particularly suitable for making "reinforced" and installation mortar
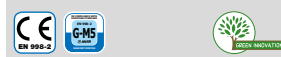
SKIMMING MORTAR

Mape-Antique FC Ultrafine
▶ Salt-resistant, transpirant ultra-fine texture skimming mortar, based on lime and Eco-Pozzolan, for a smooth finish on render

Mape-Antique FC Civile
▶ Salt-resistant, transpirant fine-texture skimming mortar, based on lime and Eco-Pozzolan, for a natural finish on render

WHITE

BRICK-COLOURED

Mape-Antique FC Grosso
▶ Salt-resistant, transpirant large-texture skimming mortar, based on lime and Eco-Pozzolan, for a rough finish on render

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INJECTION SLURRY

Mape-Antique I

▶ Super-fluid, salt-resistant, fillerized hydraulic binder, based on lime and Eco-Pozzolan, for making injection slurries for consolidating masonry

Mape-Antique I-15

▶ Salt-resistant, fillerized hydraulic binder, based on lime and Eco-Pozzolan, for making highly-fluid injection slurry for consolidating masonry

Mape-Antique F21

▶ Super-fluid, salt-resistant, fillerized hydraulic binder, based on lime and Eco-Pozzolan, for making injection slurries for consolidating masonry and render, including the frescoed one

MORTAR FOR DEHUMIDIFYING RENDER

Mape-Antique Rinzaffo

▶ Salt-resistant, transpirant scratch-coat mortar, based on lime and Eco-Pozzolan, used as first layer when applying dehumidifying, transpirant and structural renders

Mape-Antique CC

▶ Macroporous, salt-resistant dehumidifying render, based on lime and Eco-Pozzolan, for restoring old masonry, including on buildings of historical interest

BRICK-COLOURED

Mape-Antique MC

▶ Macroporous, salt-resistant dehumidifying render, based on lime and Eco-Pozzolan, for restoring old masonry, including on buildings of historical interest

WHITE

Mape-Antique MC Macchina

▶ Macroporous, salt-resistant dehumidifying render, based on lime and Eco-Pozzolan, for restoring old masonry, including on buildings of historical interest

WHITE

BINDER FOR MAKING DEHUMIDIFYING RENDER AND MASONRY MORTAR

Mape-Antique LC

▶ Salt-resistant, hydraulic binder based on lime and Eco-Pozzolan, to be mixed with aggregates in various grain sizes to make dehumidifying renders and masonry mortars

PRODUCTS **SELECTION CHART**

Legend:
- Ideal (blue)
- Possible (grey)

PROBLEMS → / Products ↓	Consolidating "rubble masonry" and masonry in general where there are internal cracks, gaps and cavities by injecting slurries	Reconditioning and consolidating "rubble masonry" and masonry in general by casting or pumping hi-flow mortars	Consolidating foundation elements, pillars, vaulted roofs and arches by injecting slurries	Reconditioning and consolidating foundations, pillars, vaults and arches by casting hi-flow mortars	Consolidating structures with frescoes or elements of particular historical and artistic interest by injecting slurries	Restoring the adhesion between masonry substrate and render, including the frescoed one by injecting slurries	Consolidating cane-mesh vault injecting slurries	"Stitching" fractures, wall bays, angle joints, etc.	"Touching-up" and "plumbing" operations	Scratch-coats on weak and/or porous masonry before applying transpirant or structural render
Mape-Antique I — Super-fluid injection slurry	Ideal		Ideal					Possible (+ steel rods MAPEROD or CARBOTUBE)		
Mape-Antique I-15 — Super-fluid injection slurry	Ideal		Ideal					Possible (+ steel rods MAPEROD or CARBOTUBE)		
Mape-Antique F21 — Super-fluid injection slurry	Possible		Possible		Ideal	Ideal	Ideal	Possible (+ steel rods MAPEROD or CARBOTUBE)		
Mape-Antique LC — Binder for mortar									Ideal (+ aggregates)	
Mape-Antique Rinzaffo — Scratch-coat mortar										Ideal
Mape-Antique CC — Dehumidifying render									Possible	
Mape-Antique MC — Dehumidifying render									Possible	
Mape-Antique MC Macchina — Dehumidifying render										
Mape-Antique Intonaco NHL — Transpirant render										
Mape-Antique Strutturale NHL — Structural render									Possible	
Mape-Antique FC Ultrafine — Ultra fine-grained texture plaster										
Mape-Antique FC Civile — Fine-grained texture plaster										
Mape-Antique FC Grosso — Coarse texture plaster										
Mape-Antique Colabile — Hi-flow masonry mortar		Ideal		Ideal						
Mape-Antique Allettamento — Masonry and pointing mortar									Ideal	

Before applying dehumidifying render (made from **Mape-Antique LC** mixed with aggregates, **Mape-Antique CC**, **Mape-Antique MC** or **Mape-Antique MC Macchina**), always apply a layer of **Mape-Antique Rinzaffo**, around 5 mm thick

Site-mixed dehumidifying render with locally-sourced aggregates	Application of dehumidifying render	Application of transpirant render	Application of "reinforced" structural render	Skimming dehumidifying, transpirant and structural render	Building and/or rebuilding facing walls with site-mixed masonry mortar with locally-sourced aggregates	Building and/or rebuilding facing walls with free-flowing masonry mortar	Building stone, brick tuff and mixed masonry	Pointing masonry joints on "exposed" masonry	Making "reinforced" joints or installation mortar	Evening out external faces of vaulted roofs	Making reinforced "caps" on the external face of vaulted roofs
■ (+ aggregates)					■ (+ aggregates)			■ (+ aggregates)			
■	■										
	■							▪			
	■							▪			
	■										
		■						▪			
		▪	■ (+ MAPENET EM 40 or zinc-plated mesh)				▪		■ (+ steel rod or MAPEROD)	■	■ (+ MAPENET EM 40 or zinc-plated mesh)
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Technical documentation
From the technical area menu you can
view the technical documentation divided
per product lines and type of document.