



Revision index	Date of implementation
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Product Guideline No.15

Coatings applied by pneumatic spraying of mineral wools with binder

ASSOCIATION POUR LA CERTIFICATION DES MATERIAUX ISOLANTS

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Purpose

This Product Guideline supplements the measures in the General Guidelines.

This Product Guideline concerns thermal insulation coatings applied by pneumatic spraying of products based on mineral wools with binder and adjuvant on the walls or structures of buildings. All surfaces of the walls, structures and ducts not exposed to the weather are concerned.

The finished product¹ is defined by a thickness, a density range and a mode of application defined in the technical file.

The mixture for spraying is composed of mineral wools, binder and adjuvant. It includes at least 50% by weight of mineral wool. It satisfies the technical manufacturing specifications subject to control under the responsibility of the manufacturer².

The products concerned by these regulations must meet the following specifications:

- For mineral wools

Mineral wools are those defined by standard NF B 20-001.

The industrialist manufacturing mineral wool supplies the industrialist manufacturing the mixture for spraying with the following identification parameters:

- Compliance with the European Directive 97/69 CE (amended by EC regulation 1272/2008)
- Humidity level expressed as a percentage/weight
- Oil level expressed as a percentage/weight
- Non-fibrous content expressed as a percentage/weight
- Colour value range according to the L.a.b method
- Packaging in bales, expressed in kg

- For the binders

The binders used are:

- Hydraulic binders including:
 - Common cements compliant with the standard NF EN 197-1
 - Masonry cement compliant with the standard NF EN 413-1
 - Building lime compliant with the standard NF EN 459-1
 - Natural quick-setting cement compliant with the standard NF P 15-314
 - Alumina cement compliant with the standard NF P15-315
- Resin-based binders in aqueous dispersion

¹ Finished product: Product sprayed onto walls.

² In these regulations, the term "manufacturer" is used to refer to the processor of mineral fibres, binder and adjuvant for the purpose of making them into a semi-finished product by a bulk mixture.



Primer and any finishing products must be clearly defined. These specifications must appear in the technical file supplied by the manufacturer to the ACERMI lead member.

Certification of bulk insulation products concerns products leaving the factory and not the product once applied. However, the certified thermal performances indicated on the packaging correspond to the performances likely to be obtained under normal conditions of application, if the application conditions defined in the DTU guideline DTU 27.1 and these regulations are complied with.

N.B.: Products coming under the ETA procedure according to ETAG 018 must provide proof of their CE marking certificate of conformity.

1 Additional elements of the certificate application technical file

The technical file defined in paragraph 2.2 of the General Guidelines does not require any additional elements.

- Proof of fitness for use: Valid favourable Technical Assessment, Technical Application Document or type A ATE_x, Pass'innovation.

2 Characteristics which can be certified

The characteristics likely to be certified according to the characteristics listed below:

- Thermal conductivity
- Thermal resistance
- Reaction to fire
- Adhesion/Cohesion
- Acoustic absorption
- Specific heat capacity

3 Methods of determination of the certified characteristics by the pilot laboratories

The test methods applied by the pilot laboratory for each of the characteristics are defined below.



The test specimens are prepared at the holder's factory. They are produced using a spraying machine on a support identified beforehand.

3.1 Thermal conductivity

The measures in Technical Specification No.1 apply.

3.2 Thermal resistance

Certified thermal resistance is defined according to the procedures in Technical Specification No.2.

3.3 Reaction to fire

The measures in Technical Specification No.3 apply.

3.4 Adhesion and Cohesion

Adhesion and cohesion are always certified.

The adhesion and cohesion coefficient must be determined according to appendices F and I of standard NF P 15-202-1 (DTU 27.1).

3.5 Acoustic absorption

The acoustic absorption coefficient may be certified.

Determination of the acoustic absorption coefficient according to standard EN ISO354/A1: cf § 4.3.11 of standard NF EN 13162.

The minimum level of acoustic absorption must be determined in accordance with Technical Specification No.9.

3.6 Specific heat capacity

The measures in Technical Specification No.10 apply.



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4 Factory production control

Production control in the production unit, performed on test specimens in each density range claimed, between the minimum and maximum minus 20 kg/m³, satisfies the requirements below.

Parameter	Direct tests	Test method	Indirect tests	
			Test method	frequency
Density of the sprayed product*	Once a week	EN 1602	Manufacturer method	Once every 5 hours
Apparent density of the bulk product	Once every 5 hours	----	----	----
Thermal conductivity and resistance in the dry state* (matured and dried)	Once a week	EN 12 667 or EN 12939	Manufacturer method	-----
Humidity level of the product in the bag	Once a week	----	----	----
Adhesion/Cohesion	Once a month	EGOLF method (appendices F and I of standard NF P 15-202-1 (DTU 27.1))	----	----
Weight in the bags	Once an hour	----	----	----
Acoustic absorption	Type testing	Technical Specification No.9	-	-

* With a correlation with the 23°C and 50% RH state.

N.B.: The quantity of material in a sales unit must not be less than the nominal weight of the sales unit.

In addition to these measures, for the following certified characteristics for the purposes of these regulations and described in detail in the various Technical Specifications, the procedures (methods and minimum test frequencies) provided for in this Technical Specification apply:

- Reaction to fire



5 Tests performed during follow-up

For characteristics requiring monitoring, random tests are conducted at least once a year according to the table below when relevant to the product in question.

The tests are conducted in accordance with the measures in paragraph 2, supplemented if applicable by the procedures described in the Technical Specifications corresponding to the characteristics tested.

Characteristics (Paragraphe Erreur ! Source du renvoi introuvable.)	Test methods	Place of performance of the tests
Thermal resistance – Thermal conductivity	NF EN 12667 NF EN 12939	Pilot laboratory
Weight of the sales unit		Production unit and pilot laboratory
Reaction to fire ¹	NF EN 13501-1	Pilot laboratory
Other characteristics or criteria	Test methods	Place of performance of the tests
Density	NF EN 1602	Production unit and Pilot laboratory for blowing

The certifying body may also perform verification tests to verify other characteristics not listed in the table below, in particular if there is any doubt as to the compliance of the certified values.

Random testing is performed for each line in the case of products in Euroclass A, B or C, once every two years for each plant, for a given group of products and according to a sampling plan drawn up by the lead member in collaboration with the industrial manufacturer concerned, unless the manufacturer supplies a test report produced by other laboratories, with whom recognition agreements have been made or by notified laboratories after assessment of the test report.

¹ The reaction to fire classification is monitored by conducting random tests once every two years.



6 Certificate maintenance rules

The certificate maintenance rules are defined in paragraph 4 of the General Guidelines.

Based on the results of the tests performed by the pilot body, product compliance is verified:

- For density, according to the specifications of the technical file;
- For the thermal performance according to the procedures in Technical Specification E:
 - Paragraph 2.1 for one density range;
 - Paragraph 2.2 for several density ranges;
- For the following characteristics certified under these regulations and described in detail in the various Technical Specifications, according to the conditions stipulated in these Technical Specifications:
 - Reaction to fire

7 Marking Rules

The marking rules laid out in Technical Specification D apply.

In particular, the information label complies with the measures in paragraph 3.3 of this Technical Specification.