

SINTEF Technical Approval

SINTEF Technical Approval (TG) that a building product has been assessed by SINTEF Building and Infrastructure, and found fit for the intended use when applied as described in the approval. SINTEF Technical Approval fulfills the requirements for documentation of building product properties and performance according to the Norwegian technical regulations for buildings. The approvals are directed towards the Norwegian market, and are issued for building materials, components and construction systems in general.



Purpose

SINTEF Technical Approvals are issued by SINTEF Building and Infrastructure (later called SINTEF) through the department SINTEF Certification. As a neutral and independent body SINTEF confirms that the product, when installed in a building construction, has the necessary properties and performance related to the requirements stated in the Technical regulations for buildings (TEK) under the Norwegian Planning and Building Act. A SINTEF Technical Approval is a technical specification according to § 3–4 of the Technical Regulations. No further documentation of product properties and performance should normally be required by the building authorities.

SINTEF Technical Approvals are a voluntary scheme for product documentation. For products that must be CE-marked according to the European Construction Product Regulations (CPR) is SINTEF Technical Approval a national supplementary documentation, aimed at the Norwegian market in order to cover assessment of the intended use and additional product performance if relevant.

Basis and scope

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

Product properties and performance shall first of all be determined in accordance with relevant test methods and calculation methods given in harmonized product standards, and fulfill possible minimum requirements for CE-marking according to the CPR. For products where CE-marking is required must the declaration of performance and the CE-marking be in place before a SINTEF Technical Approval can be issued as a supplementary documentation.

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 and by trade organizations, and recommendations given in guidelines to the Norwegian technical regulations for buildings.

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 are stated in the approval, with references to product standards and product control descriptions where relevant. For building systems the approval document may also refer to supplementary construction drawings, which are shown in a separate document. This document is also a formal part of the approval.

Area of application

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

Product properties

The documentation of product properties and performance covers primarily what is relevant in order to meet the essential performance requirements for buildings:

- 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 the necessary design work to be done before applying the product, and the critical requirements for installation which have to be fulfilled if the product shall perform as presupposed.

Product- and factory production control

All products with a SINTEF Technical Approval are subject to a supervisory product and production control. The intention is verification of the product's characteristics stated in the SINTEF Technical Approval. Our experience is that such inspection is required, as we in some cases during this control find deviations in the factory production control or with the product's performance. The manufacturer must have a satisfactory quality assurance system for the production, and the system shall be subject to audit by SINTEF Building and Infrastructure or another notified body. Product control may also include independent audit testing of product properties by SINTEF Building and Infrastructure or another independent testing laboratory. For CE-marked products where a certification of the factory production control is required, the supervisory control will normally be coordinated with the control required for SINTEF Technical Approval if the supervisory control is performed by SINTEF Building and Infrastructure.

Basis for the approval

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

Environmental properties

Assessment of environmental properties have been included in all SINTEF Technical Approvals issued after 01.01.2010. The assessment covers content of substances which may be dangerous to health or the environment, possible effects on the indoor environment, drinking water, soil, and ground water, and assessment of waste handling and possible recirculation. The extent of the assessment is adapted to the intended use of the product. A SINTEF Technical Approval may also comprise a standardized summary of a full environmental declaration Type III according to ISO 21930 (see separate information).

About SINTEF Certification

SINTEF Certification is a department in SINTEF Building and Infrastructure. We are a certification body for building products, systems and structural elements, and we are issuing SINTEF Technical Approvals, European Technical Assessments (ETA), CPR certificates and SINTEF Product Certificates.

Further information

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Products eligible for approval

SINTEF Technical Approval may in principle be issued for all types of building materials, components and building systems which SINTEF find suitable for the given intended use. The approval system is suitable for both new and established products on the market, and both domestic and imported products.

Marking

In order to indicate that a product has SINTEF Technical Approval the approval mark with an approval number may be applied directly on the product, on the packaging, or used in product marking.

Publication and validity

The holders of SINTEF Technical Approval publish the approval documents according to their choice. A list of currently valid approvals, as well as a copy of each individual approval document is published on the website www.sintefcertification.no. The website is continuously updated.

An approval is generally valid a five-year period, but is revised as soon as changes in the product or in the conditions for use are made. The approval document will then get a new dating, and the valid version is always the version displayed on www.sintef.certification.no.

A contract between SINTEF and the holder of the approval, including a production control description, is established for each approval. An approval may be withdrawn immediately if the conditions for the approval are not fulfilled according to the contract.

European technical assessment (ETA)

European technical assessments, (ETA), (former European technical approvals) are worked out in order to make it possible for products not covered by a harmonized product standard to be CE-marked (see separate information). Products which are CE-marked on the basis of an ETA may also have a SINTEF Technical Approval. This is of interest for the documentation of special product performance and for assessment of fitness for use demanded in the Norwegian market, or in cases where a particular Norwegian documentation is wanted for marketing purposes.

