INTERNATIONAL STANDARD

ISO 12576-2

First edition
2008-07-01

Thermal insulation products — Conformity control systems —

Part 2: *In-situ* products

Produits isolants thermiques — Systèmes de contrôle de la conformité —

Partie 2: Produits fabriqués sur place

Reference number
ISO 12576-2:2008(E)

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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12576-2 was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 3, *Thermal insulation products*.

ISO 12576 consists of the following parts, under the general title *Thermal insulation products — Conformity control systems*:

— *Part 1: Factory-made products*

— *Part 2:* In-situ *products*

Thermal insulation products — Conformity control systems —

Part 2: *In-situ* products

1 Scope

This part of ISO 12576 establishes three systems for the conformity control of thermal insulation products that are manufactured on site from components produced in a factory, and provides the minimum requirements for each system. Examples of these types of products are loose fill and spray-applied insulations.

The purpose of this part of ISO 12576 is to provide uniform methods to determine whether the production of a thermal insulation product is acceptable as conforming to the relevant specification requirements once it is installed on site.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC Guide 65, *General requirements for bodies operating product certification systems*

ISO 9229, *Thermal insulation — Vocabulary*

ISO 12576-1, *Thermal insulation — Insulating materials and products for buildings — Conformity control systems — Part 1: Factory-made products*

ISO 17020, *General criteria for the operation of various types of bodies performing inspection*

ISO 17021, *Conformity assessment — Requirements for bodies providing audit and certification of management systems*

ISO 17024, *Conformity assessment — General requirements for bodies operating certification of persons*

ISO 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 17050-1, *Conformity assessment — Supplier's declaration of conformity — Part 1: General requirements*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO 9229 and the following apply.

3.1
certification organization
organization that conducts certification of conformity and is accredited by an appropriate body, possessing the necessary competence and reliability to operate a certification system in accordance with International Standards in which the interests of all parties concerned with the functioning of the system are represented

NOTE A certification organization may operate its own testing and inspection activities or oversee these activities carried out on its behalf by other bodies.

3.2
conformity control
performance of control methods to prove whether a product can be accepted as conforming to specified requirements

3.3
inspection lot
definite quantity of packages (product items) manufactured under conditions that are presumed uniform, and that are submitted for inspection and accepted or rejected as a whole, depending on the quality found by inspection of a representative sample drawn from the lot

3.4
manufacturer's declaration of conformity
action by which a manufacturer declares under his own responsibility, by means of a "declaration of conformity" that the product is in conformity with the specification, without being under procedures of a third-party certification system

See ISO 17050-1.

3.5
qualified contractor
individual, organization or corporation who/that has the knowledge required for installing the material, who/that is responsible for the installation of the material and who/that has the contractual obligations for the installation

3.6
qualified installer
individual who has proper knowledge of the installation requirements and who installs the material on site to form the final product

3.7
specification
document defining requirements for performance of the product

3.8
third party
person or body that is recognized as being independent of the parties involved with respect to the issues in question

3.9
third-party certification
certification provided by a person or body that is recognized as being independent of the parties involved the certification

See ISO 17000.

3.10
verification
validation by a third party, independent of the manufacturer, of the manufacturer's declaration of conformity

4 Conformity systems, their elements and recommended application of the systems

4.1 General

In this specification, the following three systems for attestation of conformity are described:

— system A: qualified contractor's self-declaration of conformity in accordance with ISO 17050-1, based on the installer's documented installation procedures and internal quality control and initial type testing of the product by the manufacturer, without any participation of a third party to the ongoing surveillance of factory production or site installation;

— system B: qualified contractor's declaration of conformity, based on the installer's documented installation procedures and internal quality control and initial type testing of the components by a laboratory accredited in accordance with ISO 17025, where both the manufacturer's quality control and the installer's quality control has been certified initially by a third party; there is ongoing surveillance for the factory production control but not for the site installation;

— system C: installed product certification by a certification organization in accordance with ISO 17021 and ISO/IEC Guide 65, based on the installer's documented installation procedures and internal quality control and initial type testing of the components by a laboratory accredited in accordance with ISO 17025, where both the manufacturer's quality control and the installer's quality control has been certified initially by a third party; the certification organization certifies the installer in accordance with ISO 17024 and ongoing surveillance site audits are conducted on a regular basis by the certification organization accredited in accordance with ISO 17020.

NOTE Systems B and C have a progressive increase in third-party involvement in the conformity control system.

4.2 System A — Declaration of conformity by a qualified contractor — Initial type testing of manufacturer's product, manufacturer's internal quality control and qualified contractor's internal site quality control

This system is based on the following elements:

a) manufacturer's responsibilities:

— factory production control;

— having initial type testing of the components completed by the manufacturer;

b) qualified contractor's responsibilities:

— self-declaration of conformity following requirements outlined in ISO 17050-1;

— document site quality-control programme;

c) qualified installer's responsibilities:

— documented installation procedures;

— ongoing site inspection and testing by the installer;

— daily work records by the installer;

d) certification organization:

— none.

By the qualified contractor's declaration of conformity, the contractor verifies that the installation is under a site quality-control program and that the results of the site quality-control program show that the installed products are in conformity with the product specification and any applicable installation standards.

4.3 System B — Declaration of conformity by an installer — Initial type testing of manufacturer's product by a third party, third-party verification of factory production control, verification of a qualified contractor's site quality-control program and site quality control by a qualified contractor

This system is based on the following elements:

a) manufacturer's responsibilities:

- factory production control;
- having initial type testing of the components completed by a laboratory accredited in accordance with ISO 17025;

b) qualified contractor's responsibilities:

- document site quality-control program;

c) qualified installer's responsibilities:

- documented installation procedures;
- ongoing site inspection and testing by the installer;
- daily work records by the installer;

d) certification organization, in accordance with ISO 17021 and ISO/IEC Guide 65:

- testing laboratory accredited in accordance with ISO 17025;
- initial inspection of factory production control;
- ongoing surveillance audits of factory production control;
- initial inspection of the qualified contractor's installation procedures, site quality-control program, installer's site inspection, installer's site testing procedures and daily work record.

By the qualified contractor's declaration of conformity, the qualified contractor verifies that the installation is under a site quality-control program that has been verified by a third party and that the results of the site quality-control program show that the installed product is in conformity with the product specification and any installation standards. The qualified contractor also declares that the factory production control has been verified and is being monitored by a certification organization. Certification bodies shall be in accordance with ISO 17021 and be accredited by an accreditation body that is member of the IAF/ILAC Multilateral Agreement.

4.4 System C — Declaration of conformity by a third party — Initial type testing of manufacturer's product by a third party, third-party verification of factory production control, verification of a qualified contractor's site quality-control program and site quality control by a third party

This system is based on the following elements:

a) manufacturer's responsibilities:

- factory production control;
- initial type testing of the components completed by a laboratory accredited in accordance with ISO 17025;

b) qualified contractor's responsibilities:

- document site quality-control program;

c) qualified installer's responsibilities:

- documented installation procedures;
- ongoing site inspection and testing by the installer;
- daily work records by the installer;

d) certification organization, in accordance ISO 17021 and ISO/IEC Guide 65:

- testing laboratory accredited in accordance with ISO 17025;

- initial inspection of factory production control;
- ongoing surveillance audits of factory production control;
- initial inspection of the qualified contractor's installation procedures, site quality-control program, installer's site inspection, installer's site testing procedures and daily work record;
- development of a certification scheme in accordance with ISO 17024;
- routine certified installer audits to provide surveillance, assessment and approval of the ongoing *in-situ* product installation (routine inspections) in accordance with ISO 17020.

By the certification organization's declaration of conformity, the certification organization verifies that the installation is under a site quality-control program that has been verified and is monitored on an ongoing basis by a third party and that the results of the site quality-control program show that the installed products are in conformity with the product specification and any installation standards. Certification bodies shall be in conformance with ISO 17021 and be accredited by an accreditation body that is member of the IAF/ILAC Multilateral Agreement. The certification organization also declares that the factory production control has been verified and is being monitored. The certification organization for the factory production control may be a different organization from the certification organization for the site quality-assurance program; however, the certification organization for the site quality-assurance program shall be consistent with that for the factory production control program.