



PAVUS, a.s.  
Authorized body AO 216, Notified body 1391  
Prosecká 412/74, 190 00 Praha 9 - Prosek  
Decision on Authorization No. 46/2006 dated 22<sup>nd</sup> November 2006

# PRODUCT CERTIFICATE

No. 216/C5a/2009/0147

Issued for

Manufacturer:

Grena a.s., ČSA 540, 390 81 Veselí nad Lužnicí; ID No. 46678832

Place of production:

Grena a.s., ČSA 540, 390 81 Veselí nad Lužnicí

State of product origin:

Czech Republic

Authorized body 216 confirms, pursuant to Article § 5a clause 1 of Government Order No. 163/2002 Coll., which lays down technical requirements for selected construction products, as amended by Government Order No. 312/2005 Coll. (hereinafter referred to as Government Order No. 163/2002 Coll.), that in case of the construction product:

## Horizontal and vertical ventilation duct from Grenamat AL boards thickness: 20 mm, 25 mm, 30 mm, 40 mm, 46 mm, 55 mm

The Authorized body AO 216 has reviewed documents submitted by the Customer, performed the initial type testing of the product specimen, assessed the control method of the products by the Customer and has found out, that this product fulfils the requirements determined by technical regulations that relate to the essential requirements given in the Construction Technical Approval No. S-216/C5a/2009/0147 dated 27<sup>th</sup> October 2009 (herein after referred to as the "CTA").

The Authorized body AO 216 has found out, that the control method of the products by the Customer complies with appropriate technical documentation and ensures that the products introduced to the market meet the requirements laid down in the above-mentioned CTA and comply with the appropriate technical documentation according to Section 4 (3) of the above-mentioned Government Order.

An integral part of this Certificate is the Certification Report No. P-216/C5a/2009/0147 dated 30<sup>th</sup> October 2009, which contains the conclusion of the findings, verifications, test results and general description of the certified product, necessary for its identification.

This certificate remains valid as long as the requirements stated in the Appendix to the CTA referred to hereinabove, or the manufacturing conditions in the factory, or the control method of the products by the Customer, are not significantly modified.

**This certificate replaced and canceled certificate No. 216/C5a/2006/0111 of 18<sup>th</sup> October 2006, issued by AO 216.**

The Authorized Body AO 216 performs at least once in 12 months the surveillance of proper function of the control method of the products by the Customer according to Section §5a of the Government Order No. 163/2002 Coll.

If the Authorized Body AO 216 identifies any failures, it is authorized to cancel or change this certificate.

Prague, 30<sup>th</sup> October 2008



*Jaroslav Dufek*  
Jaroslav Dufek

Managing Director PAVUS, a.s. – AO 216

The assessed characteristics of the certified product are stated on the back page of this certificate.

The back page of certificate No. 216/C5a/2009/0147

The assessed characteristics of the certified product:

Property monitored	Test standard / Method	Thickness of Granamat AL board	Requirement	Findings/ Classification	Conformity Assessment
Fire resistance	ČSN EN 1366-1	Grenamat AL thickness 20 mm	EI 15 to EI 30 (ve ho i↔o)	EI 30 (ve ho i↔o)	Conforms
		Grenamat AL thickness 25 mm	E 15 to E 60 (ve ho i→o) EI 15 to EI 45 (ve ho i→o) EI 15 to EI 30 (ve ho i↔o)	E 60 (ve ho i→o) EI 45 (ve ho i→o) EI 30 (ve ho i↔o)	Conforms
		Grenamat AL thickness 30 mm	EI 15 to EI 45 (ve ho i↔o)	EI 45 (ve ho i↔o)	Conforms
		Grenamat AL thickness 40 mm	EI 15 to EI 60 (ve ho i↔o) S	EI 60 (ve ho i↔o) S	Conforms
		Grenamat AL thickness 46 mm	E 15 to E 120 (ve ho i→o) EI 15 to EI 90 (ve ho o↔i)	E 120 (ve ho i→o) EI 90 (ve ho o↔i)	Conforms
		Grenamat AL thickness 55 mm	EI 15 to EI 120 (ve ho i↔o)	EI 120 (ve ho i↔o)	Conforms
Reaction to fire	EN ISO 1182, ČSN EN ISO 1716		Reaction to fire A1 to F	Reaction to fire A1	Conforms
Bending strength	ČSN EN 310		> 2 MPa	> 2 MPa	Conforms
Compressive strength	ČSN EN 826		1 MPa	1 MPa	Conforms

The CTA No. S-216/C5a/2009/0147 is valid until 31<sup>st</sup> October 2012.



*J. Dufek*  
**Ing. Jaroslav Dufek**  
 Managing Director PAVUS, a.s. – AO 216