

# **PALADIN** – WALL THERMAL INSULATION SYSTEM

Standard

## Definition of the product

The External Thermal Insulation System **PALADIN THERM**, hereinafter referred to as ETICS, is designed and installed in accordance with ETAG004 and European Guideline for the application of ETICS. **PALADIN** is a partial or complete bonded system, Supplementary fixing with anchors may also be used whenever necessary, the ETICS comprises the components define in Table 1.

COMPONENTS	DESCRIPTION	COVERAGE (kg/m <sup>2</sup> )	THICKNESS (mm)
<b>INSULATION PRODUCT</b>	<b>EXPENDED POLYSTYRENE</b> - foam (EPS) panels with 1200 mm x 600 mm and with min. 18kg/m <sup>2</sup> confirming to <b>EN 13163</b> and Min. Class E fire rated <b>EN 1350-1</b> or to <b>ASTM – C578, Table 1 Type VIII.</b>		35 to 50
<b>ADHESIVE</b>	<b>PALADIN THERM</b> – Cement based mortar powder. Confirming to ETAG004 Tests:	3 to 5 (powder)	-
<b>BASE COAT</b>	1- Bond Strength- EPS>0.08 N/mm <sup>2</sup> 2- Bond Strength- Conc.>0.25 N/mm <sup>2</sup> 2- Impact Resistance > 4 Joules 3- Water absorption < 0.5 kg/m <sup>2</sup> .h1/2	4 to 5 (with standard mesh)	4 to 6
<b>REINFORCEMENT</b>	<b>PALADIN GLASS FIBER E_ Glass</b> 1-Standard Impact mesh <b>R 131 A101</b> Strength 2000N/5cm, weight 160g/m <sup>2</sup> . Impact > 4 Jules – ASTM 2486-6 2- Heavy Impact mesh <b>R 275 A101</b> Strength 4000N/5cm, weight 330g/m <sup>2</sup> Impact > 20 Jules – ASTM 2486-6	<b>PALADIN –Glass Fiber R131 &amp; R 275.</b> Manufactured by <b>SAINT-GOBAIN ADFORS</b> Certified to ETAG004 and hold European Technical Approval <b>ETA-13/0392 Certificate</b> EOTA ( <a href="http://www.eota.eu">www.eota.eu</a> )	
<b>ANCHORS</b>	<b>WKRET-MET LTX-10</b>	Holding European Technical Certificate <b>ETA-08/0172</b> ( <a href="http://www.eota.eu">www.eota.eu</a> )	
<b>ANCILLARY MATERIALS</b>	<b>Corner Profile</b> in PVC,glass fiber <b>Drip ledge</b> (As required) <b>Expansion Joint Profile</b> <b>Base Profile</b> (As required)	All the <b>PALADIN</b> Profiles confirming to ETAG 004 with Product Certificate No. 060_025285	
<b>FINISHING SYSTEM</b>	<b>PALADIN Standard Finishing System</b> a-1Coat Acrylic Emulsion Primer b-2Coats fine or medium1.5mmTexture	Finishing texture and based on Client requirement	
<b>PALADIN SYSTEM- Fire surface spread test – ASTM E84</b> 1-Flame Spread Index < 25      2- Smoke Developed Index < 450			
<b>PALADIN WALL THERMAL INSULATION U-Value</b> 1- Standard 200mm Concrete Block      → <b>U - Value 0.59 W/m<sup>2</sup>K</b> 2- Structural Elements (Columns & Beams)      → <b>U - Value 0.61 W/m<sup>2</sup>K</b> <b>EWA Requirement      → U - Value &lt; 0.75 W/m<sup>2</sup>K</b>			
<b>THE PALADIN WALL THERMAL INSULATION MINIMUM SERVICE LIFE GUARANTEE</b>			
<b>THE ETICS SYSTEM</b>	The complete PALADIN- Wall Thermal Insulation System minimum service life Guarantee for 10 Years.		