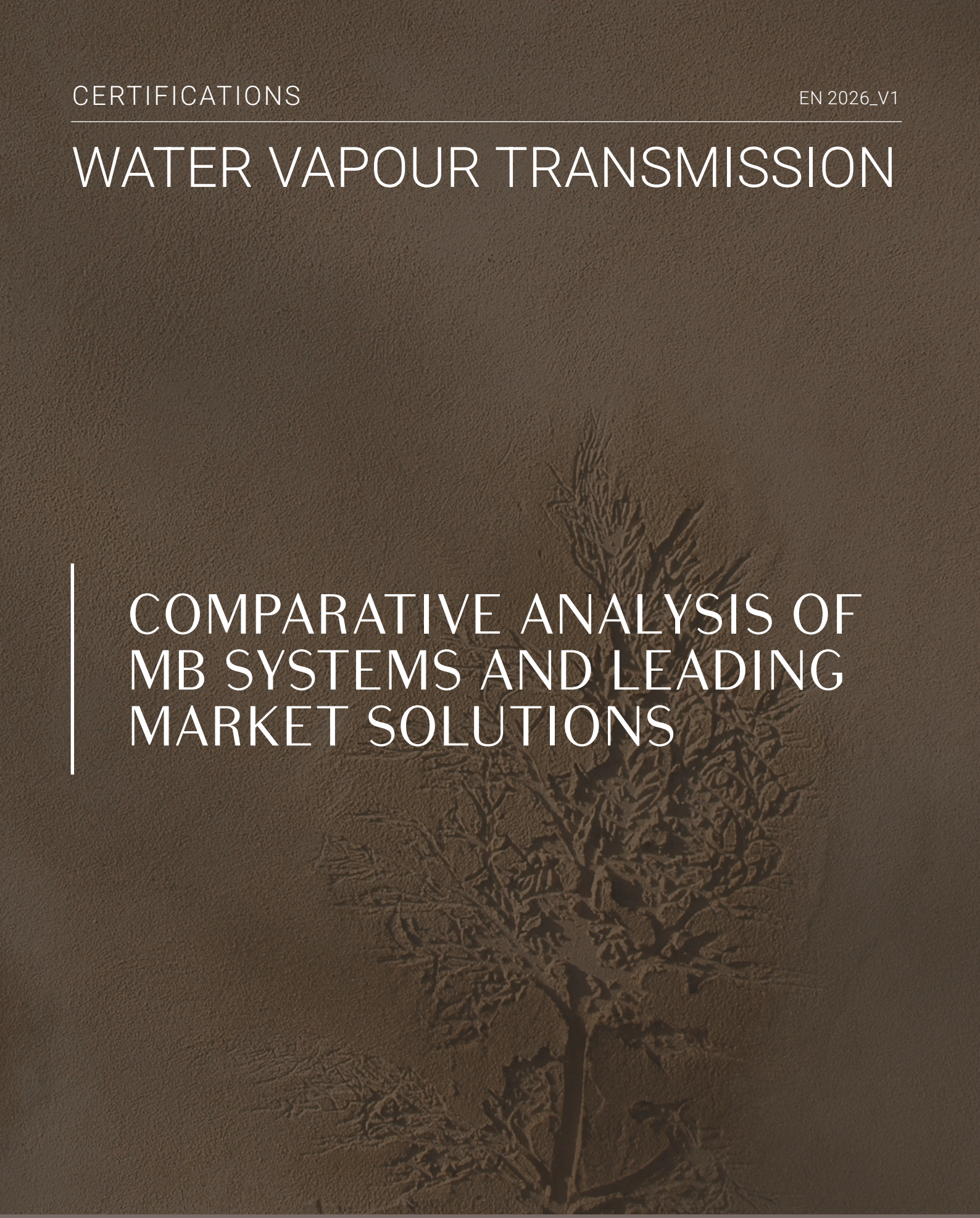
CERTIFICATIONS

EN 2026_V1

WATER VAPOUR TRANSMISSION



COMPARATIVE ANALYSIS OF MB SYSTEMS AND LEADING MARKET SOLUTIONS

MATTEOBRIONI
RAW EARTH

MATTEOBRIONI RESULTS

SYSTEM	Sd [m]**	μ	CLASS
MB TERRA 2 + water* Clay-based powder premix	0,0175	11	**V1**
MB TERRA NATURAL Clay-based decorative finish (5% binder)	0,0346	23	**V1**
MB TERRA PLUS Reinforced clay-based decorative finish (10% binder)	0,0460	31	**V1**
MB MATERIA Mineral decorative finish for exteriors	0,0596	41	**V1**
MB TECNICA Mineral decorative finish for interiors	0,0885	70	**V1**

* MB TERRA 2 + water is not a standard MATTEOBRIONI system. However, it is a viable formulation option.

** The values refer to the system without the final protective treatment. The application of any protective treatments inevitably changes water vapour permeability.

CLASSIFICATION V1 — UNI EN ISO 7783 / EN 1062-1

All MATTEOBRIONI systems considered in the comparison fall within Class V1, the class that identifies systems with **high water vapour permeability**, with Sd < 0,14 m, according to UNI EN ISO 7783.

HOW SHOULD THE DATA BE READ?

The lower the Sd [m] and μ, the higher the finish's water vapour permeability.

KEY

Sd [m]	Equivalent air layer thickness	**μ**	Resistance to vapour diffusion of the material relative to air

BENCHMARK WITH MARKET PRODUCTS

PRODUCT FAMILY	COMMERCIAL REFERENCE	Sd [m]	CLASS
Traditional raw-earth plaster Clay + sand, without polymer binders	Literature data	0,05 - 0,10	**n.d.**
Clay-based mineral fine plaster Clay, air lime, aggregates	Type: Archi+ (Novacolor)	< 0,10	**V1**
Lime + clay mineral coating Lime + clay, organic modification <5%	Type: CalceCruda (Novacolor)	< 0,140	**V1**
Lime-based mineral decorative plaster Lime + mineral aggregates	Type: Travertino Romano (Oikos)	0,024	**V1**
Unsealed mineral microcement Hydraulic/mineral binders + mixing resin	Type: MICROCEMENT (Bericalce)	0,010	**n.d.**
Mineral lime-based marmorino Air lime / hydrated lime	Tipo: Marmorino Classico/ Marmorino KS (Novacolor)	0,080	**V1**

COMPARISON OF RESULTS

01 CLAY WITHOUT ADDED BINDERS

			Sd [m]
ORIGINAL EARTH	**MB TERRA 2 + water** MB system · clays + sands, without added binders	0 — 0,14	**0,0175**
	Raw-earth plaster Clay + sand, without polymers Benchmark: Literature data	0 — 0,14	**0,05 - 0,10**

02 CLAY WITH ADDED BINDERS

			Sd [m]
ORIGINAL EARTH	**MB TERRA NATURAL** MB system · clays + 5% binder	0 — 0,14	**0,0346**
EARTH SYSTEM	**MB TERRA PLUS** MB system · clay + 10% binder	0 — 0,14	**0,0460**

Clay-based mineral fine plaster Clay, air lime, aggregates Benchmark: Archi+ type (Novacolor)		**< 0,10**
Lime + clay coating Organic modification <5% Benchmark: CalceCruda type (Novacolor)		**< 0,14**

03 HYDRAULIC MINERAL BINDERS (LIME, CEMENT...)

		Sd [m]
MINERAL SOLUTION	**MB MATERIA*** MB system · cement + hydrated lime + pozzolana	**0,0596**
MINERAL SOLUTION	**MB TECNICA*** MB system · hydraulic mineral binders + sands	**0,0885**
	Unsealed mineral microcement Hydraulic/mineral binders + resin Benchmark: MICROCEMENT type (Bericalce)	**0,010**
	Decorative lime plaster Lime + mineral aggregates Benchmark: Travertino Romano type (Oikos)	**0,024**
	Mineral lime-based marmorino Air lime/hydrated lime Benchmark: Marmorino Classico type (San Marco)/ Marmorino KS (Novacolor)	**0,080**

* Maximum permeability is not always the sole design objective.
Each MATTEOBRIONI system is formulated according to its intended use, seeking the correct balance between vapour diffusion and surface protection.
MB MATERIA, designed for external surfaces, maintains high water vapour permeability in Class V1, within a system designed to withstand the stresses associated with exterior exposure.
MB TECNICA, developed for technical interiors and areas with high water presence, also maintains Class V1, combining the mineral nature of the coating with a protective system suited to its intended use. Not the maximum possible permeability, therefore, but the correct permeability for the required function.