BUSINESS PLAN

CEN/TC 88
THERMAL INSULATING MATERIALS AND PRODUCTS

EXECUTIVE SUMMARY

CEN/TC 88 develops European Standards in the field of thermal insulation materials and products for application in buildings, including insulation for installed equipment and for industrial insulation, covering: terminology and definitions, list of required properties with regard to different applications, methods for the determination of these properties, sampling procedures, conformity criteria, specifications for insulating materials and products, marking and labelling of insulating materials and products.

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Today, in a situation of:

- limited and decreasing availability of sources of fossil energy,
- increasing costs for the production of energy,
- environmental pollution both by the production as well the consumption of fossil energy,

human society faces the necessity to safe energy for economical as well as for environmental reasons.

It is therefore that saving measures must be applied covering the entire range of energy consumption processes. Unnecessarily high energy consumption of buildings through heat losses through the building envelope are one prime aspect of this energy saving task. Unnecessarily high energy consumption for industrial production and distribution processes through energy losses in district heating systems, water supply and ventilation systems, industrial processes are the other.

Improving the thermal performance of the building envelope (walls, roofs, floors, windows etc.) is a very important possibility in this field.

Also, the environmental impact by the emission of heat and by the emission of green-house gases generated as a result of energy consumption can be decreased considerably by reducing the energy consumption of buildings. This is supported by a detailed study, accepted by the European Commission, which shows that the emission of CO_2 into the atmosphere could be reduced by 450 million tons per year by improving the thermal performance of buildings in the European Union alone.

Consequently, an improvement of the thermal insulation of houses and structures has been demanded in most of the CEN member states since decades by technical and legal provisions which led to an increase of the production of thermal insulation materials combined with an increasing economical importance of the related industries.

In addition to the increasing industrial activity in this field, the increasing public perception of the environmental consequences of energy use and the willingness to safe energy led to an increasing trade of relevant products for thermal insulation between the CEN member states, despite the fact that there are different legal and technical views due to different geographic and climatic conditions as well as different ways of life and security demands.

This situation requires a harmonisation of technical provisions in order to enable the insulation material manufacturing industry to develop materials and products meeting the requirements of a descriptional framework of their properties which, in turn, allows users in CEN member states, to demand the requirements to be met for their respective purposes in a "European standardised description framework", thus eliminating any national technical barriers to trade.

In order to reach this target, the results of the discussions within CEN/TC 88 provide the required tools in the form of European Standards, listed in the following programme.

1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN/TC:

Data for the size of the European market, in terms of the value of the products conforming to CEN/TC 88 standards are not available.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

Political, economic, social, technical, legal as well as factors of national tradition that either directly require some or all of the standardisation activities proposed by CEN/TC 88, or significantly influence the way these activities are carried out, are the following:

The bases for the CEN/TC 88 programme of work are the Basic Requirement for Construction Works 3, Hygiene, health and the environment, and 6, Energy economy and heat retention, of the Regulation EU 305/2011.

The Council of the European Communities further "stresses that the profiles of energy efficiency must be raised significantly and that a renewed commitment strongly made by the Community and its Member States to the rational use of energy is necessary", in its resolution of 7 December 1998. The Council "considers that increased exchange of information and other co-operation between the Member States and the Commission on energy efficiency policies, programs, measures and results are necessary". The Council further considers that those activities could consist for example of:

- "increased emphasis especially on the building sector, but also on energy use by industry and household";
- "increased and extended use of labelling, certification and standardisation";
- "the revision of existing legislation and the development of new legal instruments, including the use of mandatory minimum efficiency standards, if necessary and if no other measures are appropriate";
- "the use of instruments such as co-operative technology procurement in compliance with competition law and principles, and the taking into account of energy efficiency in public sector procurement practices, as well as energy audition, if appropriate".

During the Earth Summit in Rio in 1992, the Business Council for Sustainable Development (BCSD) emphasized that "business and industry need tools to help measure environmental performance, and develop powerful environmental management techniques".

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

- To provide harmonised frameworks for the declaration by insulation material and products' manufacturers of the properties of these materials and products in the form of European Standards, which also form the legal basis for users of such products as well as the national building regulators in CEN Member States, to specify the requirements that must be met by these products, when intended for the purpose of thermal insulation.

- To fulfil the performance characteristics given in the Mandate M/103 in order that insulation materials and products described according to the rules of the ENs to be developed can be clearly assessed in the role they are able to play in the satisfaction of the Basic Requirements for Construction Works laid down in the Regulation EU 305/ 2011

- To prepare product standards covering the whole family which are divided in factory-made and in in-situ produced thermal insulation materials and products.

- To produce test standards needed for the determination of the performance characteristics given in Mandate M/103. Only identical test methods allow for the comparison of results obtained in testing.

- To prepare one standard for the evaluation of conformity of all thermal insulation materials and products, which reflects the decision of the Standing Committee on Construction in the European Commission on the system of attestation of conformity.

- To provide with European Standards the pre-condition for products following the declaration rules of these standards to bear the CE mark.

4.2 Identified strategies to achieve the CEN/TC.s defined objectives

In addition to the establishment of a Working Group for the development of general test methods and a coordinating Working Group in direct contact with the TC, the basic strategy is to group the work items to product families which are covered by different Working Groups acting under the responsibility of CEN/TC 88.

The CEN/TC 88-Working Group Structure allows for the development of harmonised European Standards under Mandate M/103 for materials and products the use of which in buildings has consequences for Essential Requirements 3 and Essential Requirements 6, including standards for the evaluation of conformity. The majority of Working Groups deal with thermal insulation products for buildings, i. e. products used in the building envelope, and one Working Group is preparing harmonised European Standards for building equipment and industrial installations.

Essential for the work in CEN/TC 88 with its huge working programme on different product families was the involvement of the relevant industry by its European Associations and federations and the liaison to other CEN/TCs, e. g. CEN/TC 89, as well as ISO/TCs, e. g. ISO/TC 163, which are dealing with aspects overlapping the subject matter of CEN/TC 88, but being outside its scope.

The working language in CEN/TC 88 is English, the responsibility to provide translations of the standards developed in French and German for the stages of enquiry and formal vote lies with AFNOR and DIN.

So far CEN/TC 88 meets in intervals of approximately six months. In between meetings matters are handled by correspondance. The use of Internet (Livelink) has been put into practice.

4.3 Environmental aspects

The work of CEN/TC 88 "*Thermal insulating material and product*s" is focused on developing standards connected to the European construction sector. From an environmental point of view, a substantial amount of the total greenhouse gas emissions in Europe is related to the energy use in the construction sector. This sector is accounting for approximately 50% of the total energy use in Europe. Efforts to reduce the use of energy in the sector are crucial in order to achieve the goals of reducing greenhouse gas emissions.

Thermal insulating materials and products according European Standards, including insulation for installed equipment and for industrial insulation, covering terminology and definitions are essential for reducing the environmental pollution by the consumption of energy. As the European construction sector heads towards low and zero energy buildings, the embodied environmental impacts and resource efficiency of the insulation products become increasingly important in the life cycle of the products itself and within the construction sector and should be addressed in the European standards.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 88 WORK PROGRAMME

Thermal insulation has a tradition in most European countries under different economical, technical and legal conditions. The geographical and climatic conditions prevailing in Member States are also different, as are their building traditions and related ways of life. This requires a very detailed and flexible system of technical specifications and test methods to cover the entire range of performance requirements for very different applications in very different Member States.

It is time- and resource-consuming to prepare horizontal methods for the evaluation of the performances of the different products in all the aspects that have to be assessed to judge the relative role the product may play in the satisfaction of Basic Requirement for Construction Works 3, respectively Basic Requirement for Construction Works 6. The stipulation that the specifications must allow for the entire range of performance requirements that might be demanded in EU Member States under the provisions of Article 3 of the Regulation EU 305/2011 with a view to avoid barriers to trade results in delays in fulfilling the estimated target dates of the working programme of CEN/TC 88. Since Article 3 (3) of the Regulation EU 305/2011 refers that for specific families of construction products covered by a harmonised standard, the Commission shall, where appropriate and in relation to their intended uses as defined in harmonised standards, determine by means of delegated acts in accordance with Article 60, those essential characteristics for which the manufacturer shall declare the performance of the product when it is placed on the market.

This delay is intensified by the decision-making process in the Commission Services with respect to the necessary finalised guidance papers and documents on fire safety and dangerous substances, which have led to the situation that the first family of CEN/TC 88 standards approved in the final vote (EN 13162:2001 through EN 13171:2001, in combination with EN 13172) are still lacking any provisions for the testing for reaction to fire.

Since the work within CEN/TC 88 is carried out in English and the former CEN rule for the preparation of European Standards, namely that drafts should be prepared in the three languages English, German and French "from an early stage in the preparation" since this was supposed to be the only way to arrive at identical meanings of all three versions, has been

abandoned, the preparation of the remaining two language versions to be submitted for enquiry and formal vote, is also causing delays.