

SINTEF Technical Approval

SINTEF Technical Approval (TG) is a national approval system for building materials, components and construction systems, managed by SINTEF Certification. The purpose of an approval is to certify that a building product has been found fit for its intended use, when applied as stated in the approval. A SINTEF Technical Approval shall in one document also fulfil the requirements for documentation of construction product performance imposed by the Norwegian building regulations.



Status

SINTEF Technical Approvals are issued by SINTEF Certification. As an independent body SINTEF Certification confirms that the product, when installed in a building construction, has the necessary properties and performance related to the essential requirements stated in the Technical Regulations under the Norwegian Planning and Building Act. A SINTEF Technical Approval is a technical specification according to Technical Regulations § 5-12. Normally, no further documentation of product performance should be required by the building authorities.

Basis and scope

A SINTEF Technical Approval is based on product properties verified by type testing and/or calculations, evaluation of fitness in use, and possibly supplemented by experience from practical use, pilot projects etc.

Product properties must be determined in accordance with guidelines linked to the Council Directive 89/106/EEC on construction products, and any minimum requirements for CE-marking given in relevant European product specifications. Normally, the basis for a Technical Approval may therefore also be used as a basis for CE-marking in accordance with the relevant European product standard or ETA Guideline. A SINTEF Product Certificate for relevant properties (see separate information) may be issued in addition.

As a supplement to the authorities' minimum requirements, SINTEF Technical Approval gives a documentation of properties, field of application and critical conditions for use which are in demand in the Norwegian market. This may include quality requirements recommended by SINTEF Building and Infrastructure, by trade organisations, and recommendations given in guidelines to the Norwegian technical regulations.

The approval document

The approval document includes:

- Product description
- Area of application
- Product properties

- Critical conditions for use
- Product and factory production control system
- Basis for the approval

Product description

Specification of materials and components in the product is stated in the approval, with references to relevant product standards and product control descriptions. When construction systems entail a large number of associated building details, the approval may also include supplementary construction drawings which are a formal part of the approval.

Area of application

The approval describes the areas of application covered by the approval. This may be building types, climatic zones and fire classes.

Product properties

The documentation of product properties covers primarily what is relevant for the essential performance requirements stated in the Technical Regulations. These requirements are related to:

- Mechanical resistance and stability
- Safety in case of fire
- Hygiene, health and the environment
- Safety in use
- Protection against noise
- Energy economy and heat retention.

Properties associated with serviceability and durability is also included in the approval.

As far as possible the product properties are given in a manner that facilitates comparison of similar types of products or similar areas of application.

Critical conditions for use

The approval states design criteria for use of the product and requirements for installation which have to be fulfilled for the product to be fit for its intended use.

Product- and factory production control

All products granted a SINTEF Technical Approval are subject to supervisory product and production control. The manufacturer must have a satisfactory quality assurance system for the running production, and the system shall be subject to audit by an independent inspection body. This is achieved by means of factory visits, carried out either by SINTEF Certification or by another inspection body which can report to SINTEF Certification. Product control may also include audit testing of product properties.

Provided the manufacturer has a certified quality assurance management system (e.g. in accordance with ISO 9000), the audit of the management system is co-ordinated with the supervisory factory production control as far as possible.

Basis for the approval

A list with references to reports from type testing and other tests which constitute the basis for the approval, is included in the approval document.

Environmental declaration

All SINTEF Technical Approvals include an assessment of possible effects on the indoor environment. Technical Approvals also include information regarding the possible content of dangerous substances.

A SINTEF Technical Approval may also comprise a standardised summary of an environmental declaration Type III according to ISO 21930, see separate information.

Products eligible for approval

SINTEF Technical Approval is a general approval system intended to cover all types of building products, included construction systems, both prefabricated and built on site. The approval system is suitable for the introduction of new, inno-

vative products, as well as for established products in order to summarize the documentation of all product properties in one document. SINTEF Technical Approvals are issued both for domestic and imported products.

Marking

In order to indicate that a product has been approved, an approval mark with an approval number is issued for each individual product. This mark may be used directly on the product, on the packaging, or in product marketing.

Publication and validity

The approval documents are distributed by each individual holder of Technical Approvals. The list of approved products, as well as a copy of each approval document, is published on the web site www.sintefcertification.no.

An approval is generally valid for a five-year period. A follow-up contract is made between SINTEF and the holder of the approval, and the approval is revised and continuously updated when changes are made in the product or in the conditions for use. Any breach of the conditions for approval may result in immediate invalidation of the approval.

International applications

SINTEF Technical Approval is primarily a national approval system for the Norwegian domestic market. However, typetesting and other verifications carried out for a SINTEF Technical Approval may also be used as a basis for CE-marking or corresponding national approvals in other European countries. This can be done through SINTEF Certification's international co-operation within the organisation UEAtc.

SINTEF Technical Approval may be issued for products that are already CE-marked, when supplementary product performance documentation for the Norwegian market is wanted.

SINTEF Certification

SINTEF Certification issues certificates and approvals for construction products. Documentation is issued as SINTEF Product Certificates, SINTEF Technical Approvals and European Technical Approvals.

Further information

For further information please contact SINTEF Building and Infrastructure:

SINTEF Building and Infrastructure Oslo

P.O.Box 124 Blindern, NO-0314 Oslo
Tel. +47 22 96 55 55
Fax +47 22 69 94 38

SINTEF Building and Infrastructure Trondheim

Høgskoleringen 7B, NO-7465 Trondheim
Tel. +47 73 59 33 00/90
Fax +47 73 59 33 50/80

