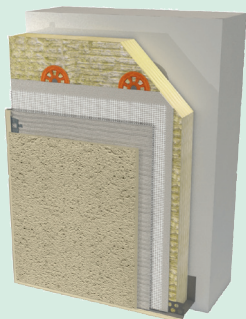


SYSTEM WITH STONE WOOL INSULATION MATERIAL AND MAITÉ BASE COAT

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EXTERNAL WALL INSULATION
PAREXLANKO



PRODUCT FEATURES

- ▶ Excellent fire resistance
- ▶ Large variety of finishing options
- ▶ Impact resistant

REFERENCE DOCUMENTS

- ▶ European Technical Assessment ETA-11/0110
- ▶ Document Technique d'Application 7/14-1582 v.1
- ▶ FD DTU 45.3
- ▶ CSTB specifications 1833: Conditions of use for EWI systems, March 1983
- ▶ CSTB specifications 3035_V2: Technical recommendations, July 2013
- ▶ CSTB specifications 3699_V3: Application rules for seismic areas, March 2014
- ▶ CSTB specifications 3709_V2: Application around exterior doors & windows, June 2015
- ▶ CSTB specifications 3714: Installation of fire protection strips, July 2012

PARISO LR-M

DESCRIPTION

- External Thermal Insulation Composite System (ETICS) intended for concrete or masonry façades.
- System composed of stone wool insulation material anchored to a substrate, a glass-fibre reinforced hydraulic base coat and a wide variety of finishing materials:
 - thick hydraulic render (rustic, knock-down or scraped finish),
 - thin mineral render (floated or smoothed finish),
 - silicone-silicate render (floated finish),
 - organic render (floated, ribbed or pebble-dash finish),
 - silicate paint (smooth finish),
 - sprayed marble aggregates,
 - Brick slips.

USES

- System intended for concrete or masonry façades (bare or covered), for new build or renovation work.
- For renovation purposes, **PARISO LR-M** system can be applied to an existing EWI system with EPS or stone wool insulation material.
- **PARISO LR-M** system is authorized for use on high-rise buildings (public access buildings over 28m and accommodation buildings > 50 m) except when finished with **GRANILANE***.
- The use of brick slips is restricted to 3-storey buildings or less (with a maximum height of 9 m). Above this height, brick slips may only be used for certain limited areas of the façade (loggias, window surrounds, etc..).
- Please refer to the applicable building regulations (e.g. DTA in France) for full details of conditions for using EWI systems.

COMPONENTS

See table on next page.

INSTRUCTIONS

- Use of **PARISO LR-M** system must comply with the specifications of CSTB guidelines 3035_V2 and 3709_V2 and applicable building regulations (DTA).
- **PARISO LR-M** system is compliant with Technical Instruction n°249 (IT 249) pertaining to building façades without application of a fire protection solution.
- Please also refer to the relevant product Technical Data Sheets.

PERFORMANCE CHARACTERISTICS

Impact resistance, fire resistance, wall types

- Performance will vary according to the chosen finish: **See table on next page.**

Thermal resistance

- Thermal resistance of **PARISO LR-M** increases in line with the thickness of the insulation material. Please refer to the relevant ACERMI certification for further information on the thermal resistance of the material in question (thicknesses ranging from 40 to 260 mm).

Wind resistance

- Stone wool insulation material is only suitable for anchored fixing, not for bonding.
- Wind resistance increases in line with the thickness of the insulation material and the number of wall-plugs used. Insulation material with a thickness of more than 40 mm can be anchored, with a minimum of 4 wall-plugs per panel.
- Please refer to the system's DTA for further information on wind resistance values.

Stability in seismic zones

- For certain finishes and from certain thicknesses upwards specific usage instructions are applicable to **PARISO LR-M** system. Please refer to the system's DTA for further information on these specific instructions.
- In all other cases, **PARISO LR-M** system is suitable for use in seismic zones 1 to 4 on buildings of Occupancy Category I to IV. Seismic zones and occupancy categories are defined in CSTB specifications 3699_V3.

PARISO LR-M

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- (1) Certified by ACERMI
 (2) ETA-certified wall-plugs
 (3) Reinforcement material certified by CSTBat:
 $T \geq 1 - R_a \geq 1 - M = 2 - E \geq 2$
 (4) Optional preliminary application of **SILICANE FOND**
 (5) Mandatory preliminary application of **SILICANE FOND**
 in 100% mix with **SILICANE PEINTURE**
 (6) Mandatory preliminary application of
REVLANE+ RÉGULATEUR
 (7) In cold & damp weather 4 to 8 %
PARITÉ+ ACCÉLÉRATEUR may be added
 (8) Mandatory preliminary application of an additional coat
 of **MAITÉ** before the decorative coating
 (9) Refer to system DTA for information on permissible
 panels

- (1) Minimum reinforcement configuration: ST = single
 standard reinforcement; DT = double standard
 reinforcement; ARS = HP reinforcement + standard
 reinforcement
 (2) Euroclass according to Standard EN 13501-1+A1
 (3) Wall type resulting from application of system, with
 regard to exposure to rain. Wall types XI, XII and XIII are
 defined in CSTB specifications 1833; maximum
 permissible heights for each wall type are defined in
 CSTB specifications 1833 and in FR DTU 45.3

TECHNICAL ASSISTANCE: ParexGroup S.A. will, on request,
 provide information and assistance to companies in relation to the
 specific use of a product. Such assistance shall not be assimilated
 with structural design and conception, nor the compliance of
 substrates, nor as a control of usage rules in force.

TECHNICAL DATA SHEET ISSUED - September 2017

The information provided in this document results from our
 knowledge of the products and our experience. Prior to
 application, customers and users are requested to check that they
 are in possession of the latest version of this document. Please
 check for updates at www.parexlanko.com

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Components

The components of **PARISO LR-M** system are listed below. Please refer to the Technical Data Sheets for each product and the **PAREXLANKO** EWI Components Guide.

Bracing products	MAITÉ: hydraulic mortar - 2.6 to 3.5 kg/m ² COLLE CCP+: hydraulic mortar - 2.6 to 3.5 kg/m ²
Insulation panels (1)	IPLMB: mono-density stone wool, $\lambda = 0.038$ W/m.K, 1200 × 600 mm IPLDD: dual density stone wool, $\lambda = 0.036$ W/m.K, 1200 × 600 mm
Mechanical fixings (2)	IFXV: screw-in wall-plugs, metal screws - 4 to 10 plugs per panel IFXF: hammer-in wall-plugs, metal or plastic nails - 4 to 10 plugs per panel
Base coat	MAITÉ: hydraulic mortar - 5.1 to 8.6 kg/m ²
Standard reinforcement (3)	IAPVC, IAVU: glass fibre mesh ≥ 160 g/m ² - 1.1 m ² /m ²
High-performance reinforcement	IAVR: glass fibre mesh ≥ 700 g/m ² - 1.0 m ² /m ²
Priming products	REVLANE+ RÉGULATEUR: organic regulator - 0.15 to 0.20 kg/m ² SILICANE FOND: silicate regulator - 0.10 to 0.15 kg/m ²
Finish coats	EHI GM/GF: thick hydraulic renders - 14 to 18 kg/m ² CALCIFIN (4): thin mineral render - 1.8 to 2.2 kg/m ² CALCILISSE (4): thin mineral render - 3.0 to 3.4 kg/m ² SILICANE TALOCHÉ FIN (5): silicate render - 1.5 to 2.0 kg/m ² REVLANE+ IGNIFUGÉ TALOCHÉ FIN (6,7): organic render - 2.2 to 2.5 kg/m ² REVLANE+ IGNIFUGÉ TALOCHÉ GROS (6,7): organic render - 2.7 to 3.0 kg/m ² REVLANE+ IGNIFUGÉ RIBBÉ FIN (6,7): organic render - 2.5 to 2.7 kg/m ² REVLANE+ SILOXANÉ IGNIFUGÉ TF (6,7): organic render - 2.2 to 2.5 kg/m ² GRANILANE+ (6): organic render with pebble-dash - 4.5 to 5.0 kg/m ²
Decorative coats (8)	SILICANE PEINTURE (5): silicate paint - 0.4 kg/m ² approx. MARBRI GRANULATS: sprayed marble aggregates - at least 8.0 kg/m ²
Brick slips	Wienerberger, Terreal, Briqueteries du Nord (9)
Accessories	Base rails, corner beads, drip rails, fire protection strips, weatherstripping products ...

Impact resistance, fire resistance, wall types

	IMPACT RESISTANCE (1)			FIRE RESISTANCE	WALL TYPE IN NEW BUILD (3)	
	Non-accessible façades	Private accessible façades	Public accessible façades	Fire reaction class (2)	on uncoated masonry	on coated masonry or concrete
EHI GM/GF	ST	ST	ST	A2 - s1, d0	XII	XIII
REVLANE+ SILOXANÉ IGNIFUGÉ TF	ST	ST	ST	A2 - s2, d0	XII	XIII
REVLANE+ IGNIFUGÉ TALOCHÉ FIN/GROS	ST	ST	ST	A2 - s2, d0	XII	XIII
REVLANE+ IGNIFUGÉ RIBBÉ FIN	ST	ST	ST	A2 - s2, d0	XII	XIII
CALCIFIN	ST	ST	DT	A2 - s1, d0	XII	XIII
CALCILISSE	ST	ST	DT	A2 - s1, d0	XII	XIII
SILICANE TALOCHÉ FIN	ST	ST	-	A2 - s1, d0	XII	XIII
MAITÉ with SILICANE PEINTURE	ST	ST	-	A2 - s1, d0	XII	XIII
GRANILANE+	ST	ST	DT	B - s1, d0	XI	XII
MAITÉ with MARBRI aggregates	ST	ST	ST	A2 - s1, d0	XII	XIII
Brick slips	ST	ST	ST	A2 - s1, d0	XI	XII