TECHNICAL DATA SHEET

MEDITERRI™ HEMP L I M E

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1. Definition and Description

The future construction material is a symbiotic relationship between the oldest plant farmed by humans (hemp) and one of the oldest and most tried-and-tested building materials (natural lime).

Hemp is a plant that grows approximately 50 times quicker than wood; biomass sufficient for a modest single-family home may be grown on one hectare of land in five months.

The combination of loose hemp shives with natural limestone and minerals results in a material that is as hard as stone and resistant to external effects, implying that structures will last for many generations, saving both the environment and money.

Because of its excellent thermal qualities, additional insulation such as polystyrene is unnecessary. Hemp-lime possesses air filtration and moisture regulation capabilities comparable to clay, guaranteeing a healthy living environment and clean air.

The cycle actively saves the environment by absorbing more CO2 than it emits.

2. Characteristics and dimensions

Wall thickness: Custom Thickness

- **Thickness**: 6, 9, 12, 15, 20, 25, 30, and 36 cm

3. Technical specifications

Product range	**60**	**90**	**120**	**150**	**200**	**250**	**300**	**360**
Thickness [mm]	60	90	120	150	200	250	300	360
Dry bulk density [kg/m³]	340	340	340	340	340	340	340	340
Dry thermal resistance [m²K/W]	0,9	1,34	1,79	2,24	3	3,5	4,5	5,4
Thermal resistance 50%RH [m²K/W]	0,85	1,27	1,69	2,11	2,82	3,7	4,23	5
Thermal conductivity λ	0,071	0,071	0,071	0,071	0,071	0,071	0,071	0,071
Equivalent air layer thickness Sd [m]	0,17	0,25	0,34	0,42	0,56	0,7	0,84	1
Phase shift [h] (ISO 13786)	3,9	5,9	7,9	9,8	13,1	16,4	19,7	23,6
Sound reduction index Rw [dB]*	37	38	**39**	40	42	43	44	45
Sound absorption coefficient α	0,85	0,85	0,85	0,85	0,85	0,85	0,85	0,85
Fire resistance * [min]		-	60	-	120	-	-	-

*Masonry wall with redder on one side: **certified value** / extrapolated value

Authentications	**Technical value**
Compressive strength [kPa]	300
Flexural resistance [kPa]	230
Dynamic rigidity module [MPa]	299
Dry thermal conductivity [W/mK]	0.067
Wet thermal conductivity 50%HR [W/mK]	0.07 1
Surface cohesion [kPa]	110
Parallelism of the installation faces - maximum defect [mm]	2.6
Water vapour resistance factor μ [-]	2.8
Acoustic absorption coefficient α [-]	0.85
Reaction to fire (NF EN 13501-1) without render With a non-flammable render	B, S1, d0