LNE Products – FIRE/PS Review No. 7 - November 2024



CERTIFICATION OF THE FIRE BEHAVIOUR OF THERMAL INSULATION MATERIALS

RAW MATERIALS USED TO MANUFACTURE EXPANDED POLYSTYRENE (EPS)

EXTRUDED POLYSTYRENE FOAM (XPS)

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1. SCOPE

The products covered by this reference document concern:

- raw materials used to manufacture expanded polystyrene (EPS), and;
- extruded polystyrene foam (XPS).

The aim of the certification is to show that raw materials certified for EPS, or products certified for XPS, meet the regulatory requirements concerning fire behaviour.

The regulatory requirements applicable to these products include the following:

A- Extract from *Instruction Technique* No. 249 on facades (French Ministerial Order of 24 May 2010 concerning the approval of various provisions that complement and modify the safety regulations to counter the risk of fire and panic in buildings open to the public):

"5.1. Insulation systems without an airspace"

Systems that use insulation materials of at least A2-s3,d0 class do not require any specific building provisions in terms of fire safety. When the insulation material is not at least A2-s3,d0 class, the provisions described hereinafter apply.

Expanded or extruded polystyrene insulation materials have a CE marking and Euroclass E. Moreover, the manufacturer has to prove that flame retardant treatment is being monitored on the manufacturing site of the raw material with a performance level equal to D euroclass for the 60 mm regular thickness of expanded polystyrene or for the 40 mm regular thickness of extruded polystyrene. A third-party certification is considered as a sufficient proof for this characteristic. These provisions also apply to composite sandwich-type panels comprising a board of expanded or extruded polystyrene placed between two wood wool boards classified as B-s1,d0."

B- Extract from several ministerial orders of 15 April 2010 on the general requirements applicable to various buildings classified under classes 1510, 1530, 2662 and 2663 in the list of classified installations for environmental protection (ICPE):

"2.2.6. Structure of buildings"

[…]

- as concerns thermal insulation materials (or insulating material if there is only one):

– either they are class A2-s1,d0;

- or the "support + insulating material" system is class B-s1,d0 and meets one of the following conditions:

[…]

- the thermal insulation is composed of several layers. The first layer (in contact with the roof boarding) is at least 30 mm thick, has a density of more than 110 kg/m3, is mechanically secured, and has a HHV less than or equal to 8.4 MJ/kg. The upper layers, meanwhile, are composed of class D-s3,d2 insulating materials that are 60 mm thick. [...]"

C- Extract from the *Guide technique de l'Isolation par l'intérieur* (Technical guide for insulation from the inside), Version 2016 applicable by the Ministerial Order of 7 August 2019 modifying the Ministerial Order of 31 January 1986 on fire protection for homes:

"6. Exceptions

[...]

A protective screen is not necessary for the following insulating materials when used in the ceiling of garages and basements of detached/semi-detached houses with one or two floors above ground level.

• Flame retardant extruded polystyrene boards (XPS) as per NF EN 13164, flame retardant expanded polystyrene boards (EPS) as per NF EN 13163 and interjoist fillers made of flame retardant expanded polystyrene (EPS) as per standards NF EN 15037-4 or NF EN 15037-55.

These insulating materials can come with the cladding listed beforehand in this paragraph." [...]

"Footnote (see page 5/14)

5: Expanded or extruded polystyrene insulating materials and interjoist fillers have the CE marking and Euroclass E. In addition, the manufacturer for these products must be able to prove that its raw material manufacturer (expandable polystyrene) carries out flame retardant monitoring. The level of performance must be equivalent to Euroclass D for standard 60 mm thickness boards for expanded polystyrene (EPS) or 40 mm for extruded polystyrene (XPS). A third-party certification is considered as a sufficient proof for this characteristic.

D- Extract from the Official Journal of the French Republic (Journal Officiel de la République Française) of October 13, 2022 modifying the decree of September 28, 2021 applicable since November 1, 2022 relating to controls within the framework of the energy saving certificate system (ESC):

§14. [...] "Polystyrene-based materials used for thermal insulation on the underside of low floors in cellars and garages of residential houses justify:

– a CE marking;

- a fire classification corresponding to at least Euroclass E;

– proof of fireproofing monitoring by the producer of the raw material with a level of performance equivalent to Euroclass D for the conventional thickness of 60 mm for expanded polystyrene (EPS) or 40 mm for extruded polystyrene (XPS);

- monitoring of the production of the raw material manufacturer on the fireproofing aspect. In the absence of any of the above elements, the operation is classified as unsatisfactory. » As an option, this certification also covers Class E as per Annex E of standard EN 13163:

The products covered by this option in the reference document concern:

- EPS raw materials with a flame retardant,
- Non-expanded polystyrene beads containing additives such as a flame retardant and a bulking agent.

As part of this option, this certification aims to show that the raw material certified for EPS meets the requirements in Annex E of standard EN13163.

The certification for the raw material only concerns products certified as having a Euroclass E reaction to fire classification as per EN 13501-1.

Note 1: Manufacturers of EPS products continue to be responsible for the factory production line checks of said products.

Note 2: In the rest of this document, the certification term 'LNE FIRE PS/Classification D' concerns the certification of the raw material used to manufacture expanded polystyrene (EPS) and extruded polystyrene foam (XPS). This is as per the requirements regarding IT249, ICPE, ITI [thermal insulation from the inside] and ESC (see Scope §A, B, C and D). The certification terms 'LNE FIRE PS/Class E' or 'Class E certification' concern the certification of EPS raw materials as per the requirements relating to Annex E of standard EN13163.

The LNE Testing and Certification Director approved this reference document on November 12, 2024.

2. REQUIREMENTS TO BE OBSERVED BY THE MANUFACTURER

2.1. PRODUCT REQUIREMENTS - REFERENCE STANDARDS

NF EN ISO 11925-2 (March 2020): Reaction to fire tests - Ignitability of products subjected to direct impingement of flame. Part 2: Single-flame source test.

NF EN 13823 +A1 (July 2022): Reaction to fire tests for building products - Building products excluding floorings exposed to thermal attack caused by a single burning item.

OPTION: For the Class E option, the reference standards are as follow as per Annex E of standard EN 13163:

NF EN ISO 11925-2 (March 2020): Reaction to fire tests - Ignitability of products subjected to direct impingement of flame. Part 2: Single-flame source test.

EN13501-1 (December 2018): Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests

NF EN 13163 + A1 (March 2015): Thermal insulation products for buildings. Factory made expanded polystyrene products. Specification

2.2. QUALITY MANAGEMENT SYSTEM REQUIREMENTS

2.2.1. GENERAL REQUIREMENTS

The manufacturer's quality system must comply with the provisions in Article 5 of standard NF EN 13172 (November 2014): Thermal insulation products. Evaluation of conformity. Article 5: Requirements relating to the factory production line inspections – Tasks for the manufacturer

OPTION: For Class E certification, the reference document to assess conformity is Annex A of standard NF EN 13172 (November 2014).

2.2.2. SPECIFIC QUALITY REQUIREMENTS

Identification and traceability - §5.7 of standard EN13172

The manufacturer must provide instructions for the identification of the product.

Standard EN13172 requires traceability; the manufacturer must control the individual identification of the product and keep records.

This identification must make it possible to ensure traceability and to find the past history of the product.

The manufacturer must identify the state of the product in relation to the monitoring and measurement requirements throughout manufacturing of the product.

Product monitoring and measurements - §5.4 of standard EN13172

Within the framework of this reference document, the monitoring plan introduced must include the tests listed below as a minimum.

The expansion system for expanding the EPS beads must be available on the manufacturing site or on another site of the manufacturer certified by the LNE Fire PS certification as well. The means of cutting samples must be available on the manufacturing site.

a) Ignitability tests

- Equipment

The internal control is carried out with the ignitability equipment which must be available on the manufacturing site.

The equipment is described in Article 4 of standard NF EN ISO 11925-2.

The combustion chamber can also be located underneath the laboratory's fume chamber or any other extraction system.

The extraction speed measurement device must also be calibrated regularly – at least once a year. Following three successive calibration operations, and if it has been demonstrated that there are no significant variations in results, the anemometer calibration frequency can be extended to every two years.

Test method:

The test method is defined in Article 7 of standard NF EN ISO 11925-2.

During preliminary operations, it is stipulated that the distances between the burner and the specimen must be checked using the spacer specified in 4.9.3 with the burner tilted 45° and the top of the burner spacer in contact with the surface of the specimen at a distance of 40 mm from the lower edge.

The flame application time is 15 seconds + 5 seconds of observation.

For EPS: The operator performs an attack on the surface on six 20 mm-thick test pieces. In the case of moulding of test pieces with a thickness of 20 mm, the tests are performed with the surface skin.

For XPS: The operator performs an attack on the surface on six 20 mm-thick test pieces cut in such a way that the surface skin is tested if applicable: 3 in the direction of extrusion and 3 perpendicular to the extrusion.

The dimensions of the specimens are as described in Article 5.2 of standard NF EN ISO 11925-2. In the context of factory production line checks, specimens can be 250 mm or 190 \pm 3 mm in length.

For EPS: the specimens must be processed in an oven at 70°C for a minimum of 48–72 hours prior to the ignitability test.

For XPS: the specimens must be processed as per the provisions in standard NF EN ISO 11925-2.

The flame height is measured to the yellow tip.

The flame height is measured in 1 cm steps, and only on the exposed face.

When the flame is between 2 graduations, the upper graduation of the flame is taken into account.

Falling flaming droplets are not taken into account.

- Frequency:

For EPS, this test is carried out once per production week per range of products, and at least every production run.

A range of EPS products is for a given polymerisation formulation and contains the different granulometric fractions resulting from it.

For XPS, this test is performed once per production week, per line and per product range. The smallest and largest thicknesses produced during that week are tested.

A range of XPS products is for a given type of expansion agent and a type of associated surface quality. It covers all production with this expansion agent and this type of surface. There are two surface qualities: panels which are planned, and panels which are not planned.

- Acceptance conditions:
- a. Flame height

For each specimen tested, the maximum flame height must be less than or equal to 10 cm.

Of the 6 tests carried out, if only one gives a non-compliant result (the flame front exceeds 10 cm above the flame application point), 2 additional tests can be carried out.

- If these two additional tests are not carried out, the final result is "non-compliant".
- If these two additional tests are performed and another "non-compliant" result is recorded, the final result is "non-compliant".
- If no non-compliance result is subsequently recorded, the average is calculated on the 7 samples whose flame height did not exceed 10 cm.

b. Average flame height:

For XPS:

The average of the flame heights for the 6 specimens (or 7 specimens) tested must be less than or equal to 6 cm.

For EPS:

The average of the flame heights for the 6 specimens (or 7 specimens) tested must be less than or equal to 5 cm.

The average of the test results will be recorded for the end result. This value will be rounded up or down to the nearest whole number if the figure after the decimal point is \leq 0.49 cm or \geq 0.5 cm respectively.

The appendices contain a test report template.

b) SBI test (calculation of the FIGRA index)

The fire growth rate index FIGRA_{0.4MJ} is the maximum value of the heat release rate during the specimen exposure time. A 1000x coefficient is systematically applied.

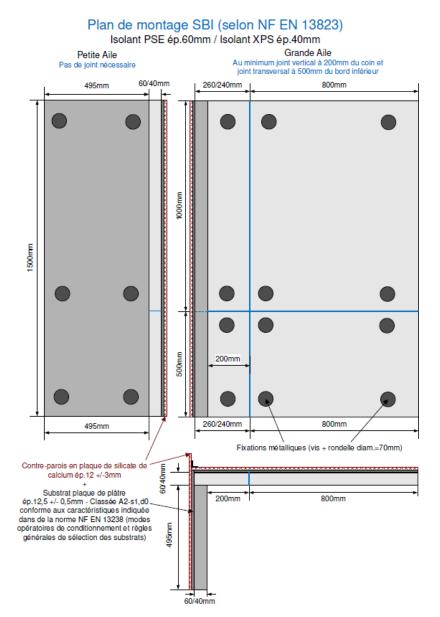
- Test method:

The test method is defined in standard NF EN 13823 - §8.

- Test conditions:

The samples to be tested are implemented as per the following installation drawing.

Installation drawing:



The test is carried out on:

- one sample of a thickness equal to 40 mm for XPS;
- one sample of a thickness equal to 60 mm for EPS.

- Frequency:

The manufacturer shall have an SBI classification report that is less than 5 years old and drawn up by a laboratory certified in CE marking for building products.ⁱ The classification report must mention the density of the product tested.

The test result is valid for the density submitted for testing, up to a maximum value of +15%. It is also valid for densities less than the one submitted for testing.

- Acceptance conditions based on the average of 3 tests:

 $FIGRA_{0.4MJ} \leq ~750~Ws.$

OPTION: As part of Class E certification, the manufacturer must set up and observe the control plan defined in Annex E §7.2 of standard EN 13163.

a. Ignitability tests

The ignitability test must be carried out as per standard EN ISO 11925-2, as the thermal stress is applied to the edge. Falling flaming droplets are taken into account.

The manufacturer shall carry out the following tests:

Test	Frequency	Test performed by	Thickness of the specimens	Density of the samples
Product type determination	1 / 5 years Raw material supplier 10mm and 60mm		10mm and 60mm	Minimum and maximum
Factory production control	1 / day or 1 / batch (which gives the highest frequency)	Raw materials factory	20mm	between 15kg/m ³ and 20kg/m ³
Factory production control	1 / 3 months	Raw materials factory	20mm	Minimum and maximum
Product type determination	1 / 5 years	Testing laboratory	10mm and 60mm	Minimum and maximum
Continuous surveillance	1 / year	Testing laboratory in audit	10mm and 60mm	Minimum and maximum

Table 1: Control plan to be observed by the manufacturer

The tests to determine the standard product shall be carried out as per EN11925-2 on 10 mm and 60 mm thick specimens. They will also be carried out on a sample of EPS products of a minimum and maximum densities.

These two densities specify the range of densities for which the certificate is valid.

ⁱ All SBI tests carried out for the preliminary study are taken into account for the initial test (test report to be provided to LNE). This enables traceability of the tests and the references required for certification.

A classification report as per EN 13501-1, and issued by an authorised entity, is required to determine the standard product. This report is valid for 5 years.

The company undertakes to prepare all samples as defined in Table 1. During monitoring checks, 4 ignitability tests are carried out per product range (maximum and minimum densities and 10 mm & 60 mm thicknesses).

b. <u>Definition of a joint monitoring test for two certifications (LNE FIRE</u> <u>PS/Classification D and LNE FIRE PS/Class E)</u>

A joint ignitability test will be defined for LNE FIRE PS/Classification D certifications as per Annex E of standard EN13163. These test procedures can be used as part of factory production line inspections (for Class E: test to be performed once a day or per production batch).

The test procedures are as follow:

- Flame attack on edge of sample,
- Density of samples between 15 kg/m³ and 20 kg/m³,
- Sample length: 250 mm or 190 mm +/-3 mm,
- Sample thickness: 20 mm +/-1 mm,
- Flame application time: 15 seconds,
- Test duration: 20 seconds (15 seconds of flame application + 5 seconds of observation),
- Ignition if flame continues for more than 3 seconds,
- Presence of filter paper.

The conformity criteria remain the same for each certification: LNE FIRE PS/Classification D or LNE FIRE PS/Classification E.

For the LNE FIRE PS/Classification D certification applied to EPS, the conformity criteria for the joint test are as follow:

- Average of flame heights less than 5 cm,
- 10 cm flame tip not reached.

For the Class E certification as per Annex E of standard EN13163, the conformity criteria for the joint test are as follow:

- 15 cm flame tip not reached.
- No ignition of filter paper.

Conformity must be declared for every certification.

Flame attack for the joint test is not similar to the one indicated in the test method defined for the LNE FIRE PS/Classification D certification. As such, before using the joint test method, the manufacturer must prove that the results obtained using the joint test method are equivalent to or not as good as those obtained by the test method defined for the LNE FIRE PS/Classification D certification.

In accordance with the procedures defined above, a manufacturer that does not have Class E certification can use this test method in the context of production inspections for the LNE FIRE PS/Classification D certification.

A sample test report is provided in the appendices.

Control of non-conforming products - §5.5 of standard EN13172

The manufacturer must draw up a documented procedure to define the processing of nonconforming products.

The manufacturer shall make sure that non-conforming products are identified and they must be processed as per one of the following arrangements:

- by carrying out the actions to process the non-conformity, e.g. by informing the client that the product has been downgraded;
- by authorising its use, release or acceptance by way of derogation: in this case, prior agreement must be obtained from the certification body;
- By carrying out actions which prevent it from being used (e.g. scrapping of the product).

Complaints

Records of any complaints made regarding products with a certificate, and their processing, must be made and kept.

3. OBTAINING CERTIFICATION

3.1. COMPILING THE APPLICATION FILE

Any company that produces the raw material used to manufacture expanded polystyrene (EPS) or extruded polystyrene foam (XPS) can file an application to obtain certification in order to meet the applicable regulatory requirements applicable in relation to fire behaviour (see §1 of this reference document).

3.1.1. APPLICATION FILE

Any manufacturer who wishes to present, for certification purposes, a range of raw materials used to manufacture expanded polystyrene (EPS) or extruded polystyrene foam (XPS) shall first be familiar with this reference document and state that he/she agrees with its contents.

This application specifies the products presented for certification.

Definitions:

A range of raw materials used to manufacture expanded polystyrene (ESP) or extruded polystyrene foam (XPS) is defined by:

- its commercial reference,
- the chemical nature of the base material,
- the chemical nature of flame retardant additives.

For raw materials used to manufacture expanded polystyrene (EPS), a range can be broken down into grades that differ from one another solely by their different granulometric fractions or additives that are not flame retardant (e.g. coating additives).

A range of EPS products is for a given polymerisation formulation and contains the different granulometric fractions resulting from it.

<u>For every factory</u> that will produce the products for which the application is filed, the applicant must provide a file containing the documents or information specified in §3.1.2. below.

The application will only be accepted if the checks set out in Part 2 of this reference document have been carried out regularly for the products in question for <u>at least three</u> <u>months or 30 production batches</u>.

All the documents must be written in French or English.

When the applicant is from a country outside the European Economic Area, they must submit their application jointly with a representative who is established in the European Economic Area. The representative shall be duly accredited and responsible for all goods likely to be eligible for certification and which are to be sold in France.

This representative must be registered with the Trade Register and have satisfied the French legal obligations, particularly as concerns insurance. He is known as the "authorised agent".

LNE must be informed of any modifications made to the range of products submitted for certification. It will decide whether extra testing needs to be carried out.

In the framework of the demand, the applicant sends the complete certification file to the LNE in one go, which is then evaluated. If the certification file received is incomplete or non-compliant, an additional certification file instruction is carried out for which instruction fees are invoiced to the applicant.

3.1.2. DOCUMENTS TO BE SUPPLIED

- A certification application letter template (Form 1a), written on the manufacturer's headed paper, as per the attached template (with the appendix and associated mandate co-signed (as per Form 1c) if the application is made from outside the European Economic Area).
- General information sheet and list of products for which certification is requested (Form 1b).

- File including:

- . If the company has ISO 9001 certification, the following documents need to be sent:
 - Quality manual and/or plan(s) (where applicable if these documents are not to be circulated off-site, they must be made available to the auditor during the audit).
 - Copy of the certificate of conformity of the quality management system whose scope and framework includes the sites and activities concerned by the "Fire behaviour of thermal insulation materials" mark and which is valid.
 - . Copy of the certificate of conformity as per requirement B1 (DIN 4102), if applicable,
 - . Technical file:
 - Brief description of the product/range of products subject to the certification application: commercial reference,
 - Description of the control plan for products ready to be sold (detailing the measures and tests conducted as well as their frequency),
 - A valid SBI classification report concerning the FIGRA for the reaction to fire tests (valid 5 years from the date of testing). This report is issued by a laboratory notified in accordance with the CE marking for building products.

OPTION:

Any company that produces the raw material used to manufacture expanded polystyrene (EPS) can file an application to obtain certification of conformity of the EPS raw material in order to meet the applicable regulatory requirements relating to fire behaviour (see Annex E §1 of standard EN13163).

Any manufacturer who wishes to present, for certification purposes, a range of raw materials used to manufacture expanded polystyrene (EPS) shall first be familiar with standard EN 13163 and state that he/she agrees with its contents.

The application file to be provided for Class E certification covers the same items as the file for LNE Fire PS/Classification D certification and is independent of the file sent for this certification. The additional items are the valid classification reports as per standard EN 13501-1, issued by a certified body, as defined in Table 1 of this reference document (see page 9/40).

The procedures for obtaining the certification for Class E are identical to those for the LNE Fire PS/Classification D certification.

Form 1a has been modified to take into account the specificities relating to Class E certification applications as per Annex E of standard EN13163.

FORM 1a APPLICATION FOR CERTIFICATION/EXTENSION*

(To be written on the manufacturer's headed notepaper)

For the attention of the General Manager of LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS Products and Services Certification Unit (Département de Certification de Produits et Services) 1, rue Gaston Boissier 75724 PARIS Cedex 15 - France

PURPOSE: Certification application

Dear Sir,

I the undersigned (name and position) representing the company (identification of the company - head office)..... request that LNE carry out the verifications needed to obtain certification for the following products listed below. These products comply with the specifications defined in Part 2 of the reference document "Fire behaviour of thermal insulation materials".

These products are manufactured in the factory belonging to (company identification and full address of factory).....

I declare that I am aware of the reference standards and the reference document "Fire behaviour of thermal insulation materials" and I undertake to observe the latter for the whole certification period.

I attest that these products satisfy the regulatory requirements applicable to them and I undertake not to present forged products for certification.

Date Stamp and signature of the manufacturer

APPENDIX TO THE APPLICATION FOR CERTIFICATION (1)

Furthermore, I authorise the company (2).... represented by Mr./Ms. (name and position).

to act on my behalf in France for all matters relating to certification.

For such purposes, I ask that the fees incumbent on me be invoiced directly to the company. I hereby accept that the company accept this mandate and that the fees incumbent on me be invoiced directly to it.

I undertake to notify LNE immediately if I appoint a new authorised agent to replace the authorised agent named above.

Yours faithfully,

Date Stamp and signature of the authorised agent's representative (3)

Stamp and signature of the manufacturer's representative (3)

(3) The signatures of the applicant and his/her agent must be preceded respectively by the hand-written words "Proxy agreed" and "Acceptance of proxy agreed".

* Cross out if not applicable

⁽¹⁾ This appendix is only to be completed by applicants located outside the European Economic Area.

⁽²⁾ The designation of the representing company must include: company name, legal form, head-office and Companies Register number.

FORM 1b

GENERAL INFORMATION SHEET - LIST OF PRODUCTS

Applicant's corporate name:

Address of the applicant:

Website of the company or site(s) mentioned in the application: Contact: Telephone: E-mail:

Contact information of the correspondent(s) for receiving the test and audit reports from LNE via email:

Name of the contact	Job-position	E-mail	Audit report	Test report

Billing address (if different from the address mentioned for the corporate name of the applicant), with undertaking if different from the applicant

Address of the manufacturing unit:

Contact: Telephone: E-mail: Size of the site mentioned in the certification: Area of the site:

Product references / product ranges / density	Chemical nature of the base material	Chemical nature of flame retardant additives:	Number of reaction to fire classification report for the range	Production date or batch number subject to the reaction to fire test

Authorised agent's name and address in France, if applicable:

Issued at on Signature

CLASS E OPTION AS PER ANNEX E OF STANDARD EN13163 FORM 1a

APPLICATION FOR CERTIFICATION/EXTENSION*

(To be written on the manufacturer's headed notepaper)

For the attention of the General Manager of LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS Products and Services Certification Unit (Département de Certification de Produits et Services) 1, rue Gaston Boissier 75724 PARIS Cedex 15 - France

PURPOSE: Certification application

Dear Sir,

I the undersigned (name and position)representing the company (identification of the company - head office)..... request that LNE carry out the verifications needed to obtain certification for the following products listed below. These products comply with the specifications defined in Annex E of standard 13163.

These products are manufactured in the factory owned by (company identification and full address of the factory):....

I declare that I am aware of the reference standards and the reference document "Fire behaviour of thermal insulation materials" and I undertake to observe the latter for the whole certification period.

I attest that these products satisfy the regulatory requirements applicable to them and I undertake not to present forged products for certification.

Date Stamp and signature of the manufacturer

APPENDIX TO THE APPLICATION FOR CERTIFICATION (1)

Furthermore, I authorise the company (2).... represented by Mr./Ms. (name and position).

to act on my behalf in France for all matters relating to certification.

For such purposes, I ask that the fees incumbent on me be invoiced directly to the company. I hereby accept that the company accept this mandate and that the fees incumbent on me be invoiced directly to it.

I undertake to notify LNE immediately if I appoint a new authorised agent to replace the authorised agent named above.

Yours faithfully,

Date Stamp and signature of the authorised agent's representative (3)

Stamp and signature of the manufacturer's representative (3)

(3) The signatures of the applicant and his/her agent must be preceded respectively by the hand-written words "Proxy agreed" and "Acceptance of proxy agreed".

* Cross out if not applicable

⁽¹⁾ This appendix is only to be completed by applicants located outside the European Economic Area.

⁽²⁾ The designation of the representing company must include: company name, legal form, head-office and Companies Register number.

FORM 1c EXAMPLE OF A MANDATE

(to be drawn up on the applicant/authorised agent's letterhead paper)

List of information to be supplied:

Identification of the roles of the authorised agent to be included in the mandate between applicant/holder and authorised agent

Applicant/Holder:

Minimum requirements which must be shown in the mandate:

- assignments and associated responsibilities
- financial aspects (invoicing for the "fire behaviour of thermal insulation materials" mark)
- complaints
- certifying body contact

Mandate:

The mandate should be mentioned in the applicant/holder's quality system.

A copy of the mandate in French or English should be attached to the co-signed admission application.

Compliance with the mandate arrangements is checked during audits.

Date of the initial mandate Signatures of the representative of the authorised agent and the applicant

3.2 APPLICANT/HOLDER COMMITMENTS

The applicant/holder commits in general to giving LNE the means to carry out the operations necessary for the correct progress of the evaluation and follow-up of their file and in particular to:

- comply at all times with the requirements defined by these certification rules, and to implement the necessary changes within the deadlines prescribed by LNE in the event of changes in the certification rules,
- communicate the information and working documents necessary for a proper evaluation procedure to representatives authorised by LNE;
- only communicate information that the applicant/holder knows is fair and sincere;
- designate a supervisor as the LNE's special contact person;
- designate recipients within the company who will receive LNE test and audit reports and inform LNE of changes to be made in case of a change of recipient within the company or e-mail address;
- introduce the staff assigned to the various tasks to the authorised LNE representatives;
- instruct staff to work with authorised LNE representatives, and to agree to participate in any interviews;
- provide authorised LNE representatives with a way to access and move around the sites and work areas, including the subcontractors' sites, as the case may be;
- inform the authorised LNE representatives about the safety and hygiene provisions and instructions applicable to the sites and work areas and the staff there, and make any equipment necessary available to them for this purpose;
- pay LNE the sums due for the evaluation, in accordance with the financial conditions defined and accepted by the applicant/holder
- Authorise the presence of an observer who is required to respect confidentiality. This
 observer can be imposed on LNE by the standards or agreements of which they are
 a signatory. Information regarding the presence of this observer is always
 communicated to the applicant/holder by LNE prior to the audit.
- take the necessary measures in the event of non-compliance, within the deadlines specified by LNE,
- return the duly completed non-compliance sheets to the lead auditor within 3 weeks of the last day of the audit,
- implement the necessary actions to enable the certificate to be issued within a maximum of 11 months after the initial audit. After this period, a new initial audit shall take place prior to certification,

It is also the responsibility of the certificate holder to:

- refer, where applicable, to the certification as per the provisions defined in chapter §3.3 of the reference document on the sole products covered by the certificates issued by LNE that comply with the applicable requirements;
- reserve the product's commercial name only for the products covered by the certificates issued by LNE and in accordance with the applicable requirements;
- communicate to LNE beforehand any modification of the product or any information likely to affect conformity with the requirements of the present rules, the methods of evaluation being defined in Part 4,
- make available to LNE any data or information necessary to establish and maintain the certificate;
- keep a record of all claims of which the holder is aware of the conformity of the product(s) with the certification requirements and make these records available to LNE upon request, and
 - take any appropriate action with respect to these claims and imperfections in the products that affect their compliance with the requirements of the certification,
 - o document the actions taken.
- in the event of suspension, reduction, withdrawal or refusal of renewal of the certificate, stop using any references to the certification of the products concerned and stop using all the means of communication that make reference to this,
- authorise follow-up evaluations during the period of validity of the certificate, on the basis of the frequency specified in Part 4 and any duly justified additional assessment,
- make statements about certification consistent with the content of the certificate,
- not use the certification issued by LNE in a manner that could damage LNE, nor make a declaration regarding the certification of its products that LNE may consider misleading or unauthorised;
- reproduce the certificates in their entirety, including the appendices in case of supply to a third party.

3.3. INITIAL ASSESSMENT PROCESS

3.3.1. EXAMINATION OF THE CERTIFICATION APPLICATION

The application and enclosed file sent to LNE are examined before factory verifications.

If certain items do not correspond to the requirements in this reference document, LNE informs the applicant and only carries out the audit upon presentation of a new file deemed fully conforming to the requirements in this reference document.

When the file is complete and fees have been paid, an audit can be prepared in the factory.

OPTION: For Class E certification, the procedures for examining the application are identical to the LNE Fire PS/Classification D certification, except as concerns the reference standard: Annex E of standard EN 13163.

3.3.2. FACTORY VERIFICATIONS

Examination of the application is preceded by an audit of each factory where the products presented for certification are manufactured. The audit is performed by auditors who are bound by professional confidentiality.

3.3.2.1. Quality audit

The auditor(s) carry out a quality audit aimed at checking whether there is a quality management system, as well as its implementation by the manufacturer. It will also check the system's adherence to the quality requirements defined in §2.2.

This audit is conducted according to the general principles defined in standard NF EN ISO 19011 for conducting a quality audit. They cover in particular, the scope of the audit and details of the procedure which are specified in an audit plan sent to the company before the audit.

The duration of the audit is generally one day (including the audit and writing up the report on site). This timeframe may be modulated according to the number of products (product ranges) to be certified.

It may be reduced if the audit is carried out together with an audit as part of another certification by LNE (e.g. joint audit with ACERMI or NF-Sécurité feu, etc.).

During the audit, a detailed examination is carried out of the conditions for performing tests and interpreting results.

The auditors may, with the manufacturer's agreement, take a copy of any production inspection documents they deem necessary.

These provisions do not apply to all documents concerning the formulation of materials and products relating to this certification.

Once the audit has been completed, the audit leader will write up a report. This report will detail the effectiveness of the quality system in place, the strong points, weak points and an explicit statement of non-conformities, where applicable. It also includes the report of tests carried out during the audit and the sampling sheet, if applicable.

A non-conformity is classified as major when, on the basis of objective evidence:

- there is a significant risk to the conformity of the product in relation to the specified requirements (these requirements are set out by the reference document, the company or its clients), or
- there is a significant risk in terms of the management system's ability to control product conformity for a specified requirement, or
- there is systematic or repeated non-compliance with a given requirement.

In all other cases, the non-conformity is classified as minor.

The applicant must respond to any notified non-conformity with a causal analysis, corrections and corrective actions. An action plan to address major or minor non-conformities is sent within three weeks following the end of the audit to the Audit Leader for assessment.

In the case of major non-conformities:

- Tangible proof guaranteeing the implementation of the correction to eliminate this nonconformity must be sent with the action plan.
- LNE must receive tangible proof guaranteeing the implementation of the corrective action associated with this non-conformity within the timeframes it has specified.

In the case of minor non-conformities, LNE must receive tangible proof that guarantees the implementation of the correction to eliminate this non-conformity and the associated corrective action. Failing that, it will be checked at the latest during the next audit, unless otherwise specified by LNE.

The complete report is sent by LNE by email to the correspondent(s) designated by the applicant, with a copy (where applicable) to the authorised agent.

3.3.2.2 On-site tests

a) Ignitability test

This test must be carried out as per the conditions and requirements set out in paragraph 2 of this reference document.

The test is carried out for each range as per the method defined in §2.2.2. (see pages 7 and 8 of this reference document). The joint monitoring test method for the two certifications cannot be used during the audit.

In the event of a non-conforming result, the auditor takes samples for testing at LNE.

b) SBI test (FIGRA)

The manufacturer must have an SBI classification report on the FIGRA that is less than 5 years old.

In the case of tests carried out at LNE, the tests are subject to a test report that is sent by LNE by email to the contact person(s) designated by the applicant. A copy is sent to the authorised agent where applicable.

OPTION: The factory verification procedures for Class E certification are identical to those for the LNE Fire PS/Classification D certification.

The certification audit for Class E is carried out together with the audit carried out as part of the LNE Fire PS/ Classification D certification. The duration of the joint audit depends on the number of ignitability tests to be performed on site. The audit time is calculated as follows:

1 ignitability test \leq 1 day on site \leq 6 ignitability tests 7 ignitability tests \leq 1.5 days on site \leq 12 ignitability tests 13 ignitability tests \leq 2 days on site \leq 20 ignitability tests

During the audit, at least one ignitability test is carried out on each certified range for the LNE FIRE PS/ Classification D certification. Four ignitability tests are carried out during the audit for each certified range for Class E certification (tests on both thicknesses (10 mm and 60 mm), and both densities (minimum and maximum densities)).

During the audit, a detailed examination is carried out of the conditions for performing tests and interpreting results.

On-site tests:

a) Ignitability test

This test must be carried out as per the conditions and requirements set out in paragraph 7 of standard EN 13163.

The tests are performed for each range according to the method defined in standard EN11925-2.

In the event of a non-conforming result, the auditor takes samples for testing at LNE.

b) Determining standard products

The manufacturer must have a classification report as per EN 13501-1 that was issued by a certified body less than 5 years ago.

3.3.3. DECISION AND NOTIFICATION

On the basis of the results obtained during examination of the application after consultation with the Reading Committee, LNE notifies the applicant of one of the following decisions:

a) Granting of certification

This decision may be accompanied by suspensive conditions which define the conditions to be met by the applicant before the certificate is awarded.

b) Refusal of certification

A decision may be deferred for the purpose of completing further examination of the application.

This certification is maintained on the basis of the results of the verifications defined in Part 4.

This certification is strictly limited to the products for which it was granted, i.e. duly defined products from the duly defined factories, manufactured under the conditions set out in this reference document.

The certificate holder can refer to the LNE Fire PS/Classification D certification as follows:

EPS: "The raw materials range(s) X/Y/Z manufactured in factory/factories X/Y/Z, used for the production of expanded polystyrene, complies/comply with the requirements in LNE document 'Certification of the fire behaviour of thermal insulation materials' (reference)."

XPS: "The extruded polystyrene foam(s) X/Y/Z manufactured in factory/factories X/Y/Z, complies/comply with the requirements in LNE document 'Certification of the fire behaviour of thermal insulation materials' (reference)."

OPTION: The decision and notification procedures for Class E certification are identical to LNE Fire PS/Classification D certification. The only difference is the reference standard.

The certificate holder can refer to it as follows:

"EPS products made of this raw material (not mixed with other materials) and within a density range from ...kg/m³ to ...kg/m³ will fulfil the requirements of class E according to EN 13501-1".

3.4. REQUIREMENTS GOVERNING THE USE OF THE LNE FIRE PS MARK

The LNE Fire PS/Classification D mark is part of the range of LNE Sécurité certifications.

The rules for using LNE marks are specified in a dedicated document available on the LNE website: <u>www.lne.fr</u>

All the different marks (product, packaging, user instructions, etc.) on products (or ranges) must comply with the requirements in the applicable regulations and standards.

Only the holders of "LNE Fire PS" certification for one or more certified products can use the "LNE Fire PS" mark for their products and communication media.

As well as allowing for identification and traceability of a certified product, marking a product with the LNE mark ensures that users will receive better protection. It also protects holders from abusive use of the product and counterfeit goods.

The reproduction and use of the LNE mark is strictly prohibited without LNE's prior approval.

If this mark is used, the holder undertakes to respect the LNE mark's graphic charter.

To ensure that there is no risk whatsoever of confusion with other products, certified products have a different designation and identification to non-certified products.

The holder is advised to submit all documentation making reference to the LNE mark to LNE before use. LNE will supply the computer file after the LNE Fire PS/Classification D certification has been obtained. The certification mark shall be used in compliance with the graphic charter in force.



When the holder plans to use the LNE mark ("LNE Fire PS" mark), they must comply with the conditions for use of the mark, i.e.:

- > any reference to the certification prior to notification of its issue is prohibited;
- any reference to the LNE Fire PS certification in advertising, the presentation of any service, as well as commercial documents of any kind that refer to it must feature the following information, as a minimum:
 - The certificate number,
 - The LNE website address,
 - The site(s) concerned by LNE Fire PS certification if the holder excludes some of its sites from the certification scope.

Any use of or abusive reference to the "LNE Fire PS" mark, whether by the certificate holder or a third party, shall be subject to legal action in application of the regulations in force concerning intellectual property and misleading advertising.

3.4.1 PRODUCT OR PACKAGING MARKING

If the LNE certification mark is used, each certified product or, failing that, each certified product packaging must always clearly display the NF mark. This is in compliance with the graphic charter requirements and, where applicable, the specific standards and regulations in force.

The additional indications covered by the LNE Fire PS certification include placing the adapted LNE mark according to the type of product or packaging and the following indelible indications:

- the product's commercial reference given on the certificate;
- coding to guarantee product traceability. This identification must be formalised in the manufacturer's quality documents and communicated to LNE;
- the website www.lne.fr.

The manufacturer is free to choose the dimensions of these markings and the means used, provided that the markings are legible and indelible.

3.4.2. DOCUMENTATION

References to the LNE mark in the documentation (order confirmations, invoices, delivery notes, advertiser pamphlets, catalogues, etc.) must be made in such a way as to make it impossible to confuse the certified products with other products.

The reproduction of the LNE mark on documentation and marketing materials must be suited to the product or range.

At the request of LNE, the holder must communicate any document in which reference is made to the LNE mark, whether directly or indirectly.

4. PRODUCT SURVEILLANCE PROCESS – MODIFICATIONS AND CHANGES

4.1. CERTIFIED PRODUCT SURVEILLANCE PROCESS

LNE organises the monitoring of products by proceeding with verifications in the production unit. The aim of the verifications is to check manufacturer compliance with its obligations.

4.1.1. FREQUENCY OF VERIFICATIONS

The manufacturing unit is audited at least once a year.

In the case of factories that do not have ISO 9001 certification, or are not subject to B1 monitoring (DIN 4102) by a third party, the monitoring audit frequency is twice a year.

In the case of factories that have ISO 9001 certification, or are subject to B1 monitoring (DIN 4102) by a third party, the monitoring audit frequency is once a year.

Additional audits may be carried out if LNE observes non-conformities.

4.1.2. FACTORY VERIFICATIONS

The examinations carried out concern primarily any modifications made since the previous audit that affect manufacturing, inspection methods or organisation of the quality management system.

During each audit:

- a quality audit is carried out as per the general principles defined in standard NF EN 19011 for conducting a quality audit (in particular, the scope of the audit and details of the procedure are specified in an audit plan sent to the company prior to the audit);

- the auditor will ask for product verification tests to be carried out in his or her presence. This is to check the conditions under which the manufacturer carries out inspections and interprets results.

With the manufacturer's agreement, the auditor can take a copy of any document he/she considers necessary.

These provisions do not apply to all documents concerning the formulation of materials and products relating to this certification.

4.1.2.1. Quality audit

The audit duration is usually 1 day (including the audit and writing up the report on site). This timeframe may be modulated according to the number of products (product ranges) to be certified.

It may be reduced if the audit is carried out together with an audit as part of another certification by LNE (e.g. joint audit with ACERMI or NF-Sécurité feu, etc.).

Once the audit has been completed, the audit leader will write up a report. It will detail the effectiveness of the quality system in place, the strong points, the conforming items to be monitored, and an explicit statement of non-conformities. It also includes the report of tests carried out during the audit and the sampling sheet, if applicable.

A non-conformity is classified as major when, on the basis of objective proof:

- there is a significant risk to the conformity of the product in relation to the specified requirements (these requirements are set out by the reference document, the company or its clients), or
- there is a significant risk in terms of the management system's ability to control product conformity for a specified requirement, or
- there is systematic or repeated non-compliance with a given requirement.

In all other cases, the non-conformity is classified as minor.

The applicant must respond to any notified non-conformity with a causal analysis, corrections and corrective actions. An action plan to address major or minor non-conformities is sent within three weeks following the end of the audit to the Audit Leader for assessment.

In the case of a major non-conformity:

- Tangible proof guaranteeing the implementation of the correction to eliminate this nonconformity must be sent with the action plan.
- LNE must receive tangible proof guaranteeing the implementation of the corrective action associated with this non-conformity within the timeframes it has specified.

In the case of minor non-conformities, LNE must receive tangible proof that guarantees the implementation of the correction to eliminate this non-conformity and the associated corrective action. Failing that, it will be checked at the latest during the next audit, unless otherwise specified by LNE.

The completed report is sent by e-mail, by LNE to the contact person or people designated by the holder. If applicable, a copy shall be sent to the agent.

4.1.2.2. Tests during the audit

a) Ignitability test

Specimens kept for on-site ignitability testing during the audit:

<u>Case of EPS</u>: The manufacturer must keep a set of 8 specimens per range every two months.

<u>Case of XPS</u>: The manufacturer must keep a set of 8 specimens per production campaign of a range. In addition, it must also keep a minimum of 6 sets spread over all production periods for a production year.

The aim is to have samples spread over different production campaigns since the last audit. N.B. This means that 48 specimens are kept over a period of 12 months. These specimens must be available for the ignitability test during the audit.

During the audit, an ignitability test is performed for each range on a set of specimens that have been set aside. This test carried out as per the conditions and requirements set out in Part 2 of this reference document. The joint monitoring test method for the two certifications cannot be used during the audit.

In the event of a non-conforming result, the auditor takes samples for testing at LNE.

If tests are carried out at LNE, it sends a report on the tests carried out on the samples by email to the contact person(s) designated by the applicant. If applicable, a copy shall be sent to the authorised agent.

b) Justification of the SBI test (FIGRA)

The manufacturer must have an SBI classification report that is less than 5 years old.

OPTION:

For the Class E certification, the monitoring audit is carried out together with the monitoring audit for the LNE Fire PS/Classification D certification.

The duration of the joint audit depends on the number of ignitability tests to be performed on site (see §3.3.2.2. On-site tests).

The audit report also includes a report on the tests performed during the audit for the purposes of Class E certification.

Tests during the audit

a) Ignitability test

Specimens kept for on-site ignitability testing during the audit:

The aim is to have samples spread over different production campaigns since the last audit. The manufacturer must keep a set of 32 specimens per three-month production period for this purpose (specimens 10 mm and 60 mm thick, and with the minimum and the maximum density). The 32 specimens are broken down as follows:

- 8 specimens (10 mm thick) with the minimum density
- 8 specimens (60 mm thick) with the minimum density
- 8 specimens (10 mm thick) with the maximum density
- 8 specimens (60 mm thick) with the maximum density

N.B. This means keeping 128 specimens over a period of 12 months. These specimens must be available for the ignitability test during the audit.

During the audit, an ignitability test is performed for each range on a set of specimens that have been set aside. This test carried out as per the conditions and requirements set out in Part 2 of this reference document.

In the event of a non-conforming result, the auditor takes samples for testing at LNE.

b) Justification of the classification report as per standard EN 13501-1

The manufacturer must have a classification report that was issued by a certified body less than 5 years ago.

4.1.3. CLAIMS AND COMPLAINTS

If there are claims/complaints from users, inspections may include sampling or tests at the places where products are used (in this case the holder is invited to arrange for representation during sampling and tests).

4.1.5. DECISION AND NOTIFICATION

Based on the results of the inspections carried out, following consultation with the Reading Committee, LNE will notify the holder of its decision, which will be one of the following:

- a) Maintenance of certification with a possible request for corrective action
- b) Maintenance of certification, with formal notification to cease the infringements observed within a given time period, possibly accompanied by increased inspections.
- c) Suspension of the certification (suspension has a maximum duration of 6 months and is renewable once only. After this period, withdrawal of the certification is pronounced).
- d) Withdrawal of certification.

For sanctions b), c) and d), the fees for additional verifications are charged to the holder, regardless of their results. The decisions are enforceable as from the date of notification.

If there is a serious breach of the reference document, LNE may, as a precautionary measure and after confirmation of the breach, take any of the decisions listed above.

OPTION: For Class E certification, the decision and notification procedures are identical and also apply to this certification.

4.2. MODIFICATIONS AND DEVELOPMENTS CONCERNING THE COMPANY STRUCTURE OR THE PRODUCT

4.2.1. MODIFICATION CONCERNING THE HOLDER

In the event of a holder merger, liquidation or takeover, any certification it may have had automatically ceases. The holder must inform LNE without delay of any decision likely to result at a later stage either in a modification of the company's legal status or a change in the company name.

LNE maintains the right to examine the terms and conditions for any new certification applications.

4.2.2. TRANSFER OF THE PRODUCTION SITE

Before any full or partial production transfer to another production site, the holder must inform LNE in writing of the new production arrangements envisaged. It must also stop referring to the certification until the LNE has reached a decision following an audit of the new production site (certification renewal or examination of a new application).

4.2.3. CHANGE TO THE PRODUCT – NEW PRODUCTS

Products must comply with the technical file included in the certification application, along with any observations which may have been made when certification was granted.

Accordingly, any change (including changes to the production and inspection means and the quality management system put in place that may have a decisive influence on production compliance) that the holder wishes to make to the products must be reported in writing to LNE.

The modification will be examined as shown in the table below. It cannot be carried out until LNE has agreed. LNE must inform the holder of the method of investigation (acceptance, prior testing or referral to the LNE Reading Committee) within 15 days.

Upon receipt of the application for extension, LNE informs the holder of the verifications to be carried out in the context of the examination of the application.

The application for extension is examined and the modification can only be made upon approval by LNE.

In the case of test to be performed at LNE, the samples necessary to carry out testing are sent by and under the responsibility of the applicant to the mark laboratory tasked with carrying out the tests. They must be marked so that they can be identified at a later time and they must be accompanied by instructions to identify the lot numbers of the materials used in their manufacture.

Different types of extension need to be distinguished:

- Extension to a new range or new product,
- Extension to one or several grades for a range that has already been accepted,
- Extension to a new commercial reference for a range or grade that has already been accepted.

Extensions to new sites will be deemed as an initial certification application.

	Application to be sent	Examination of the	Extension notification				
Type of change	to LNE	application	conditions				
For LNE FIRE PS/Classification D certification							
Application for extension for a new range or new product	Application as per Forms 1a and b in §3.1.2 together with technical file	On file, with tests	On the basis of the file and the test results (without consulting the LNE reading committee if no particular problems are found)				
Application for extension for a new grade (range already certified for this grade)	Application as per Forms 1a and b in §3.1.2 with SBI classification report for the valid range	Case-by-case examination with possibility of performing tests	On the basis of the results (without consulting the LNE reading committee if no particular problems are found)				
	For LNE FIRE PS/C	Class E certification					
Application for extension for a new range or new product	Application as per Forms 1a and b in §3.1.2 together with technical file	On the basis of the file, with tests if necessary	On the basis of the file and the test results (without consulting the LNE reading committee if no particular problems are found)				
Application for extension for a new grade (range already certified for this grade)	Application as per Forms 1a and b in §3.1.2 with classification report for the valid range	Case-by-case examination with possibility of performing tests	On the basis of the results (without consulting the LNE reading committee if no particular problems are found)				
For LNE FIRE P	S/Classification D certificati	ons and LNE FIRE PS/Class					
New commercial reference for a range or grade already accepted for the LNE FIRE PS mark	Application to maintain certification as per Appendix 1 and 2 of this reference document	On the basis of the file	Without consulting the LNE reading committee				
Change in authorised agent	Application as per Forms 1a, b and c in §3.1.2	Complete procedure. The procedure can be simplified in view of the conclusions of the last audit or the last test results if the range/product covered by the application is identical to previous certified ranges/products.	Upon consultation with the LNE reading committee				
Designation of an additional authorised agent	1a, b and c in §3.1.2	Complete procedure. The procedure can be simplified in view of the conclusions of the last audit or the last test results if the production and inspection conditions are unchanged with respect to previously certified ranges/products	Upon consultation with the LNE reading committee				
Other cases	Report modifications	On a case-by-case basis	On a case-by-case basis				

APPENDIX 1

FORM MAINTENANCE APPLICATION FOR THE RIGHT TO USE

(to be prepared on the requesting manufacturer's letterhead paper or to be completed with the company stamp and signature of the company's legal representative).

For the attention of the General Manager of LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS Products and Services Certification Unit (Département de Certification de Produits et Services) 1, rue Gaston Boissier 75724 PARIS Cedex 15 - France

Purpose: Application to maintain the right to use the "fire behaviour of thermal insulation materials" mark

Dear Sir,

This application pertains to products sold through means of (3):

Reference of the certified p	New brand(s) and/or	
Commercial reference of the range/product that has already been acceptedCertificate number for the "fire behaviour of thermal insulation materials" mark		commercial reference(s) requested by the distributor

The commitment from the above mentioned distributor is attached (see Appendix 2).

Stamp and signature of Holder or of authorised agent (*):

Date

(1) Job-position

(2) Identification of the company (head office)

(3) Distributor's name and address

(*) Concerns a manufacturer outside the European economic area

APPENDIX 2

ATTACHMENT TO THE APPLICATION TO MAINTAIN THE RIGHT TO USE THE "FIRE BEHAVIOUR OF THERMAL INSULATION MATERIALS" MARK

(Distributor's undertaking to be written on the distributor's letterhead paper)

I the undersigned, ______acting as _____

of the company: _____

acknowledge that the substitution of the trademark _________ for that of the manufacturer on the....... of the abovementioned ranges (or grades) leads me to accept the relevant responsibilities.

In particular, I declare that I hold an exclusive right to use these trademarks and references, having registered them in compliance with industrial property legislation in force,

and I agree to market the abovementioned range(s) (or grades) for which this application is made without making any change of any type whatsoever.

Issued at

on

Signature

Distributor's stamp:

Stamp and signature of producer or authorised agent:

4.2.4. TEMPORARY STOPPAGE OF PRODUCTION OR INSPECTION

The products must be manufactured regularly.

The holder must immediately inform LNE of any temporary stoppage of production or product inspection. The manufacturer must notify LNE if production resumes. Products are then marketed based on the performance of audits and/or tests (with said marketing defined by the LNE).

4.2.5. DEFINITIVE STOPPAGE OF PRODUCTION OR SURRENDER OF RIGHT TO USE THE MARK

If the holder ceases production of a product definitively or if it surrenders the right to use the mark, it must inform LNE, indicating the time it considers necessary to sell off the remaining stock of products. LNE lays down the conditions under which this stock can be sold off.

5. AUDIT ORGANISATION

LNE carries out the audits.

However, it may call upon the expertise of duly qualified external auditors according to LNE's procedures. This outsourcing of audits is formalised in the form of contracts (due to independence and confidentiality requirements).

The holder or applicant must facilitate the operations that agents in charge of audits are required to carry out in the context of their mission.

LNE must be informed of any challenge concerning the members of an audit team within 10 days from when the audit team receives the notification in order for it to be taken into account.

6. READING COMMITTEE

The reading committee is responsible for rendering an opinion on the certification decision and is composed of member(s) not involved in the evaluation process.

The reading committee is responsible for:

- reviewing the audit and test reports and formulating an opinion and a recommendation on the decisions to be taken,
- where appropriate, considering in the first instance appeals against decisions of LNE and formulating an opinion on the follow-up,
- evaluating the quality of reports.

7. CONSULTATION OF THE INTERESTED PARTIES

Within the framework of the fire behaviour of thermal insulation materials certification activities (for raw materials used to manufacture expanded polystyrene and extruded polystyrene foam), LNE organises and collects the points of view of selected interested parties on the reference system project and its revisions. It processes the returns prior to final validation of the draft and its revisions.

The parties concerned who were consulted for the draft reference document and its revisions comprise:

- representatives of entities applying for fire behaviour of thermal insulation materials certification, or certification holder representatives, for raw materials used to produce expanded polystyrene or extruded polystyrene foam;
- representatives of the users of certified products;
- representatives from the French administrations concerned (DGSCGC, MEEDEM);
- a LNE representative.

8. INFORMATION FOR HOLDERS

LNE publishes an up-to-date list of products that require a certificate and certificate holders on its website.

At least once a year, LNE convenes all holders, or informs them in writing, for the purposes of presenting:

- a summary of all the inspections performed. The documents examined during each meeting of certificate holders must be presented anonymously;

- draft revisions to this reference document.

9. APPEAL AGAINST A DECISION

The applicant or holder of a certificate can contest any decision made that concerns them on the basis of supporting documents by contacting LNE. The appeal is filed by registered letter with acknowledgement of receipt within 15 working days.

LNE firstly proceeds with the re-examination of the file in view of the factors justifying this challenge. It notifies confirmation of the decision or the new decision to the applicant within 30 working days.

In case the applicant wants to maintain his/her objection, an appeal can be issued by the applicant or the certification holder against the decision of LNE.

This appeal of the decision of LNE has not suspensory effect and must be substantiated. LNE is notified by registered letter with acknowledgement of receipt within 15 working days.

The file is examined by LNE within 30 days after receipt and is then reviewed by the Reading Committee when it concerns the decision of certification or the rules of certification. LNE notifies the author of the appeal of the preservation or change of its decision.

If the appeal is maintained after processing and submission to the reading committee for its opinion, it is then presented to the LNE Certification and Impartiality Preservation Committee, which proposes its conclusions after examination.

LNE notifies the final decision to the company.

10. LEGAL ACTION

When fraudulent use of the certificate is reported or observed, LNE orders an investigation and files legal proceedings accordingly.

Any measures likely to mislead others about the quality or origin of the material are considered fraudulent, particularly:

- any reference to certification for materials manufactured or transformed under conditions that do not meet the recommendations in this reference document, or any reference by a manufacturer to certification which it has not yet applied for or which is still pending;
- any marketing material or offers likely to cause confusion amongst users about which manufacturers have a certificate and which do not.

11. FINANCING

The administrative and inspection fees within the framework of this certification are covered by:

- a) fees for obtaining the certification they cover the technical appraisal fees for the file and the initial audit fees. These fees remain applicable even if the applicant's products are not certified.
- b) an annual licence fee following certification. This fee covers the file management and monitoring audit expenses.

The applicant or holder is charged travel expenses (covering overnight stays and transport) according to the price list in force.

Prices are revised annually on the basis of LNE rate increases and are subject to a separate publication.

Appendix for LNE FIRE PS/Classification D certification

Identification of the product:	Test date:
Operator:	Date of manufacture:

Ignitability test report template:

Reference documents NF EN 11925-2 and this certification reference document.	Dimensions: 250 or 190 mm ⁱⁱ in length; 90 mm in width; and 20 (±1) mm in thickness
	Density [kg/m³]:
Air speed: (0.7 \pm 0.1) m/s Calibration date for the air speed measurement device:	Surface exposure – Burner spacer, 5 mm
Flame height applied: (20±1) mm	Flame application time: 15 seconds, observation time after application of the flame: 5 seconds. The total duration of the test is 20 seconds.

Sample number	1	2	3	4	5	6	C1 ⁱⁱⁱ	C2 ⁱⁱⁱ
XPS: Direction of extrusion (L for length or W for width)								
Ignition (yes/no)								
Flame lasting more than 3 seconds								
Flame tip > 10 cm (yes/no)								
Maximum flame height (cm) In 1 cm steps Rounded up to the next value								

Result:

Flame height (average of samples): (limit 5 cm or 6 cm - Rounded up or down to the nearest value)	
Reference line at 10 cm reached for at least one sample	yes 🗆 - no 🗆

CONFORMING: yes
- no

ⁱⁱ Cross out if not applicable

ⁱⁱⁱ Additional test results, where applicable (see §2.2.2. - a) - Acceptance conditions)

Appendix for Class E certification as per Annex E of standard EN13163

Ignitability test report template:

Identification of the product:	Test date:
Operator:	Date of manufacture:

Reference documents NF EN 11925-2 and annex E of standard EN13163.	Dimensions: 250 mm in length; 90 mm in width and □ 10 mm or □ 60 mm (±1) in thickness Density [kg/m³]: Density: □ Minimum □ Maximum
Air speed: (0.7 \pm 0.1) m/s Calibration date for the air speed measurement device:	Exposure on edge – 16 mm burner spacer
Flame height applied: (20±1) mm	Flame application time: 15 seconds, observation time after application of the flame: 5 seconds. The total duration of the test is 20 seconds.

Sample number	1	2	3	4	5	6	C1 ^{iv}	C2 ⁱⁱⁱ
Ignition (yes/no)								
Flame lasting more than 3 seconds								
Flame tip: > 150 mm (yes/no)								
Time to reach reference line								
Presence of flaming droplets/particles								
Ignition of filter paper								

Result:

Reference line at 150 mm reached for at least one sample	yes □ - no □
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CONFORMING: yes
- no

 $^{^{\}rm iv}$ Additional test results, where applicable (see §2.2.2. - a) - Acceptance conditions)

Appendix: Joint monitoring test for certifications: LNE Fire PS/Classification D & LNE Fire PS/Class E

Ignitability test report template, which could be used for self-monitoring:

Identification of the product:	Test date:
Operator:	Date of manufacture:

Reference documents NF EN 11925-2, this reference document and Annex E of standard EN13163.	Dimensions: 250 mm or 190 mm ⁱⁱ in length; 90 mm in width and 20 mm (±1) in thickness Density [kg/m ³]:				
Air speed: (0.7 \pm 0.1) m/s	Exposure on edge – 16 mm burner spacer				
Flame height applied: (20±1) mm	Flame application time: 15 seconds, observation time after application of the flame: 5 seconds. The total duration of the test is 20 seconds.				

Sample number	1	2	3	4	5	6	C1 ^v	C2 ⁱⁱⁱ
Ignition (yes/no)								
Flame lasting more than 3 seconds								
Flame tip: > 150 mm (yes/no)								
Time to reach reference line								
Presence of flaming droplets/particles								
Ignition of filter paper								
Flame tip: > 10 cm (yes/no)								
Maximum flame height (cm) In 1 cm steps Rounded up to the next value								

Results:

 Flame height (average of samples):
 (limit 5 cm or 6 cmⁱⁱ - Rounded up or down to the nearest value)

 Reference line at 10 cm reached for at least one sample
 yes □ - no □

CONFORMING: LNE FIRE PS/Classification D certification: yes
- no
-

CONFORMING: LNE FIRE PS / Class E certification: yes
- no

ⁱ Additional test results, where applicable (see §2.2.2. - a) - Acceptance conditions)

ⁱⁱ Cross out if not applicable