

# STANDARDS ANALYSIS

# **CONSTRUCTION**

# **LUXEMBOURG**

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Institut Luxembourgeois de la Normalisation, de l'Accréditation, de la Sécurité et qualité des produits et services



Agence pour la Normalisation et l'Economie de la Connaissance



# **FOREWORD**

Technical standardization provides important support for a company's economic development and the quality of its products and services. Indeed, the <u>European Regulation No. 1025/2012</u> on European standardization states that the application of standards "also helps to boost the competitiveness of enterprises by facilitating in particular the free movement of goods and services, network interoperability, means of communication, technological development and innovation".

At national level, the *Institut Luxembourgeois de la Normalisation, de l'Accréditation, de la Sécurité et qualité des produits et services* (ILNAS), a public administration under the supervision of the Minister of the Economy, SME, Energy and Tourism, is the national standards body. Within this framework, ILNAS, as a member of European (CEN, CENELEC, ETSI) and international (ISO, IEC, ITU-T) standards organizations, enables the national market to participate in the development of standards within these entities, and also provides access to standards.

In order to promote technical standardization and develop the ad hoc skills in Luxembourg, the <u>Luxembourg standardization strategy 2020-2030</u> identifies the construction sector as one of the most relevant economic pillars that can benefit greatly from technical standardization, along with the information and communication technology and aerospace sectors.

Directly linked to this strategy, ILNAS has drawn up the <u>Luxembourg's policy on technical standardization in the construction sector 2020-2025</u>, which is implemented with the support of the Economic Interest Group "*Agence pour la Normalisation et l'Economie de la Connaissance*" (ANEC GIE – Standardization Department). This policy intends to promote and strengthen the use of technical standards by the national market, to reinforce the position of Luxembourg in the global construction standardization landscape - particularly through a stronger involvement of national stakeholders in the relevant technical standardization committees - and to pursue the development of research and education programs in standardization.

National standardization activities are also playing an increasingly significant role in the construction sector, with several national standards documents currently being created, and many more published in recent years.

In order to foster, but also to enhance all these developments, the present document contributes to facilitating the orientation of construction market activities, from the normative point of view, and helps to position them in the related European and international context. Updated annually, it provides industry stakeholders with an overview of standards developments in the field and, this year, also highlights activities relevant to sustainable construction in line with the goals of the United Nations 2030 Agenda.

Jean-Marie REIFF, Director ILNAS

Jean-Philippe HUMBERT, Deputy Director ILNAS



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# Introduction

The present version of the standards analysis for the construction sector provides information on the relevant technical committees at European (CEN and CENELEC)<sup>1</sup> and international (ISO and IEC)<sup>2</sup> level, as well as details on national involvement in the standardization process.

As a member of European and international organizations, ILNAS promotes technical standardization and encourages the national stakeholders to get involved in the standardization process at all levels.



Technical standardization offers the opportunity for construction professionals to participate in defining the rules of the art. The use of standards also provides a framework for technical innovation and best practices. Furthermore, taking into account the challenges of sustainable development, standards help guaranteeing quality and durability of buildings as well as effectively considering the social, environmental, and economic needs of current and future populations.

To offer a better visibility of standardization activities oriented towards eco-design, the "sustainability" logo below is affixed next to the relevant technical committees throughout the document.



-

<sup>&</sup>lt;sup>1</sup> CEN: European Committee for Standardization CENELEC: European Committee for Electrotechnical Standardization

<sup>&</sup>lt;sup>2</sup> ISO: International Organization for Standardization IEC: International Electrotechnical Commission



The present analysis is structured to facilitate access to information by adopting a classification into five main sections divided further according to specific topics. Each of these topics serves as an umbrella to group the relevant technical committees.

#### STUDY & DESIGN



- · Buildings & Civil Engineering Works · Acoustics
- Structural Design
- Digital Modelling
- Geographic Information
- Technical Drawings
- Geotechnics

- · Sustainability & Environment
- Energy Performance
- · Maintenance & Facility Management
- Conformity
- · Accessibility

- · Cleanroom Technology
- · Spectator Facilities
- · Crime Prevention
- Conservation of Cultural Heritage

#### BUILDING CONSTRUCTION & CIVIL ENGINEERING



- · Steel & Aluminum
- Welding
- Fasteners & Structural Bearings
- Timber Structures
- Cement
- Concrete

- Masonry Aggregates Natural Stones
- Greenhouses
- Earthworks
- Geosynthetics
- Road Networks
- · Railway Networks
- · Water Networks
- · Gas Networks
- · Electricity Networks: Overhead Lines
- · Electricity Networks: Power & Energy

#### INSTALLATION



- Valves, Pumps & Compressors
- · Cooling & Ventilation Systems
- Heating Systems
- Gas
- Chimneys
- · Domestic Appliances for Water
- Sanitary Appliances

- Building Management Systems
- · Lifts, Escalators & Moving Walks
- · Wind Energy
- · Solar Energy
- Lighting
- · High Voltage

- · Low Voltage
- Electrical Energy Storage Systems
- Protection from Lightning & Surges
- · Electric Cables & Accessories
- · Power Transformers & Capacitors
- Electrical Installations
- · Communication Cables & Equipment

#### COMPLETION & FINISHING



- Wood & Timber
- Gypsum
- Coatings
- Sealing
- Sealant

- · Roof
- · Doors & Windows
- · Glass in Building
- · Paints & Varnishes
- Wallcoverings
- · Ceramic Tiles
- Ceilings
- · Floor Coverings
- · Floor Screeds
- · Surfaces for Sports Areas

#### SAFETY, MACHINERY & EQUIPMENT



- · Personal Protective Equipment
- Tools
- Work at Height
- Cranes
- Machinery

- · Chains, Ropes, Webbing, Slings & Accessories
- · Mechanical Vibration & Shock
- Live Working
- · Temporary Works Equipment
- Aerial Ropeways, Funicular Ropeways & Surface Lifts
- Measuring Equipment for Electrical & Electromagnetic Quantities

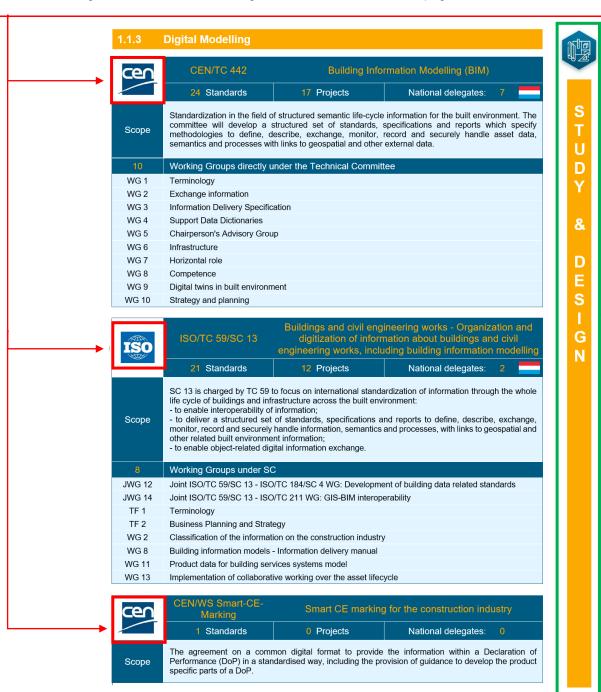
The second part of the document provides an overview of national participation in the standardization process in the construction sector, with statistics on the number of delegates and organizations registered in standardization bodies. Finally, the document presents a list of all technical committees, subcommittees and working groups related to the construction sector in which experts from Luxembourg are involved, along with a list of registered delegates.



# 1 TECHNICAL COMMITTEES IN THE CONSTRUCTION SECTOR

### **Tutorial: Navigation within the chapter**

Click on the logo of the standardization organization to access the web page of the technical committee.



Click on the picture representing the ANS section (e.g.: "Study & Design") or on the corresponding banner to go back to the table of contents of the section.





# 1.1 STUDY & DESIGN

ARCHITECTURE

ENGINEERING

TECHNICAL CONSULTANCY

SURVEYORS

TECHNICAL TESTING AND ANALYSIS

• • •



# 1.1 Study & Design



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1.1.2	Structural Design	17
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# 1.1.1 Buildings & Civil Engineering Works





# ISO/TC 59

#### Buildings and civil engineering works

135 Standards 25 Projects

National delegates:

2



Standardization in the field of buildings and civil engineering works, of:

- general terminology;
- organization of information in the processes of design, manufacture and construction;
- general geometric requirements for buildings, building elements and components including modular coordination and its basic principles, general rules for joints, tolerances and fits, performance and test standards for sealants;
- general rules for other performance requirements, including functional and user requirements related to service life, sustainability, accessibility and usability;
- general rules and guidelines for addressing the economic, environmental and social impacts and aspects related to sustainable development;
- geometric and performance requirements for components that are not in the scope of separate ISO technical committees;
- procurement processes, methods and procedures. Excluded:

#### Scope

- standardization and coordination of technical product documentation (ISO/TC 10);
- acoustic requirements (ISO/TC 43);
- bases for design of concrete structures (ISO/TC 71/SC 4);
- fire tests and fire safety engineering related to building materials, components and structures (ISO/TC 92);
- bases for design of structures (ISO/TC 98);
- construction machinery (ISO/TC 127 and ISO/TC 195);
- performance requirements for glass in buildings (ISO/TC 160);
- performance requirements for doors, doorsets and windows (ISO/TC 162);
- calculation of thermal properties (ISO/TC 163);
- bases for design of timber structures (ISO/TC 165);
- bases for design of steel and aluminium structures (ISO/TC 167);
- geotechnical aspects and soil quality (ISO/TC 182 and ISO/TC 190);
- standardization in the design and retrofit buildings regarding acceptable indoor environment and practicable energy use (ISO/TC 205).

2	Working Groups directly under Technical Committee
AG 1	Advisory Group
WG 4	Resilience of buildings and civil engineering works
10	Sub-Committees
SC 2	Terminology and harmonization of languages
SC 8	Sealants
SC 13	Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)
SC 14	Design life
SC 15	Framework for the description of housing performance
SC 16	Accessibility and usability of the built environment
SC 17	Sustainability in buildings and civil engineering works
SC 18	Construction procurement
SC 19	Prefabricated building
SC 20	Resilience of buildings and civil engineering works

SC 8 is developed in the section 1.4.5 – Sealant

SC 13 is developed in the section 1.1.3 – Digital Modelling

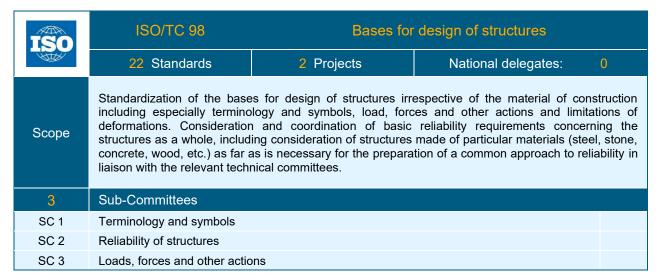
SC 15 is developed in the section 1.1.11 – Conformity

SC 16 is developed in the section 1.1.12 - Accessibility

SC 17 is developed in the section 1.1.8 – Sustainability & Environment



# 1.1.2 Structural Design



CEN/TC 250		Struc	tural Eurocodes		
	120 Standards	61 Projects	National delegates: 28		
Scope	Standardization of structural and geotechnical design rules for building and civil engineering works taking into account the relationship between design rules and the assumptions to be made for materials, execution and control.				
4	Working Groups directly u	nder the Technical Committ	ee		
WG 1	Policy, procedures and links	with other standards			
WG 4	Fiber reinforced polymer stru	ctures			
WG 5	Membrane Structures				
WG 6	Robustness				
11	Sub-Committees				
SC 1	Eurocode 1: Actions on structures				
		15.1.00			
SC 2	Eurocode 2: Design of concr				
SC 2 SC 3		ete structures			
	Eurocode 2: Design of concr Eurocode 3: Design of steel	ete structures	ıres		
SC 3	Eurocode 2: Design of concr Eurocode 3: Design of steel	ete structures structures osite steel and concrete structu	ıres		
SC 3 SC 4	Eurocode 2: Design of concr Eurocode 3: Design of steel s Eurocode 4: Design of comp	ete structures structures osite steel and concrete structu r structures	ıres		
SC 3 SC 4 SC 5	Eurocode 2: Design of concr Eurocode 3: Design of steel s Eurocode 4: Design of comp Eurocode 5: Design of timbe	ete structures structures osite steel and concrete structu r structures nry structures	ıres		
SC 3 SC 4 SC 5 SC 6	Eurocode 2: Design of concr Eurocode 3: Design of steel s Eurocode 4: Design of comp Eurocode 5: Design of timbe Eurocode 6: Design of maso	ete structures structures osite steel and concrete structu r structures nry structures esign	ıres		
SC 3 SC 4 SC 5 SC 6 SC 7	Eurocode 2: Design of concrete Eurocode 3: Design of steel 3: Eurocode 4: Design of competer Eurocode 5: Design of timbe Eurocode 6: Design of maso Eurocode 7: Geotechnical design of the Eurocode 7: Geotechnical d	ete structures structures osite steel and concrete structu r structures nry structures esign stance design of structures	ıres		
SC 3 SC 4 SC 5 SC 6 SC 7 SC 8	Eurocode 2: Design of concrete Eurocode 3: Design of steel steel Eurocode 4: Design of competer Eurocode 5: Design of timbe Eurocode 6: Design of maso Eurocode 7: Geotechnical de Eurocode 8: Earthquake resi	ete structures structures osite steel and concrete structu r structures nry structures esign stance design of structures num structures	ıres		

IINIAS	ILNAS/TC 100	Eurocodes (Stand-by)		
11 47)	58 Standards	0 Projects	National delegates: 0	
Scope	National Annexes for structu	ral Eurocodes		



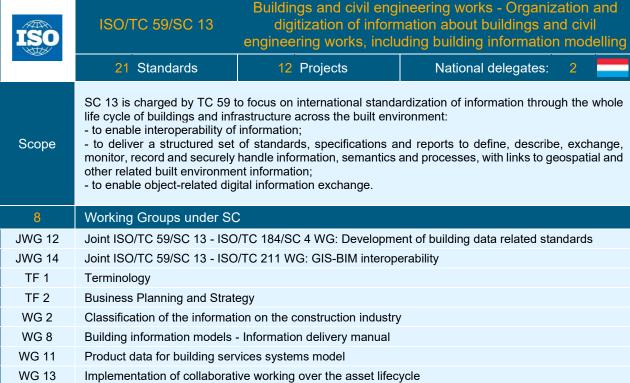


# 1.1.3 Digital Modelling



cen	CEN/TC 442	Building Information Modelling (BIM)			
	24 Standards	17 Projects	National delegates:	7	
Scope	Standardization in the field of structured semantic life-cycle information for the built environment. The committee will develop a structured set of standards, specifications and reports which specify methodologies to define, describe, exchange, monitor, record and securely handle asset data, semantics and processes with links to geospatial and other external data.				
10	Working Groups directly under the Technical Committee				
WG 1	Terminology				
WG 2	Exchange information				
WG 3	Information Delivery Specification				
WG 4	Support Data Dictionaries				
WG 5	Chairperson's Advisory Group				
WG 6	Infrastructure				
WG 7	Horizontal role				
WG 8	Competence				
WG 9	Digital twins in built environm	ent			
WG 10	Strategy and planning				







**CEN/WS Smart-CE** 

<b>5</b> 0	Marking	Smart CE marking for the construction industry			
	1 Standards	0 Projects	National delegates: 0		
ope			the information within a Declaration of ovision of guidance to develop the product		





#### 1.1.4 **Geographic Information**

**ISO/TC 211** 

97 Standards



Scope

Standardization in the field of digital geographic information.

This work aims to establish a structured set of standards for information concerning objects or phenomena that are directly or indirectly associated with a location relative to the Earth.

21 Projects

Within the scope of geographic information, these standards may specify methods, tools, and services for data management. Data management is understood to include acquiring, processing, analyzing, accessing, presenting, and publishing data for users and systems

The work shall link to appropriate standards for information technology and data where possible, and provide a framework for the development of sector-specific applications using geographic data

21	Working Groups directly under the Technical Committee
AG 1	Outreach advisory group
AG 2	Advisory group on strategy
AG 3	Programme maintenance group (PMG)
AG 4	Joint advisory group (JAG) ISO/TC 211 – OGC
AG 5	Harmonized model maintenance group (HMMG)
AG 6	Group for Ontology Maintenance (GOM)
AG 7	Terminology maintenance group (TMG)
AG 10	XML maintenance group (XMG)
AG 11	Advisory group to support UN-GGIM and other related UN activities
AG 12	Control body for the ISO geodetic register
AG 13	Land cover and land use
AG 14	Register Maintenance Group (RMG)
AHG 11	Climate change
CAG 1	Chair's advisory group
CAG 1	Joint ISO/TC 211 - ISO/TC 204 WG: GIS-ITS
JWG 11	Framework and reference model
WG 1	Geospatial services
WG 4	Imagery
WG 6	Information communities
WG 7	Information management
WG 9	Ubiquitous public access

CEN/TC 287	Geogr	aphic Information		
59 Standards	12 Projects	National delegates:	1	

Scope

The committee will produce a structured framework of standards and guidelines, which specify a methodology to define, describe and transfer geographic data and services. This work will be carried out in close co-operation with ISO/TC 211 in order to avoid duplication of work. The standards will support the consistent use of geographic information throughout Europe in a manner that is compatible with international usage. They will support a spatial data infrastructure at all levels in Europe.

Standardization in the field of digital geographic information for Europe:



# **Technical Drawings**

IEC/TC 3



### Documentation, graphical symbols and representations of technical information

66 Standards 16 Projects

National delegates:

Standardization in the field of documentation, graphical symbols and representations of technical information, covering

- 1) Rules, principles and methods focusing on machine sensible representation of information. This includes but is not limited to:
- Definition and identification of classes and properties (e.g. sematic data),
- ontologies and data dictionaries (e.g. CDD),
- Information models for structuring of technical data and document management,
- information exchange based on existing communication means.

It includes definition, co-ordination and management of the information required during the whole life cycle of a device, system, or plant, also covering aspects of documentation.

- 2) Rules, principles and methods focusing on human sensible representation of the information. This includes but is not limited to:
- presentation of information in documentation,
- graphical symbols for use in documentation,
- graphical symbols for the human interaction with equipment.

#### Scope

The standards deal with the presentations and graphical symbols as shown in documents or on equipment, independently of their forms of representation, analogue or digital, but may also include requirements for the development of documentation.

- 3) Rules, principles and methods for general and safety related marking, identification and arrangement of information in electrical installations, equipment and man-machine interfaces. This includes but is not limited to:
- the meanings of colours and alternative means, when used for marking and identification,
- the arrangement of indicating devices and actuators,
- coding principles for indicating and actuating devices,
- terminal designation of electrical and electronic components, apparatus and equipment,
- designation of certain designated conductors.
- marking of electrical and electronic equipment with ratings related to supply and to its properties,
- marking of bare and insulated conductors.

#### Horizontal functions:

- To develop basic safety publications related to marking, identification and arrangement of information in electrical installations, equipment and man machine interfaces.
- To develop horizontal publications in the area of documentation, graphical symbols and representation of technical information.

#### 21 Working Groups directly under the Technical Committee

WG 27	Terminology
WG 28	Intelligent Information Request and Delivery specification (iiRDS) – A Process Model for Information Architecture
MT 21	Maintenance team of IEC 62027 and IEC 61082
MT 22	Maintenance team of IEC 60073, IEC 60445 and IEC 60447
MT 23	Maintenance team of IEC 60152, IEC 60757 and IEC 61293
MT 29	Graphical symbols for diagrams

MT 60848 Maintenance of IEC 60848 MT 61175 Maintenance of IEC 61175

MT 61666 Maintenance of IEC 61666 MT 62023 Maintenance of IEC 62023 MT 62491 Maintenance of IEC 62491

MT 62507 Maintenance of IEC 62507

MT 81714 Maintenance of the IEC 81714 series

**JWG 16** Maintenance of IEC 82079 series linked to ISO/TC 10

**JWG 17** Documentation of communication in power utility automation linked to TC 57

Revision of IEC 81355-1 (former IEC 61355-1), to replace the existing MT 61355 linked to ISO/TC **JWG 18** 10/SC 10

JWG 24 Maintenance of the IEC 81346 series linked to ISO/TC 10/SC 10

Industrial systems, installations and equipment and industrial products - Structuring principles and **JWG 25** reference designation - Part 10: Power plants linked to ISO/TC 10/SC 10

**JWG 26** IEC 82045 series linked to ISO/TC 10/SC 10

AG CAG Chair Advisory Group

VT 60617 SDB team for IEC 60617 - Graphical symbols for diagrams

Sub-Committees SC<sub>3</sub>C Graphical symbols for use on equipment

SC<sub>3D</sub> Classes, Properties and Identification of products - Common Data Dictionary (CDD)



F

SC 10

Process plant documentation



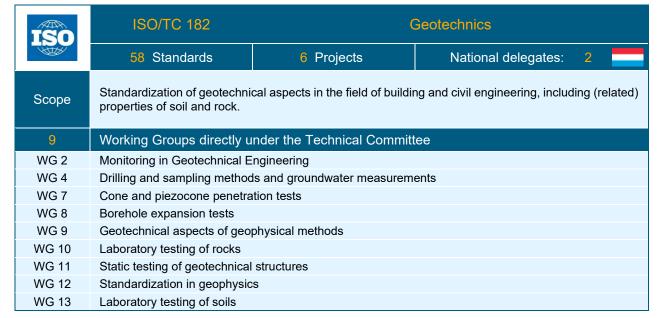
CENELEC	CLC/SR 3	Information structur	es, documentation and graphical symbols
//	29 Standards	6 Projects	National delegates: 0
CENELEC	CLC/SR 3C	Graphical syn	nbols for use on equipment
//	4 Standards	0 Projects	National delegates: 0
CENELEC	CLC/SR 3D	Product properties a	nd classes and their identification
7/ *	7 Standards	3 Projects	National delegates: 0
TSO	ISO/TC 10	Technical	product documentation
	145 Standards	22 Projects	National delegates: 0
Scope	Standardization and coordination of technical product documentation (TPD), including technical drawings, model based (3D), computer based (2D) or manually produced for technical purposes throughout the product life cycle, to facilitate preparation, management, storage, retrieval, reproduction, exchange and use.		
9	Working Groups directly เ	ınder the Technical Commi	ttee
CAG	Chairman's Advisory Group		
JSG 1	Joint Advisory Group between ISO/TC 10 and ISOTC 213 for harmonization issues		
JWG 21	Joint ISO/TC 10 - IEC/TC 3 WG: Work on the ISO 81355 series standards		
TF 1	Task Force for the development of the ISO/TC 10 roadmap		
WG 16	3D models: Presentation of product definition data		
WG 17	Vocabulary of terms and definitions		
WG 18	Drawing and writing instruments		
WG 19	Harmonization ISO 129 and ISO 128 series		
WG 20	Design and documentation for manufacture, assembly, disassembly and end-of-life processing		
4	Sub-Committees		
SC 1	Basic conventions		
SC 6	Mechanical engineering doc	umentation	
SC 8	Construction documentation		
00.10			

cen	CEN/SS F01	Tecl	nnical Drawings
	64 Standards	6 Projects	National delegates: 0
cen	CEN/SS F16	Gra	phical symbols
	13 Standards	0 Projects	National delegates: 0





# 1.1.6 Geotechnics



cen	CEN/TC 288	Execution of special geotechnical works		
	15 Standards	8 Projects	National delegates:	3
Scope		tion procedures for special geo dures) and of the required mate	otechnical works (including the terial properties.	esting and
8	Working Groups directly u	nder the Technical Committ	ee	
WG 19	Sheet-pile walls			
WG 20	Ground freezing			
WG 22	Deep mixing			
WG 23	Ground treatment			
WG 24	Soil nailing			
WG 25	Diaphragm walls -Bored piles			
WG 26	Displacement piles			
WG 27	Micropiles			

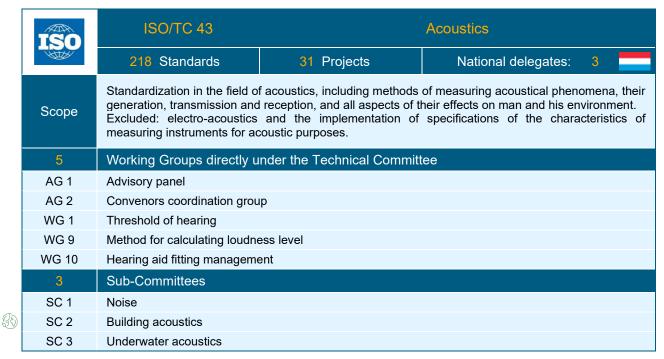
cen	CEN/TC 341	Geotechnical	Investigation and Testing
	57 Standards	6 Projects	National delegates: 2
Scope		of geotechnical investigation mpling and field and laboratory	and testing pertaining to equipment and testing.

cen	CEN/TC 340	Anti-seismic devices		
	1 Standards	6 Projects	National delegates: 0	
Scope	Standardization of the design, manufacture, testing, installation and maintenance of antiseismic devices for use in structures erected in seismic areas and designed in accordance with Eurocode 8.			
1	Working Groups directly u	nder the Technical Committ	ee	
WG 5	Revision of EN 15129			





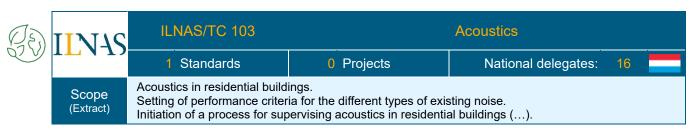
#### 1.1.7 Acoustics



cen	CEN/TC 211		Acoustics
	91 Standards	8 Projects	National delegates: 0
Scope	generation, transmission and environment, and methods of Excluded: acoustical perform	I reception of sound, all aspect fnoise reduction.	s of measuring acoustical phenomena, the ets of the effects of sound on man and his urement methods for building components uring protectors.

|--|

cen	CEN/TC 126 Acoustic properties of building elements and of buildings			
	54 Standards	3 Projects	National delegates:	2
Scope	Standardization in the field of acoustic properties of building elements and of buildings, including: laboratory methods, expression of results and accuracy; rating of acoustic properties of elements; field measurement methods, expression of results and accuracy; rating of acoustic properties of buildings; methods for determining the acoustic of buildings from the performance of its elements.			
5	Working Groups directly u	nder the Technical Commit	tee	
WG 1	Methods for measuring the s buildings	ound insulation of building elen	nents and the acoustic perforn	nances of
WG 2	Prediction of the acoustic per	rformance of buildings from the	performance of elements	
WG 5	Coordination working group			
WG 7	Laboratory measurement of	airborne and structure borne so	ound from building equipment	
WG 12	BIM Acoustics			







# 1.1.8 Sustainability & Environment



ISO	ISO/TC 59/SC 17	Sustainability in buildings and civil engineering works	
WITH .	13 Standards	2 Projects	National delegates: 0
Scope	Standardization in the field of sustainability of new and existing construction works in the context of the UN Sustainable Development Goals and climate change mitigation and adaptation. The environmental, economic, and social aspects of sustainability and circular economy are included as appropriate.		
6	Working Groups directly under the Technical Committee		
WG 1	General principles and terminology		
WG 3	Environmental declaration of products		
WG 4	Environmental performance of buildings		
WG 5	Civil engineering works		
AHG2	Circular economy in the cons	struction sector	
AHG3	Climate change mitigation in	buildings and engineering work	KS



TSO	ISO/TC 205		environment design
	40 Standards	11 Projects	National delegates: 0
Scope (Extract)	Standardization in the design of new buildings and retrofit of existing buildings for acceptable indoor environment and practicable energy conservation and efficiency.  Building environment design addresses the technical building systems and related architectural aspects, and includes the related design processes, design methods, design outcomes, and design-phase building commissioning. Indoor environment includes air quality, and thermal, acoustic, and visual factors.  Covering and including:  - aspects of sustainability related to indoor environmental quality and energy that can be addressed in the design of buildings and the design of retrofits of existing buildings;  - general principles of building environment design;  - design of energy-efficient buildings;  - building automation and control systems in building and retrofit design;  - indoor air quality in building and retrofit design;  - indoor thermal environment in building and retrofit design;  - indoor visual environment in building and retrofit design;  - indoor visual environment in building and retrofit design;  - design of heating and cooling systems including radiant; and  - application of methods of testing and rating the performance of building environmental equipment in the design of new buildings and retrofits. ()		
11	Working Groups directly under the Technical Committee		
AG 1	Joint advisory group TC 163 - TC 205 – Coordination of ISO 52000 family		
CAG	Chair's advisory group		
JWG 11	Joint ISO/TC 205 - ISO/TC 1	63 WG: Moisture damage	
JWG 12	Joint ISO/TC 205 - ISO/TC 2	74 WG: Visual indoor environn	ment
WG 1	General principles		
WG 2	Design of energy-efficient bu	ildings	
WG 3	Building Automation and Cor	ntrol System (BACS) Design	
WG 7	Indoor visual environment		
WG 8	Radiant heating and cooling systems		
WG 9	Heating and cooling systems		
WG 10	Commissioning		







TSO	ISO/TC 323	Circ	cular economy
WITH .	0 Standards	6 Projects	National delegates: 11
Scope	Standardization in the field of Circular Economy to develop frameworks, guidance, supporting tools and requirements for the implementation of activities of all involved organizations, to maximize the contribution to Sustainable Development.  Excluded: Aspects of Circular Economy already covered by existing committees.  Note: In parallel, the ISO TC 323 works in cooperation with existing committees on subjects that may support Circular Economy.		
8	Working Groups directly under the Technical Committee		
AG	Communication		
CAG	Chairman's Advisory Group		
WG 1	Terminology, principles, frameworks and management system standard		
WG 2	Practical approaches to develop and implement Circular Economy		
WG 3	Measuring and assessing circularity		
WG 4	Circular Economy in practice: experience feedback		
WG 5	Product circularity data sheet		
STTF	Spanish Translation Task Fo	rce	





#### **CEN/TC 473**

#### Circular economy

Ostandards

O Projects

National delegates:



Scope

Standardization in the field of Circular Economy to develop horizontal standards relating to European specific prerequisites, legislation, and policy. The standards aim to provide recommendations, requirements, methodologies and tools to support and measure transition towards a circular economy. The deliverables aim to unify international and European standardization while contributing to a sustainable green economy.

Excluded:

This covers:

- Aspects of Circular Economy already covered by existing committees or future standardization falling within specific sectors, product groups, material, or data standardization.
- Aspects concerning standardization on Ecodesign and Digital Product Passport.





### **CEN/TC 350**

### Sustainability of construction works

#### 14 Standards

#### 5 Projects

#### National delegates:



assessment of the sustainability aspects of new and existing construction works (buildings and civil engineering works) in the context of the UN Sustainable Development Goals and of the circular economy. The methodological basis will be developed in the context of current needs, European strategies, such as mitigation, adaptation and resilience to climate change, and life cycle thinking. The standards describe coherent methodologies for the assessment of sustainability of construction works covering the assessment of environmental, social and economic performance (aspect and impacts) of buildings and civil engineering works, and the provision of construction product environmental information (EPD).

The committee is responsible for the development of horizontal standardized methods for the

Scope

- Environmental performance assessment; circularity principles (the circular economy in the construction sector), energy efficiency and decarbonization, sustainable use of resources (resource efficiency, waste minimization), protection of the environment and biodiversity;
- Social performance assessment; health and comfort, safety and security, adaptability and accessibility in response to user needs, resilience against external events such impact of climate change, sourcing of materials:
- Economic performance assessment; life cycle cost, whole life costs and impact on economic value, 'green finance' initiatives (taxonomy);
- The implementation of the standards in response to trends in digitalization (e.g. BIM, CAD). Note: The committee is also entrusted with an advisory function to CEN committees to ensure the effective implementation of horizontal core rules regarding the development a specific Product Category Rules based on EN 15804.



6	Working Groups directly under the Technical Committee
WG 1	Environmental performance of buildings
WG 3	Products Level
WG 5	Social performance assessment of building
WG 6	Civil Engineering works
WG 7	Framework and Coordination
WG 8	Sustainable refurbishment
1	Sub-Committees
SC 1	Circular Economy in the Construction Sector





ISO	ISO/TC 268	Sustainable cities and communities	
MILE	46 Standards	19 Projects	National delegates: 1
Scope	Standardization in the field of Sustainable Cities and Communities will include the development of requirements, frameworks, guidance and supporting techniques and tools related to the achievement of sustainable development considering smartness and resilience, to help all Cities and Communities and their interested parties in both rural and urban areas become more sustainable.  Note: TC 268 will contribute to the UN Sustainable Development Goals through its standardization work.  The proposed series of International Standards will encourage the development and implementation of holistic and integrated approaches to sustainable development and sustainability.		
9	Working Groups directly u	nder the Technical Committ	ee
AHG 1	PWI Harbour Cities		
CAG 1	Chairman Advisory Group		
TG 1	Awareness-raising, communication and promotion		
TG 2	Collection of cities good practices and needs		
TG 3	Supporting the strategic positioning of ISO/TC 268		
WG 1	Management System Standards		
WG 2	City indicators		
WG 3	City anatomy and sustainability terms		
WG 4	Smart processes and operati	ng models for sustainable com	munities
2	Sub-Committees		
SC 1	Smart community infrastructu	ıres	
SC 2	Sustainable cities and comm	unities - Sustainable mobility a	nd transportation





Scope

**CEN/TC 465** 

#### 1 Standards 3 Projects National delegates: Standardization in the field of Sustainable Cities and Communities, covering the development of requirements, frameworks, guidance and supporting tools and techniques. The proposed standardization plan will be developed to assist cities and community decision making, and support their implementation of sustainability and sustainable development. Standardization will focus on the development of a holistic and integrated approach in response to the needs of European Cities and Communities in both rural and urban areas. It is proposed that the standardization activities focus on: - the purposes of urban sustainable development as defined by ISO 37101 related to Sustainable Cities and Communities, namely resilience, attractiveness, well-being, social cohesion, preservation and improvement of environment, responsible resource use, aligned with the main pillars of sustainable development (economic, environmental and social), all innovative approaches to solution and service delivery, designed for use by all Cities and Communities, Citizens and their interested parties as a means of achieving the sustainability of urban

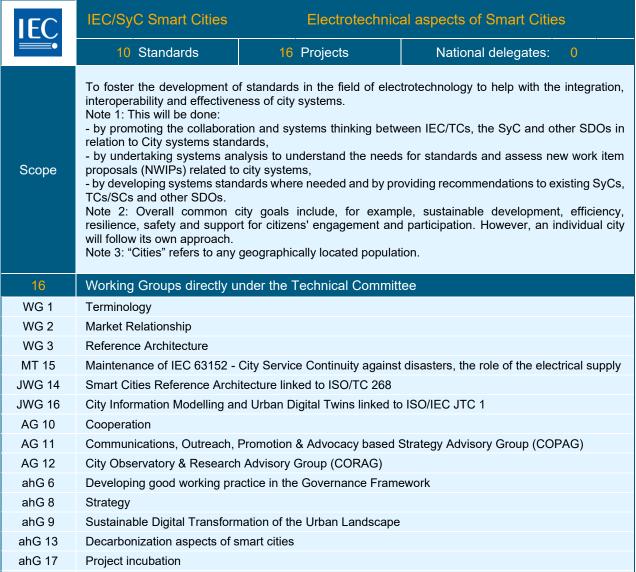
and rural development, with the aim of continuously improving solutions and services. and rural

Sustainable and Smart Cities and Communities

development, with the aim of continuously improving solutions and services.









CAG<sub>1</sub>

OF 1

Chair's Advisory Group

Open Forum 1 - Smart Cities Events

ISO	ISO/TC 207	Environmental management		
MIN	68 Standards	22 Projects	National delegates:	6
Scope	Standardization in the field of environmental management to address environmental and climate impacts, including related social and economic aspects, in support of sustainable development. Excluded: test methods of pollutants, setting limit values and levels of environmental performance, and standardization of products.  Note 1: TC 207 is focused on environmental management systems, auditing, verification/validation and related investigations, environmental labelling, environmental performance evaluation, life cycle assessment, climate change and its mitigation and adaptation, ecodesign, material efficiency, environmental economics and environmental and climate finance.  Note 2: Where appropriate, the ISO/TC 207 works in cooperation with existing committees on subjects that may support environmental management.			
7	Working Groups directly under the Technical Committee			
DCCG	Developing Countries Coordination Group			
SLG	Strategic Leadership Group			
STTF	Spanish translation task force			
TCG	Terminology Coordination Group			
TF 1	Communications			
TG 1	Sustainable Finance Coordin	ation		





TG 2	Circular economy coordination
6	Sub-Committees
SC 1	Environmental management systems
SC 2	Environmental auditing and related environmental investigations
SC 3	Environmental labelling
SC 4	Environmental performance evaluation
SC 5	Life cycle assessment
SC 7	Greenhouse gas management and related activities









cen	CEN/TC 351 Construction Products - Assessment of release of dangerous substances		ease of	
	32 Standards	4 Projects	National delegates:	0
Scope	The development of horizontal standardized assessment methods for harmonized approaches relating to the release (and/or the content when this is practicable or legally required solution) of regulated dangerous substances under the Construction Products Directive (CPD) taking into account the intended conditions of use of the product. It addresses emission to indoor air, and release to soil, surface water and ground water.			
5	Working Groups directly under the Technical Committee			
WG 1	Release from construction products into soil, ground water and surface water			
WG 2	Emissions from construction products into indoor air			
WG 3	Radiation from construction p	Radiation from construction products		
WG 4	Terminology			
WG 5	Content and eluate analysis in construction products			

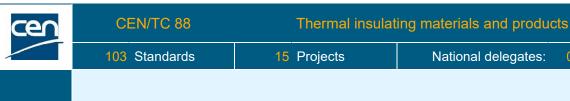
# 1.1.9 Energy Performance



ISO	ISO/TC 163	Thermal performance and energy use in the built environment		
MIN	153 Standards	14 Projects	National delegates:	0
Scope (Extract)	Standardization in the field of building and civil engineering works: - of thermal and hygrothermal performance of materials, products, components, elements and systems, including complete buildings, both new and existing, and their interaction with technical building systems; - of thermal insulation materials, products and systems for building and industrial application, including insulation of installed equipment in buildings; () Standardization of the holistic assessment of the energy performance of new and existing buildings as well as building retrofits, in close collaboration with ISO/TC 205 by means of the ISO/TC163/WG4 Joint working group TC 163 & TC 205 Energy performance using holistic approach ()			
1	Working Groups directly under the Technical Committee			
WG 4	Joint ISO/TC 163 - ISO/TC 205 WG: Energy performance of buildings using holistic approach			
3	Sub-Committees			
SC 1	Test and measurement methods			
SC 2	Calculation methods			
SC 3	Thermal insulation products,	components and systems		









Scope

Standardization in the field of thermal insulating 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.

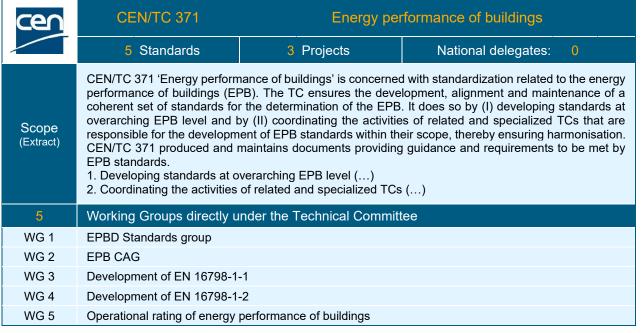
22	Working Groups directly under the Technical Committee
WG 1	Common general test methods
WG 2	Coordinating group
WG 3	Mineral wool
WG 4	Expanded polystyrene foam (EPS)
WG 5	Rigid cellular polystyrene, extruded
WG 6	Rigid cellular polyurethane and polyisocyanurate
WG 7	Rigid cellular phenolic foam
WG 8	Cellular glass (CG)
WG 9	Mineral bonded wood wool (including multi-layered products)
WG 10	Building equipment and industrial installations
WG 11	Vacuum insulation products (VIP)
WG 12	Prefabricated products of bonded expanded perlite
WG 13	Expanded cork boards (ICB)
WG 15	In situ formed insulation products
WG 16	Factory production control
WG 17	Wood fibre boards (WF)
WG 18	External thermal insulation composite systems
WG 19	Polyethylene foam
WG 20	Expanded clay lightweight aggregates
WG 21	Reflective insulation products
WG 22	Factory made calcium silicate (CS) products
WG 23	Vegetal fibers based products (VFBP)



cen	CEN/TC 89	Thermal performance of	buildings and building components
	18 Standards	19 Projects	National delegates: 0
Scope	Standardization in the field of energy performance of buildings, including particularly energy transfer through building components and thermal insulation of installed equipment in buildings, covering:  - rules for expressing relevant thermal properties and requirements;  - calculation and test methods;  - input data, including climatic data;  - effects of moisture.		
5	Working Groups directly under the Technical Committee		
WG 7	Thermal properties of doors and windows		
WG 8	Thermal test methods		
WG 13	In-situ thermal performance of construction products, building elements and structures		
WG 14	Determination of thermal resistance at elevated temperatures using the guarded hot plate method		
WG15	Durability of adhesives for ai	rtight layers	









ISO	ISO/TC 301	Energy manag	ement and energy savings	
WITH THE PROPERTY OF THE PROPE	23 Standards	6 Projects	National delegates: 0	
Scope	Standardization in the field of	energy management and ene	rgy savings	
13	Working Groups directly u	nder the Technical Commit	tee	
AHG 10	Energy management system	prioritizing GHG emission red	uction	
AHG 11	Relationship between energy	performance and energy-rela	ted GHG emissions	
AHG 12	Development of ISO 14019			
AHG 13	Integrated District Energy Sys	stem (IDES)		
CAG	Chair's Advisory Group			
STTF 1	Spanish translation task force			
TG 2	Communication Task Group	Communication Task Group		
TG 3	Terminology Task group			
TG 5	Maintenance of requirements	documents		
WG 1	Energy management			
WG 16	Zero Net Energy			
WG 17	Energy Audits			
WG 18	Energy data collection plan			



<u>IEC</u>	IEC/SyC Smart Energy	Smart Energy		
	13 Standards	5 Projects	National delegates: 0	
Scope	Standardization in the field of Smart Energy in order to provide systems level standardization, coordination and guidance in the areas of Smart Grid and Smart Energy, including interaction in the areas of Heat and Gas.  To widely consult within the IEC community and the broader stakeholder community to provide overall systems level value, support and guidance to the TCs and other standard development groups, both inside and outside the IEC.  To liaise and cooperate with the SEG Smart Cities and future SEGs, as well as the future Systems Resource Group.			
9	Working Groups directly u	nder the Technical Committ	ee	
WG 2	IEC Smart Energy Developm	ent Plan		





WG 5	Methodology and Tools
WG 6	Generic Smart Grid Requirements
WG 8	Distributed energy trading infrastructure
JWG 3	IEC Smart Energy Roadmap linked to ISO/IEC JTC 1/SC 41
AG 1	Technical Committees Forum
AG 4	Advisory group on Forums of SDOs & Regional Coordination Organizations
CAG 7	CAG Chairman's Advisory Group
ahG 9	Smart Hydropower





cen	CEN/CLC/JTC 14	Energy management and energy efficiency in the framework of energy transition	
CENELEC	14 Standards	3 Projects	National delegates: 1
Scope	coordination with CEN/CENE - Energy management system - Energy audits - Energy efficiency and energy - Energy efficiency improvement of the contract of the co	ELEC sectorial strategy including  gy performance improvement tion methodologies ment financing (For example: \ ting minimum requirements, et monitoring gies and RES within the ene excluded from the scope:	the energy transition framework in close g, but not limited to, subjects such as:  /aluation of Energy Related Investments, cc.)  ergy management and energy efficiency ergy to avoid overlap with scopes of other se of other CEN, CENELEC or Joint CEN-
2	Working Groups directly under the Technical Committee		
WG 4	Energy financial aspects		
WG 5	Guarantees of Origin related	to energy	

# 1.1.10 Maintenance & Facility Management

cen	CEN/TC 319	Maintenance		
	13 Standards	3 Projects	National delegates: 0	
Scope	Standardization in the field of are concerned	f maintenance as far as generio	c standards which are generally applicable	
11	Working Groups directly u	nder the Technical Commit	tee	
WG 4	Terminology			
WG 6	Maintenance performance and indicators			
WG 7	Maintenance of buildings			
WG 8	Maintenance functions and maintenance management			
WG 9	Qualification of personnel			
WG 10	Maintenance within physical asset management			
WG 11	Condition assessment methodologies			
WG 12	Risk based inspection framework (RBIF)			
WG 13	Maintenance process			
WG 14	Maintenance engineering			
WG 15	Safety and maintenance			





cen	CEN/TC 348	Facility Management	
	12 Standards	12 Projects	National delegates: 0
Scope	The scope of the CEN/TC is the preparation of European standards for Facility Management (FM) covering operational, tactical and strategic levels to support primary processes.		
3	Working Groups directly under the Technical Committee		
WG 6	Space measurement in Facility Management		
WG 9	Facility Management - Princi	ples and processes	
WG 10	FM digital transformation		

# 1.1.11 Conformity

ISO	ISO/CASCO	Committee on conformity assessment		
VOTEM	38 Standards	6 Projects	National delegates: 3	
Scope	a) Develop International States assessment; b) Promote recognition and assessment systems, and a documents for conformity assec) In relation to conformity assic. Identify and analyze new ii. Provide a forum for the development and implementatiii. Provide advice and recactions; iv. Evaluate current and nest and ards or other technical standards or other technical	ommittee on Conformity Assessment (CASCO) shall: Standards and other ISO and ISO/IEC documents related to conformit appropriate use of International, regional and national conformit appropriate use of International Standards and other ISO and ISO/IEC assessment; assessment: bew or emerging trends; the exchange of information on the experience of stakeholders in the attation of standards and on other related questions of interest; ecommendations to the ISO Council regarding new or revised policies of mew conformity assessment methods as relevant to emerging or changing		
15	Working Groups directly under the Technical Committee			
AHG	Monitoring global developme	nts relevant to conformity asse	essment	



CPC	Chair's Policy and Coordination Group
IAF/ILAC JSG	IAF-ILAC-ISO Joint Strategic Group
INetQI	Hosted ISO/CASCO INetQI group
JWG 62	Joint ISO/CASCO - ISO/TC 85 WG: ISO/TS 23406 (ITNS)
JWG 63	Joint ISO/CASCO - ISO/TC 304 WG: Development of ISO/IEC 17021-15
STAR	Strategic Alliance and Regulatory group
STTF	Spanish translation task force
TIG	Technical Interface Group
WG 30	Conformity assessment - General requirements for bodies operating certification of persons
WG 31	Conformity assessment - Requirements for the operation of various types of bodies performing inspection
WG 61	ISO TS 17012 Guidelines remote methods in audits management systems
WG 64	Revision of ISO/IEC 17007 - Conformity assessment - Guidance for drafting normative documents suitable for use for conformity assessment.
WG 65	Revision of ISO/IEC 17067 - Conformity assessment - Fundamentals of product certification and guidelines for product certification schemes.
WG 66	Development ISO/IEC TR 17035 Conformity Assessment – Guidelines for validation and verification programmes

cen	CEN/CLC/JTC 1	Criteria for conformity assessment bodies	
CENELEC	20 Standards	6 Projects	National delegates: 0
Scope		criteria for bodies involved in t and assessment, and other rel	resting calibration, certification, inspection, lated standards.

cen	CEN/TC 330	Qualification of construction enterprises	
	1 Standards	0 Projects	National delegates: 0
Scope	To draft European standards (ENs) for the harmonisation of criteria and procedures to be used by qualification bodies for the qualification of construction enterprises.		

IINAS	ILNAS/TC 105	Technical co	ntrol missions (Stand-by)	)	
IL VI	1 Standards	0 Projects	National delegates:	23	
Scope	2- Precise definition of the standardization of risks with a qualifications required in order 3- Precise definition of the management.	dized list defining the scope of andardized missions of the tecl a view to the subscription of a term to be accredited by insurers issions of the technical control as the technical and other quachnical controller.	hnical controller within the fran ten-year insurance, as well as ller as part of the verification o	nework the tec	of the chnical tability

ILNAS	ILNAS/TC 101	Living space (Stand-by)	
	1 Standards	0 Projects	National delegates: 0







Scope

### ISO/TC 59/SC 15 Framework for the description of housing performance



#### National delegates:



Standardization in the field of basic performance standards on building construction including general rules for performance requirements for buildings as a whole and for subsystems, e.g., building elements, focusing on performance description and requirements, user requirements, and the means to evaluate housing and other types of building solutions.

A special emphasis is placed on developing housing performance descriptions on aspects (e.g., for trading of houses as a whole), such as:

- Structural integrity, durability and serviceability
- Fire safety
- Operating energy
- Accessibility and usability

4 Standards

Topics covered in more specific detail by other SCs within TC 59 and other technical committees are excluded. Determination of performance level values required for specific purposes is excluded as it will be decided by the stakeholders.

# 1.1.12 Accessibility



TSO	ISO/TC 59/SC 16	Accessibility and us	sability of the built environment
	1 Standards	1 Projects	National delegates: 0
Scope	Standardization of accessibility in the built environment to ensure usability for the widest range of people.		
2	Working Groups directly under the Technical Committee		
AHG 1	Accessible environments for children with disabilities		
WG 4	Accessibility of immovable cu	ıltural heritage	



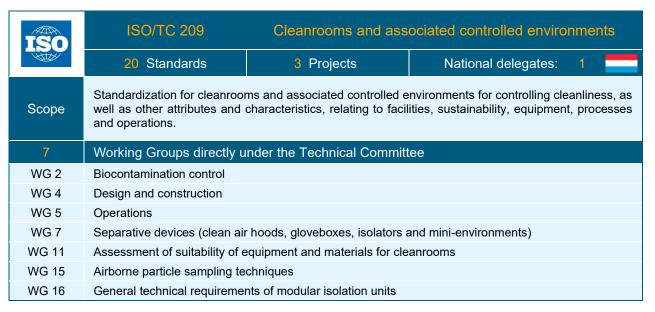
cen	CEN/CLC/JTC 11	Accessibility in the built environment			
CENELEC	3 Standards	1 Projects	National delegates:	3	
Scope	Development of the standardization deliverables as requested by Mandate/420 Phase II :  - A European Standard (EN) on functional European accessibility requirements  - A Technical Report (TR1) on technical performance criteria  - A Technical Report (TR2) on conformity assessment				
1	Working Groups directly under the Technical Committee				
WG 1	Revision of EN 17210				

# 1.1.13 Spectator Facilities

cen	CEN/TC 315	Spectator facilities		
	9 Standards	3 Projects	National delegates: 0	
Scope	General: Standards for architectural design and performance requirements for spectator facilities for sports and multipurpose venues (indoor and outdoor), in order to ensure safety, comfort of and visibility for the spectators.  Permanent indoor venues such as theatres, cinemas, opera houses, lecture halls, etc. are excluded. Specific: a) Standards for layout criteria including spacing, access and egress, sight lines, positioning of separation fences and barriers; b) Standards for products by performance requirements for permanent, demountable, movable and telescopic stands.			
2	Working Groups directly u	s directly under the Technical Committee		
WG 1	Layout criteria			
WG 2	Products			



# 1.1.14 Cleanroom Technology



cen	CEN/TC 243	Cleanroom technology		
	16 Standards	2 Projects	National delegates:	0
Scope	contamination in such space air, liquid, materials, equip biocontamination control is Methods of aseptic processir particular reference to inert embraces all aspects of clear	ation of controlled environments. Guidance on the design, takenent and personnel as wincluded, as are provisions for are excluded, as are method surfaces in cleanrooms. The nroom technology, including the lation control in such environtal prology.	ing into account sources of corell as their interactions. Go the control of molecular cods of cleaning and disinfection e field of competence of the classification of controlled elements.	ontamination; Guidance on ontamination. In except with e committee invironments,
1	Working Groups directly u	nder the Technical Commit	tee	
WG 5	Biocontamination control			

### 1.1.15 Crime Prevention



cen	CEN/TC 325	Crime prevention through building, facility and area design			
	8 Standards	2 Projects	National delegates: 0		
Scope	Development of European standards for the prevention of crime at industrial facilities, educational institutions, hospitals, residential building areas, department stores, squares and public meeting places through building, facility and area design.  The standards will include their area of application, the corresponding strategy, security levels, building and area layout, application of construction elements, roads and pavements.  The standards may be applied to new and significantly refurbished buildings, facilities and areas.  The standards will not deal with building products and security systems components.				
2	Working Groups directly under the Technical Committee				
WG 1	Terminology, principles and process				
WG 3	Building design				





# 1.1.16 Conservation of Cultural Heritage











# 1.2 BUILDING CONSTRUCTION & CIVIL ENGINEERING

RESIDENTIAL AND NON-RESIDENTIAL BUILDINGS

**ROADS AND MOTORWAYS** 

RAILWAYS AND UNDERGROUND RAILWAYS

**BRIDGES AND TUNNELS** 

UTILITIES (FLUIDS, ELECTRICITY AND TELECOMMUNICATION)

DEMOLITION, SITE PREPARATION, DRILLING AND BORING

• • •



## 1.2 Building Construction & Civil Engineering

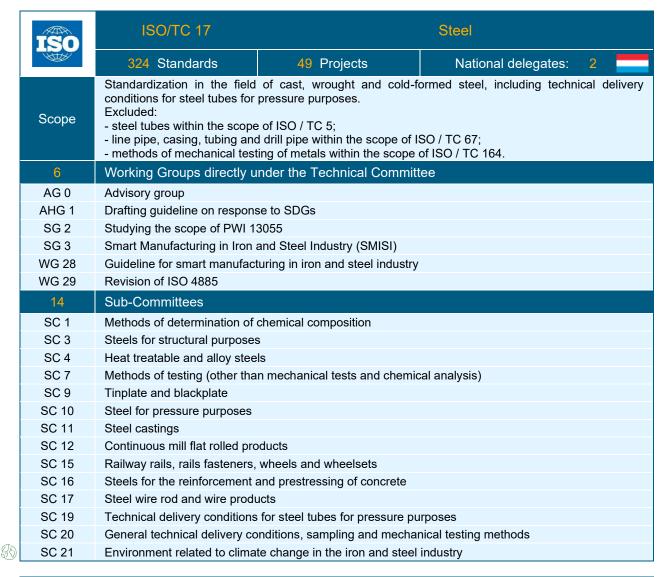


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#### 1.2.1 Steel & Aluminum



	cen	CEN/TC 459	ECISS : European Committee for Iron and Steel Standardization		
		450 Standards	87 Projects	National delegates: 3	
	Scope	Standardization on the define requirements for iron and ste		chemical analysis and technical delivery	
	1	Working Groups directly u	nder the Technical Commit	tee	
B	WG 1	Steel circular economy			
	12	Sub-Committees			
	SC 1	Test methods for steel (other than chemical analysis)			
	SC 2	Methods of chemical analysis for iron and steel			
	SC 3	Structural steels other than reinforcements			
	SC 4	Concrete reinforcing and prestressing steels			
	SC 5	Steels for heat treatment, alloy steels, free-cutting steels and stainless steels			
	SC 6	Wire rod and wires			
	SC 7	Steels for pressure purposes			
	SC 8	Steel sheet and strip for electrical applications			
İ	SC 9	Coated and uncoated flat products to be used for cold forming			
	SC 10	Steel tubes, and iron and steel fittings			
İ	SC 11	Steel castings and forgings			
	SC 12	General issues			



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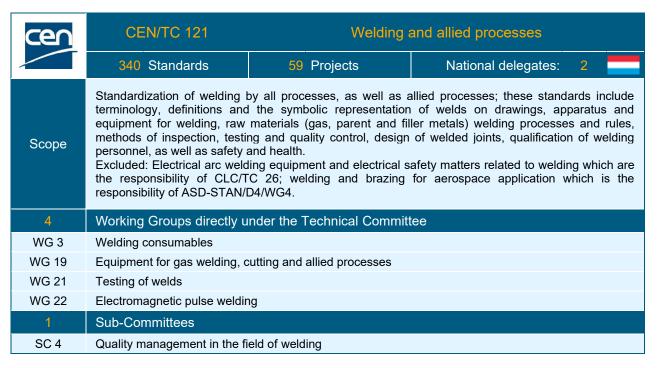
cen	CEN/TC 135	Execution of steel structures and aluminium structures		
	6 Standards	7 Projects	National delegates: 3	
Scope	Standardization of rules for execution of steel and aluminium structures for building and civil engineering works including rules for inspection and control.			
5	Working Groups directly under the Technical Committee			
WG 2	Technical requirements for the execution of steel structures			
WG 14	Execution of aluminium structures and steel structures with cold formed structural sheeting			
WG 15	EN 1090-1, Requirements for conformity assessment of structural components			
WG 16	Revision of EN 1090-3			
WG 17	Product category rules comp use in construction works	lementary to EN 15804 for Ste	el and Aluminium structural products for	

#### 1.2.2 Welding

TSO	ISO/TC 44	Welding and allied processes		
MATH	321 Standards	42 Projects	National delegates: 1	
Scope	Standardization of welding, by all processes, as well as allied processes; these standards include terminology, definitions and the symbolic representation of welds on drawings, apparatus and equipment for welding, raw materials (gas, parent and filler metals) welding processes and rules, methods of test and control, calculations and design of welded assemblies, welders' qualifications, as well as safety and health.  Excluded: electrical safety matters related to welding which are the responsibility of IEC/TC 26.			
3	Working Groups directly u	nder the Technical Commit	tee	
JAG	IIW - ISO/TC 44 - CEN/TC 1	21 Coordination Committee		
TF 1	Review of ISO/TC 261 stand	ards dealing with welding		
WG 5	Welding simulation			
12	Sub-Committees			
SC 3	Welding consumables			
SC 5	Testing and inspection of welds			
SC 6	Resistance welding and allied mechanical joining			
SC 7	Representation and terms			
SC 8	Equipment for gas welding, o	Equipment for gas welding, cutting and allied processes		
SC 9	Health and safety			
SC 10	Quality management in the field of welding			
SC 11	Qualification requirements for welding and allied processes personnel			
SC 12	Soldering materials			
SC 13	Brazing materials and processes			
SC 14	Welding and brazing in aeros	space		
SC 15	Underwater welding			

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<b>IEC</b>	IEC/TC 26	Electric welding			
	29 Standards	4 Projects	National delegates:	0	
Scope	To prepare standards for electrical safety, EMC and EMF matters related to the construction, installation and use of equipment for electric welding and allied processes in both normal and adverse welding environments, taking into account all safety aspects for protection against electrical and mechanical hazards for professional and non-professional use and all aspects to protect the environment. All electric welding processes are covered except electromagnetic processing.				
2	Working Groups directly under the Technical Committee				
WG 1	Safety requirements for elect	tric welding equipment			
WG 5	EMC and EMF requirements	for electric welding equipment			

CENELEC	CLC/TC 26	Electric welding		
37/*	32 Standards	5 Projects	National delegates: 0	
Scope	To prepare standards for electrical safety, EMC and EMF matters related to the construction, installation and use of equipment for electric welding and allied processes in both normal and adverse welding environments, taking into account all safety aspects for protection against electrical and mechanical hazards for professional and non-professional use and all aspects to protect the environment. All electric welding processes are covered except electromagnetic processing.			
2	Working Groups directly under the Technical Committee			
WG 1	Safety requirements for electric welding equipment			
WG 5	EMC and EMF requirements	for electric welding equipment		



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Scope

### ISO/IIW International Institute of Welding

29 Standards 2 Projects

National delegates:

0

The International Institute of Welding was founded in 1948 by the welding institutes or societies in 13 countries, who felt the need to make possible more rapid scientific and technical progress.

The technical field of the IIW encompasses the joining, cutting and surface treatment of metallic and non-metallic materials by such processes as welding, brazing, soldering, thermal cutting, thermal spraying, adhesive bonding, microjoining and embraces allied fields including quality assurance, non-destructive testing, standardization, inspection, health and safety, education, training, qualification, design and fabrication.

The IIW's objectives are:

- To organize the exchange of scientific and technical information and provide for the transfer of knowledge related to these techniques;
- To prepare recommendations, state-of-the-art reports and guidelines related to the technical field;
- To promote by all appropriate means the organization of national welding institutes or associations in countries where these do not exist;
- To organize annual assemblies, international conferences and regional congresses;
- To define guidelines for the education, training, qualification and certification of personnel involved in welding and rules for their application;
- To prepare and assist in the formulation of international standards in collaboration with the International Organization for Standardization (ISO)
- To promote and encourage the development of a sustainable environment within welding activities. For the development of some standards in the field of welding, ISO collaborates with the International Institute of Welding, which has been approved by the ISO Council as an international standardizing body in this field of technology. ISO standards in the field of welding are developed and maintained under the responsibility of ISO/TC 44 Welding and allied processes.

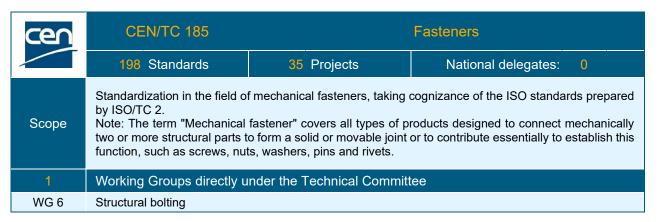
## 1.2.3 Fasteners & Structural Bearings

TSO	ISO/TC 2		Fasteners		
MIN	195 Standards	41 Projects	National delegates: 0		
Scope	Standardization of fasteners and fastened connections, including:  - terms and definitions,  - dimensions and tolerances,  - mechanical, physical and functional properties,  - fastener coatings and finishes,  - test methods,  - acceptance and quality procedures,  - design and calculation of fastened assemblies/joints,  - assembly methods,  - assembly/joint qualification.  The term fastener covers all types of products designed to mechanically join two or more parts to form a solid or movable fastened connection or to contribute essentially to establish this function, such as bolts, screws, nuts, washers, pins and rivets. Assembly/joint qualification includes qualification of the assembly/joint, the assembly tools as well as the qualification of the personnel.  Excluded: Fasteners for aerospace applications, keys, and hose clamps.				
3	Working Groups directly under the Technical Committee				
WG 13	Washer and non-threaded fasteners				
WG 17	Stainless steel fasteners				
WG 18	Pre-applied adhesive systems for threaded fasteners				
5	Sub-Committees				
SC 7	Reference standards				
SC 11	Fasteners with metric external thread				
SC 12	Fasteners with metric interna	Fasteners with metric internal thread			
SC 13	Fasteners with non-metric th	read			
SC 14	Surface coatings				



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cen	CEN/TC 167	Structural bearings		
	12 Standards	1 Projects	National delegates: 0	
Scope	Standardization of structural bearing device used for bridges, stadiums, industrial buildings etc. describing the various types and giving the recommendations for design, specifications for materials, manufacture and installation, criteria for acceptance and testing.  Excluded, for example, are: connections between piers and columns obtained by reinforced concrete, welded or bolted connections.			
1	Working Groups directly under the Technical Committee			
WG 1	Revision of EN 1337			

## 1.2.4 Timber Structures

TSO	ISO/TC 165	Timber structures			
WITH THE PROPERTY OF THE PROPE	54 Standards	3 Projects	National delegates: 0		
Scope	Standardization concerning structural applications of timber, wood -based panels, other wood based products, and related lignocellulosic fibrous materials including: - requirements for design; - structural properties, performance, and design values of materials, products, components, and assemblies and; - test methods and requirements to establish related structural, mechanical and physical properties and performance. Note: In cases where topics of TC 165 are also a subject, for non-structural purposes, of the Technical Committee of the relevant material or product (e.g. TC 89 or TC 218) a strong liaison with the relevant Technical Committee will be established.				
5	Working Groups directly under the Technical Committee				
WG 2	Structural glued wood products				
WG 7	Connections and assemblies				
WG 10	Characteristic values and design specifications				
WG 11	Solid and mechanically lamin	olid and mechanically laminated timber products			
WG 12	Structural use of bamboo				

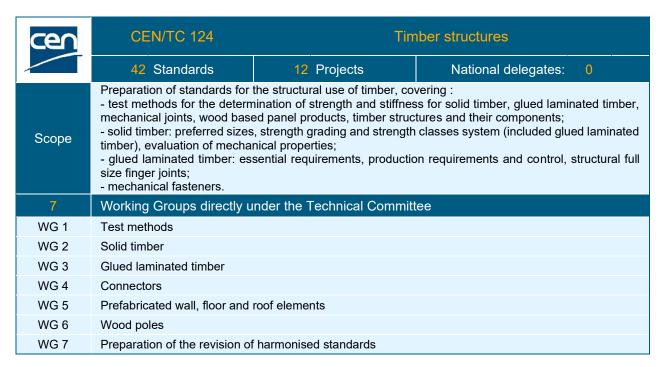


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#### 1.2.5 Cement

ISO	ISO/TC 74	Cement	Cement and lime (Stand-by)	
MIN	7 Standards	0 Projects	National delegates: 0	
Scope	and lime used in building co		specifications - of various kinds of cement, ither for binding together the construction	

cen	CEN/TC 51	Cement and building limes		
	41 Standards	9 Projects	National delegates: 1	
Scope	Standardization in the field of definitions and terminology, specifications and methods of test for cements and limes used in building and civil engineering.			
7	Working Groups directly under the Technical Committee			
WG 6	Definitions and terminology of cement			
WG 10	Masonry cement			
WG 11	Building lime			
WG 12	Special performance criteria			
WG 13	Assessment of conformity			
WG 14	Hydraulic binders for road bases			
WG 15	Test methods of cement and	its constituents		

ISO	ISO/TC 77	Products in fibre reinforced cement (Stand-by)		
MIN	4 Standards	0 Projects	National delegates: 0	
Scope	essentially inorganic hydrauli test methods and specific val	c binders, asbestos and other fi ues for acceptance and applic chods for asbestos and othe ed cement products. In the by ISO/TC 71;	d cement and calcium silicate containing ibres; to include specifications, dimensions, ation requirements.  er fibres appropriate to their use in the	



Concrete and related products

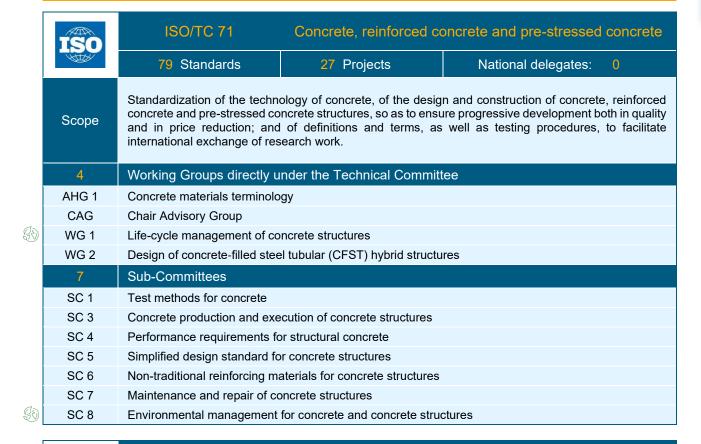
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**CEN/TC 104** 

#### 1.2.6 Concrete



	180 Standards	31 Projects	National delegates: 3			
Scope	with respect to properties and fresh and hardened concret constituent materials of constituent materials of constituent materials of consequences are execution of concrete struct products for the protection and Additionally relevant test method procedures mentioned above Not covered by the scope of the constituent materials; and (see CEN/TC 51); the design of concrete structures are the products (see CEN/TC 51);	standardisation of provisions for concrete and related products, in particular d requirements for: ste; - production and delivery of fresh concrete; sterete, e.g. mixing water, additions and admixtures; sudons; grout for prestressing tendons; - fibres for use in concrete; stures; - production and execution of sprayed concrete; and repair of concrete structures. sthods and provisions for the assessment of conformity for the products and e are standardized. TC 104 are: saggregate (see CEN/TC 154), Pigments (see CEN/TC 298) and Cement curres and components (see CEN/TC 250/SC 2);				
11	Working Groups directly under the Technical Committee					
WG 4	Fly ash for concrete					
WG 9	Silica fume for concrete					
WG 10	Sprayed concrete					
WG 11	Fibres for concrete					
WG 14	Concrete: Health, Hygiene ar	nd Environment				
WG 15	Ground granulated blast furns	ace slag				
WG 16	Joint Working Group CEN/TO geotechnical works and found		2 and CEN/TC 288 - Concrete for special			
WG 17	Curing compounds					
WG 18	Specification of ground calciu	ım carbonate as an addition fo	r concrete			



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WG 19	Decarbonisation, resource efficiency and sustainability	
WG 20	New constituents for concrete	
4	Sub-Committees	
SC 1	Concrete - Specification, performance, production and conformity	
SC 2	Execution of concrete structures	
SC 3	Admixtures for concrete	
SC 8	Protection and repairs of concrete structures	



IINAS	ILNAS/TC 102 Concrete		Concrete
IL ( I)	1 Standards	6 Projects	National delegates: 9
Scope	production and conformity - National annex of standard - National annex of standard Creation of additional nationa - EN 1338 - Concrete pavers - EN 1339 - Concrete slabs EN 1340 - Elements for cor - EN 1433 - Hydraulic chan	EN 13670 - Execution of conc EN 13369 - Precast concrete al annexes in the field of concrete - Requirements and test methon rete curbs - Requirements and nels for traffic areas used by	products; rete for the following European standards: nods rds

cen	CEN/TC 177		d components of autoclaved aerated ght aggregate concrete with open structure
	26 Standards	0 Projects	National delegates: 0
Scope	Standards for prefabricated reinforced components of autoclaved aerated concrete or lightweight aggregate concrete with open structure (expanded clay, pumice, etc.).		
2	Working Groups directly under the Technical Committee		
WG 1	Prefabricated Reinforced Components of AAC		
WG 3	Test methods		

cen	CEN/TC 229	Precast concrete products		
	49 Standards	27 Projects	National delegates:	2
Scope	steel/concrete) covering te tolerances, relevant physical and connections, not duplic properties covered by TC 10 design and structural aspec	concrete products (plain, p rminology, performance crite properties special test methods cating the work of other TCs, 24, properties for reinforcing si cts covered by the Eurocodes chnical committees (including	ria, preferred shapes and s, special features due to transp, referring however, to concruteel covered by ECISS/TC 19s, particularly Eurocode 2, ar	dimensions, port, erection rete material d, all general and excluding
4	Working Groups directly u	nder the Technical Commit	tee	
WG 1	Products for which the stabili	ty requirements is predominan	t	
WG 3	Products for which the stabili	ty requirements is not dominar	ıt	
WG 4	Products which do not warra standards	nt a specific standard and whic	h could be referred to in speci	fic
WG 5	Sustainability of concrete pro	oducts and structural concrete o	cast in situ	



## 1.2.7 Masonry – Aggregates – Natural Stones



cen	CEN/TC 154		Aggregates
	57 Standards	10 Projects	National delegates: 0
Scope		natural, recycled and manufactions and matural, recycled and matural maturals and methods of test.	ctured aggregates, by specifying aggregate
4	Working Groups directly u	nder the Technical Commit	tee
WG 10	Armourstone		
WG 11	Railway ballast		
WG 12	Aggregates from secondary source		
WG 13	Dangerous substances		
5	Sub-Committees		
SC 1	Aggregates for concrete, mo	rtar and grouts	
SC 3	Bituminous bound aggregate	S	
SC 4	Hydraulic bound and unboun	d aggregates	
SC 5	Lightweight aggregates		
SC 6	Test methods		

cen	CEN/TC 246	N	atural stones
	48 Standards	1 Projects	National delegates: 0
Scope	finished and finished productitems in the field of work cover. The WG 4 (JWG 229/246) of ancillary uses, for interior an and does not cover pressed to stone which is the territory of Note: Reference should be a	ts intended for use in building ered by other Technical Comm covers the agglomerated stone d exterior use, with resin or co- iles such as terrazzo tiles which CEN/TC 246.	es for floor coverings, wall coverings and ement binders or a combination of the two nare the territory of CEN/TC 229, or natural cisting test methods. Submission of WG 4





4	Working Groups directly under the Technical Committee
WG 1	Terminology, classification and characteristics
WG 2	Test methods
WG 3	Product specifications
WG 4	Agglomerated stones (JWG 229/246)





CEN/TC JWG 229/246	Agglo	omerated stones		
0 Standards	0 Projects	National delegates:	0	

#### 1.2.8 Greenhouses

C	en	
		-

Scope

CEN/TC 284	G	Greenhouses	
2 Standards	1 Projects	National delegates:	0
	of permanent and non-permar other functional and material		

#### 1.2.9 **Earthworks**

cen	CEN/TC 396	Earthworks				
	14 Standards	7 Projects	National delegates:	0		
Scope	including improved soils treat Classification systems of soils	ion for earthworks of natural sted with binders or lime or othe stand rocks suitable for use in extern or principles/rules for contability ("excavatability");	r "additives" used in earthwor embankment construction, pos	ks. ssibly leading		
8	Working Groups directly u	nder the Technical Committ	tee			
WG 1	General matters	General matters				
WG 2	Soil and rock classification for	r Earthworks				
WG 4	Quality control					
WG 5	Hydraulic fill					
WG 6	Hydraulic placement of mine	ral waste				
WG 7	Use of alternative materials in	n earthworks				
WG 8	Test methods					
WG 9	Sustainable earthworks					



21	ILNAS/TC 109		Geotechnics	otechnics	
1)	0 Standards	1 Projects	National delegates:	12	



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cen	CEN/TC 451	Water wells and borehole heat exchangers			
	1 Standards	3 Projects	National delegates: 1		
Scope	Standardization in the field of design, environmental aspects, drilling, construction, completion, operation, monitoring, maintenance, rehabilitation and dismantling of wells and borehole heat exchangers for uses of groundwater and geothermal energy.  Oil, gas and other mining activities in these fields are excluded from the scope.				
2	Working Groups directly under the Technical Committee				
WG 1	Water wells				
WG 2	Borehole heat exchangers				

## 1.2.10 Geosynthetics

ISO	ISO/TC 221	Geosynthetics		
	47 Standards	12 Projects	National delegates:	1
Scope	Standardization of all geosynthetic products including geotextlles, geomembranes, geocomposite clay liners and other geosynthetic related products.			
5	Working Groups directly under the Technical Committee			
WG 2	Terminology, identification and sampling			
WG 3	Mechanical properties			
WG 4	Hydraulic properties			
WG 5	Durability			
WG 6	Design using geosynthetics			

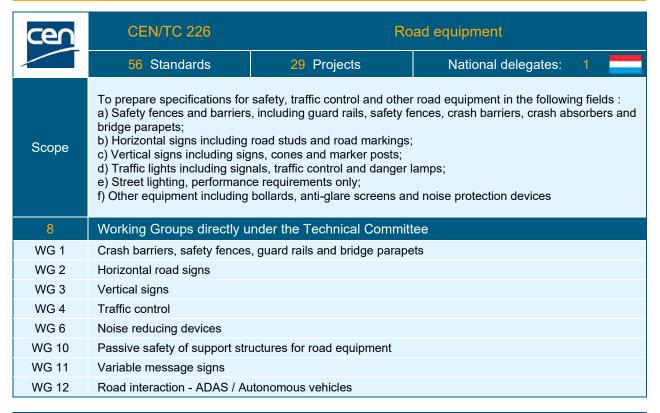
cen	CEN/TC 189	Geosynthetics		
	77 Standards	9 Projects	National delegates: 2	
Scope		geosynthetics; terminology, sa requirements related to the inte	impling before testing, identification and ended used.	
7	Working Groups directly under the Technical Committee			
WG 1	Geotextiles and geotextile-related products - General and specific requirements			
WG 2	Terminology, identification, sampling and classification			
WG 3	Mechanical testing			
WG 4	Hydraulic testing			
WG 5	Durability			
WG 6	Geosynthetic barriers - Gene	eral and specific requirements		
WG 7	Geosynthetics sustainability	and environmental topics		

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#### 1.2.11 Road Networks

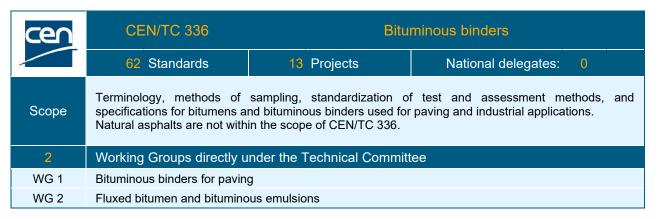


cen	CEN/TC 227	Road materials		
	174 Standards	19 Projects	National delegates: 1	
Scope	To prepare specifications, test methods, compliance criteria for materials for construction and maintenance of roads, airfields and other trafficked areas.			
7	Working Groups directly under the Technical Committee			
WG 1	Bituminous mixtures			
WG 2	Surface Dressing, Sprays and Slurry Surfacing (incorporating Microsurfacing)			
WG 3	Materials for concrete roads including joint fillers and sealants			
WG 4	Hydraulic bound and unbound mixtures (including byproducts and waste materials)			
WG 5	Surface characteristics			
WG 6	Sustainability			
WG 7	Chairman's Advisory Group			

CENELEC	CLC/BTTF 69-3	Road tra	affic signal systems	
	3 Standards	0 Projects	National delegates: 0	
Scope	To prepare a standard, as described in BT (DE/NOT)141 (Road traffic signal systems).			
1	Working Groups directly u	nder the Technical Committ	tee	
WG 02	Road traffic signal systems			







cen	CEN/TC 178	Paving units and kerbs			
	13 Standards	1 Projects	National delegates:	0	
Scope	Standardization of the performance requirements and their associated methods of test of paving units, kerbs and accessories manufactured from clay,concrete, natural stone or other materials used for the surfacing of footways, roads and other paved areas (dock, industrial, parking) considering their application.				
5	Working Groups directly u	nder the Technical Committ	ee		
WG 1	Precast concrete products				
WG 2	Natural stone products				
WG 3	Clay products				
WG 4	Test methods for simulation of	of ageing of pavers by polishin	g		
WG 5	Tactile Paving				

## 1.2.12 Railway Networks

TSO	ISO/TC 269	Railway applications			
WITH .	32 Standards	30 Projects	National delegates: 3		
Scope	Standardization of all systems, products and services specifically related to the railway sector, including design, manufacture, construction, operation, and maintenance of parts and equipment, methods and technology, interfaces between infrastructure, vehicles and the environment, excluding those electrotechnical and electronic products and services for railways which are within the scope of IEC/TC 9.				
9	Working Groups directly u	nder the Technical Commit	tee		
AG 17	Strategic liaison group				
AHG 2	Rail vehicle hydrogen refueling equipment				
AHG 7	Migration strategy				
CAG 1	Chair's Advisory Group				
WG 5	Railway quality management	system			
WG 6	Fire protection				
WG 8	Platform barrier systems				
WG 9	Wheel-rail contact geometry				
WG 10	Terms and definitions				
3	Sub-Committees				
SC 1	Infrastructure				
SC 2	Rolling stock				
SC 3	Operations and services				





cen	CEN/TC 256	Railway applications		
	313 Standards	127 Projects	National delegates: 4	
Scope	• •	ations (except electrical and electrically intended for vehicles	ectronic subjects), in the field of railways, and fixed installations.	
3	Working Groups directly under the Technical Committee			
WG 51	Advisory Group Labour Health and Safety			
WG 56	Chairman's Advisory Group			
WG 57	Adoption of ISO Standards			
4	Sub-Committees			
SC 1	Infrastructure			
SC 2	Rolling stock products			
SC 3	Rolling Stock Systems			
SC 4	Cross-functional applications			

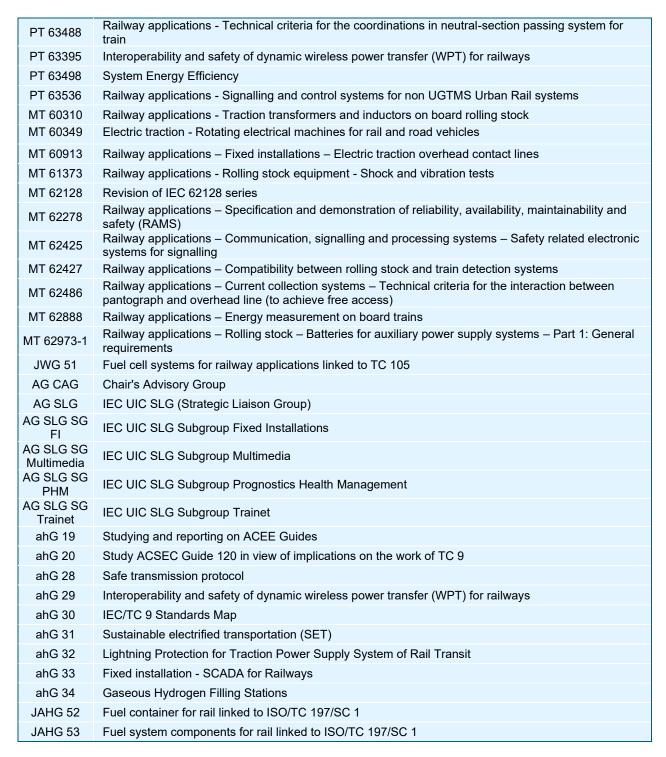
IFC	IEC/TC 9 Electrical equipment and systems for railways					
	161 Standards	37 Projects	National delegates: 3			
Scope	To prepare international standards for the railways field which includes rolling stock, fixed installations, management systems (including supervision, information, communication, signalling and processing systems) for railway operation, their interfaces and their ecological environment.  These standards cover railway networks, metropolitan transport networks (including metros, tramways, trolleybuses and fully automated transport systems) and magnetic levitated transport systems.  These standards relate to systems, components and software and they will deal with electrical, electronic and mechanical aspects, the latter being limited to items depending on electrical factors.  These standards deal with electromechanical and electronic aspects of power components as well as with electronic hardware and software components.					
50	Working Groups directly u	nder the Technical Commit	tee			
WG 40	Railway applications-Urban (	Guided Transport Management	t and Command/Control Systems			
WG 43	Railway applications - Train	communication network (TCN)				
WG 46	Onboard multimedia systems	s for railways				
WG 48	ODIS - On board Driving Info	rmation System				
WG 50	Railway applications – Fixed	installations – Electronic power	er converter			
PT 591	Railway Applications - Rolling	g Stock - Specification and ver	ification of energy consumption			
PT 641	the design of traction power:	supply systems	r the validation of simulation tools used for			
PT 62848-3	Railway application – Fixed i Application Guide	nstallations – D.C. surge arres	ters and voltage limiting devices – Part 3:			
PT 62973-2	batteries		systems - Part 2: Nickel Cadmium (NiCd)			
PT 62973-3	Railway applications – Rollin acid batteries	g stock – Batteries for auxiliary	power supply systems – Part 3: Lead			
PT 62973-4	sealed nickel-metal hydride b	patteries	power supply systems - Part 4: Secondary			
PT 62973-5	Railway applications - Rolling ion batteries	g stock - Batteries for auxiliary	power supply systems - Part 5: Lithium-			
PT 63341-2	Railway applications - Rolling stock - Fuel cell systems for propulsion - Part 2: Hydrogen storage system					
PT 63438	Railway applications - Fixed installations – Protection principles for AC and DC electric traction power supply systems					
PT 63452	Railway applications - Cybersecurity					
PT 63453	Railway applications - Currer between pantograph and over		on of simulation of the dynamic interaction			
PT 63477	Coordination requirements a Systems	nd energy-saving performance	evaluation for EFS in DC Traction Power			



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CENELEC	CLC/TC 9X	Electrical and electronic applications for railways				
71	218 Standards	55 Projects	National delegates:	3		
Scope	Standardization of electrical and electronic systems, equipment and associated software for use in all railway applications, whether on vehicles or fixed installations, including urban transport. This includes in particular communication, information, supervision and control systems.					
24	Working Groups directly under the Technical Committee					
WG 12	Communication means between safety equipment and man machine interface (mmi)					
WG 15	Liaison between CEN/TC278/WG3 and IEC/TC9/WG43&46 and Modtrain FIS					
WG 15-07	ICT for Railways - 7th edition					
WG 15-10	Digital Automatic Coupling (	DAC)				





Survey group 16 for assessment of Modtrain functional interface specifications (FIS)		
Survey group 17 for preparation of transfer of EN 50155 to SC9XB		
Railway application Electromagnetic compatibility (EMC)		
Alignment of prEN 50153, prEN 50388 and EN 50122		
Revision of EN 50126-1 & -2		
IT-Security / Cybersecurity in the railway sector		
Survey group Current collectors on commercial road vehicles in overhead contact line operation		
Survey Group on a cross functional standard on software		
Survey Group on a "Guide to the use of EN 45545-2 and EN 45545-5 for electronic equipment on board of rolling stock".		
Current collectors for ground-level feeding system on road vehicles in operation		
Survey Group on NiCd batteries on board of rolling stock.		
Survey Group on Simulation		
Survey group on Climate change adaptation		
Survey Group on digitalization for railways		
Survey Group Revision of EN 50553 Requirements for running capability in case of fire on board of rolling stock		
Survey Group on "Merging Strategy"		
Energy measurement on board trains		
Survey Group on Artificial Intelligence (AI)		
Survey Group on the parallel vote of IEC 63341-1 ED1		
Survey Group on the parallel vote of IEC 63341-2 ED1		
Sub-Committees		
Communication, signalling and processing systems		
Electrical, electronic and electromechanical material on board rolling stock, including associated software		
Electric supply and earthing systems for public transport equipment and ancillary apparatus (Fixed installations)		

## 1.2.13 Water Networks

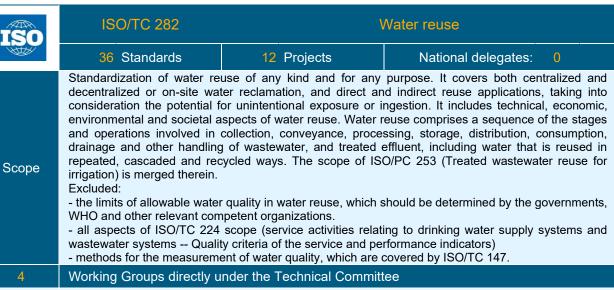
cen	CEN/TC 164	Water supply	
	233 Standards	61 Projects	National delegates: 0
Scope	To establish standards for the installation and performance requirements of systems, constructions of components used for the water supply from the production facility, including the treatment of the water, to the taps attached or unattached to a sanitary appliance with the view of maintaining the quality of water as stated in Directive 80/778.		
11	Working Groups directly u	nder the Technical Commit	tee
WG 1	External systems and compo	nents	
WG 2	Internal systems and components		
WG 3	Effects of materials in contact with drinking water		
WG 8	Sanitary tapware		
WG 9	Chemicals and filtering media for water treatment		
WG 10	Hot water and cold water storage within dwellings		
WG 12	Flexible hoses assemblies		
WG 13	Water conditioning equipment inside buildings		
WG 14	Valves and fitting for buildings and devices to prevent pollution by backflow		
WG 15	Security of drinking water supply		
WG 16	In-situ generating and dosing of biocides for water treatment		



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	wastewater systems Quality criteria of the service and performance indicators) - methods for the measurement of water quality, which are covered by ISO/TC 147.		
4	Working Groups directly under the Technical Committee		
CAG	Chair Advisory Group		
CTG 1	Communications Task Group		
WG 2	Terminology		
WG 3	Water systems for biopharma industries		
4	Sub-Committees		
SC 1	Treated wastewater reuse for irrigation		
SC 2	Water reuse in urban areas		
SC 3	Risk and performance evaluation of water reuse systems		
SC 4	Industrial water reuse		

cen	CEN/TC 165	Waste water engineering	
	121 Standards	22 Projects	National delegates: 0
Scope	Functional standards, standards for performance and installation in the field of wastewater engineering for systems and components.  Where there is no existing material related TC, product standards for all components of discharge pipes, drain and sewer pipes, pipelines, separators etc. according to the resolutions of BT (for the organization of work in the field of metallic tubes see resolution BT 160/1989).  Standards for design, calculation, construction, commissioning, operation and maintenance in the field of wastewater engineering, from the point of origin (with the exception of the product standards for sanitary appliances*) up to the point of disposal, including treatment plants and use of treated wastewater for purposes other than agricultural irrigation.  *) flushing cisterns, urinals, kitchen sinks, basins bidets, baths, (including whirlpool baths) and shower trays, see TC 163 Resolution 2 (London), WG 3 and 4.		
16	Working Groups directly u	nder the Technical Commit	ttee
WG 1	General requirements for pip	es	
WG 2	Vitrified clay pipes		
WG 4	Manhole tops, gully tops, drainage channels and other ancillary components for use outside buildings		
WG 7	Steel pipes		
WG 8	Separators		
WG 9	Concrete pipes		
WG 10	Installation of buried pipes fo	r gravity drain and sewer syste	ems
WG 11	Gratings, covers and other ancillary components for use inside buildings		
WG 12	Structural design of buried pipelines		
WG 13	Renovation and repair of drains and sewers		
WG 21	Drainage systems inside buildings		
WG 22	Drain and sewer systems outside buildings		
WG 30	Terminology in the field of wa	astewater engineering	

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WG 40	Wastewater treatment plants > 50 PT
WG 41	Small type sewage treatment plants (< 50 inhabitants)
WG 50	Use of treated wastewater



cen	CEN/TC 203 Cast iron pipes, fittings and their joints		
	18 Standards	11 Projects	National delegates: 0
Scope	Standardization of cast iron pipes, fittings, accessories, and their joints for water supply, drainage and sewerage, gas supply and other application.  Valves, pumps and malleable iron parts are excluded.		
5	Working Groups directly under the Technical Committee		
WG 1	Water pipelines under pressure		
WG 7	Influence of non metallic materials used by ductile iron pipelines on potable water		
WG 8	Coatings for pipes, fittings and accessories		
WG 9	Revision of EN 545, EN 598 and EN 969		
WG 10	Life cycle costs (LCC) and Life cycle assessment (LCA) for ductile iron pipe systems		

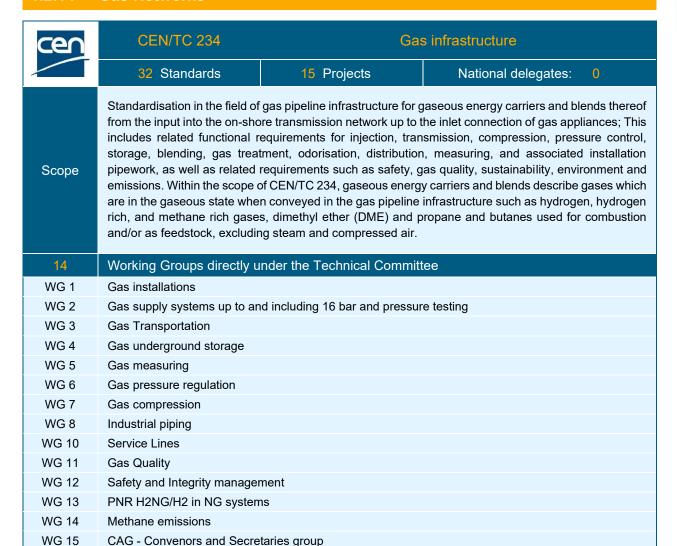
cen	CEN/TC 92	V	Vater meters
	9 Standards	5 Projects	National delegates: 0
Scope	Standardization for meters to measure volume flow of cold potable water and heated water enclosed in full conduits, irrespective of technology applied.		
1	Working Groups directly under the Technical Committee		
WG 2	General requirements		

cen	CEN/TC 107	District heating and cooling systems	
	20 Standards	11 Projects	National delegates: 0
Scope	Standardization in the field of district heating and district cooling systems including design, prefabricated pipe systems, construction, integration, control, optimization, monitoring. Excluded: Aspects of DHC systems already covered by existing committees or future standardization. NOTE: This TC foresees a close cooperation with existing committees that may support DHC at system level such as: CEN/TC 113, CEN/TC 155, CEN/TC 156, CEN/TC 197, CEN/TC 228, ISO/ TC 60, ISO/TC 265, ISO/TC 301, ISO/TC 341		
10	Working Groups directly under the Technical Committee		
WG 2	Basic consideration		
WG 3	PUR-foam properties		
WG 4	Joint casing systems		
WG 5	Fitting, Valves and Twin Pipes		
WG 9	PE Casings		
WG 10	Flexible pipe systems for district heating		
WG 11	Surveillance systems		
WG 12	Polymer Service Pipes		
WG 13	Preinsulated district heating pipe systems - Design and installation		
WG 14	District cooling		

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#### 1.2.14 Gas Networks



cen	CEN/TC 235	Gas pressure regulators and associated safety devices for use in gas transmission and distribution	
	2 Standards	3 Projects	National delegates: 0
Scope	Standardization of the requirements for the construction, performance, testing and marking of gas pressure regulators and associated safety devices for use in gas transmission and distribution for pressures up to 100 bar.		
1	Working Groups directly under the Technical Committee		
WG 1	Safety shut-off devices, safety relief devices and small regulators with or without safety devices used in gas transmission and/or distribution.		

CEN/TC 237 Gas		Gas meters	
	10 Standards	5 Projects	National delegates: 0
Scope	Standardization of the requirements for the construction, performance and safety of gas meters, including diaphragm, rotary displacement and turbine and electronic gas meters, and all associated conversion devices.		
7	Working Groups directly under the Technical Committee		
WG 2	Rotary displacement gas meters		
WG 3	Turbine meters		
WG 4	Associated conversion devices		
WG 5	General requirements		





WG 8	Diaphragm meters
WG 9	Ultrasonic gas meters
WG 10	Thermal-mass flow-meter based gas meters



cen	CEN/TC 238 Test gases, test pressures, appliance categories and gas appliance types		
	62 Standards	8 Projects	National delegates: 0
Scope	Standardization of test gases, test pressures, appliance categories and gas appliance types as a reference standard to serve as the basis for the elaboration of standards for gas appliances, including mirroring the activity work of ISO/TC193 'Natural gas'.		
2	Working Groups directly under the Technical Committee		
WG 1	EN 437		
WG 2	Emission measurements		

cen	CEN/TC 282 Installation		and equipment for LNG	
	18 Standards	3 Projects	National delegates:	0
Scope	Developing and maintaining standards in the field of installations, equipment and procedures used for production, transportation, transfer, storage, regasification and use of LNG, taking into account the programme of work of other CEN technical committees dealing with LNG. Standardization covers the supply chain from the inlet to the outlet of the relevant natural gas/LNG facilities, and comprises both onshore and offshore siting options for them. Standardization involves contribution to and adoption of ISO standards (under Vienna Agreement) as well of development of homegrown European standards. CEN/TC 282 further coordinates questions concerning LNG in the technical work of technical committees dealing with cryogenic equipment.			
1	Working Groups directly u	nder the Technical Committ	tee	
WG 5	Design of onshore installation	ns		

## 1.2.15 Electricity Networks: Overhead Lines

IEC	IEC/TC 7	Overhead electrical conductors		
•	17 Standards	2 Projects	National delegates: 0	
Scope	To prepare International Standards and Specifications for fabrication and utilization of overhead electrical conductors, including:  - All types of overhead ground wires, - All shapes of round and non-round wires, - Conductors made of various metals such as aluminium, steel, copper, or composite material supporting core etc. and their combinations, - Test methods for assessment of overhead electrical conductor performance in operation, - Have the cooperation with TC11 on hardware and accessories directly connected to conductor for the purpose of maintaining electrical/mechanical continuity, - Have the cooperation with SC86A on aerial optical cables used either for phase conductors or ground wires, such as the publication of the original OPGW standard now named IEC 60794-4.			
5	Working Groups directly under the Technical Committee			
MT 1	Aluminium and aluminium alloy with and without steel or alternative reinforcement stranded conductors			
PT 61089	Concentric lay overhead electrical stranded conductors and tests methods			
PT 61597	Maintenance of IEC 61597/T	R		
PT 62818	IEC 62818			
PT 63089	Development of IEC 63089/E	d1		



CENELEC	CLC/TC 7X	Overhead	electrical conductors
7/ **====	18 Standards	1 Projects	National delegates: 0
Scope	Preparation and maintenance of European standards regarding fabrication, test methods and utilization of:  - all kinds of overhead electrical conductors including ground wires made of various materials (aluminium, steel, copper, composite)  - all shapes of round and non-round wires for conductors and cores  - hardware directly connected to conductors.		
1	Working Groups directly u	inder the Technical Committ	ee
WG 01	Conductors for Overhead Lir	nes - Characteristics of Greases	s (Revision of EN 50326)

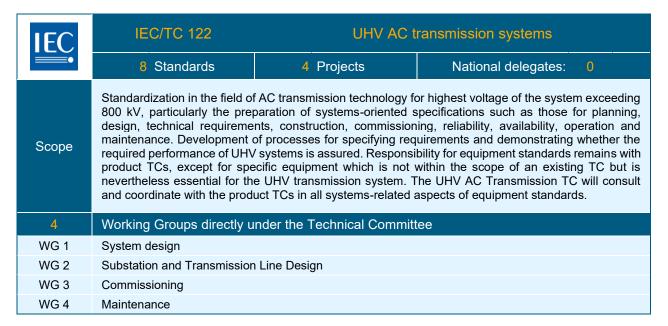
IEC	IEC/TC 11	Overhead lines		
	14 Standards	1 Projects	National delegates: 0	
Scope	To prepare International Standards for Overhead Lines above 1 kV AC and 1.5 kV DC Nominal Voltage, excluding railway traction supports and line materials. These Standards will provide design criteria that may serve as a guide to national regulations differing from each other only in the local conditions and in the assumed safety level. These Standards will deal with mechanical loadings and strength of the line, with clearances and with tests on supports, fittings and foundations. Including design requirements for supports and foundations to be able withstand the required mechanical loadings. Excluding Recommendations dealing with tests on conductors and insulators established respectively by Technical Committees Nos 7 and 36.			
5	Working Groups directly under the Technical Committee			
JWG 13	IEC 61284 - Requirements and tests for fittings - linked to TC 7			
WG 14	Requirements and tests for aeronautical warning balls			
MT 1	Maintenance of TC 11 docum	nents		
MT 2	Maintenance of IEV 466 Part	S		
AG 15	Committee Advisory Group			

CENELEC	CLC/TC 11	Overhead electrical line	es exceeding 1 kV a.c. (1,5 kV d.c.)
//	32 Standards	1 Projects	National delegates: 0
Scope	To prepare harmonized standard for overhead electrical lines. The standard(s) will specify the general requirements that should be met by the design and construction of an overhead line to ensure that the line is suitable for its purpose with regard to safety of persons, maintenance, operation and environmental consideration. CENELEC, CEN, IEC publications and other relevant documents have to be considered.		
7	Working Groups directly under the Technical Committee		
WG 08	Maintenance of CLC/TC 11 Standards		
WG 08-01	Maintenance of CLC/TC 11 standards		
WG 08-02	Maintenance of CLC/TC 11 standards		
WG 08-03	Maintenance of CLC/TC 11 standards		
WG 09	Restructuring EN 50341		
WG 10	Final Review EN 50341-1		
WG ED	Editing Committee of TC 11		



N G





IFC	IEC/TC 36		Insulators	
	58 Standards	19 Projects	National delegates: 0	
Scope	Standardization of insulators for high voltage systems and equipment including bushings, insulators for overhead lines and substations and their couplings.			
14	Working Groups directly u	nder the Technical Committ	tee	
WG 11	Revision of IEC 60815, Edition	on 1: Guide for the selection of	insulators in respect of polluted conditions	
PT 63264	Fiber optical bushings for a.c. voltage greater than 1 000 v and d.c. voltage greater than 1 500 v – definitions, test methods and acceptance criteria			
PT 63414	Artificial pollution tests on high-voltage insulators made of hydrophobicity transfer materials to be used on a.c. and d.c. systems			
PT 63432	Room temperature vulcanising (RTV) silicone rubber for outdoor insulators			
MT 14	Revision of Chapter 471 of IEC 60050			
MT 15	Review of IEC 61245 Ed.1.0			
MT 16	Review of IEC/TS 62073			
MT 17	Revision of IEC 60305 and 60433			
MT 18	Revision of IEC 61109, 6146	6-1,-2 & IEC 62609 and IEC 6 <sup>-</sup>	1952-2	
MT 19	Revision of IEC 62217			
MT 20	Revision of IEC 60383-1			
MT 21	Revision of IEC 60120, IEC 6	Revision of IEC 60120, IEC 60372 and IEC 60471		
MT 23	Revision of IEC 60437			
MT 24	Revision of IEC 62772 and II	EC 61462		
1	Sub-Committees			
SC 36A	Insulated bushings			

CENELEC	CLC/SR 36		Insulators	
71	39 Standards	4 Projects	National delegates:	0





CENELEC	CLC/TC 36A	Inst	ulated bushings
37/1123	18 Standards	1 Projects	National delegates: 0
Scope	To prepare harmonized sta installations.	ndards for bushings for use	in electrical apparatus, transformers and
3	Working Groups directly under the Technical Committee		
WG 01	Open type bushings for liquid filled transformers		
WG 02	Plug-in type bushings for liqu	uid filled transformers and appa	nratus
WG 03	Revision of EN 50366 and E	N 50386	

## 1.2.16 Electricity Networks: Power & Energy

IFC	IEC/TC 8	System aspects of electrical energy supply		oly
	44 Standards	42 Projects	National delegates:	0
Scope	To prepare and coordinate, in co-operation with other TC/SCs, the development of international standards and other deliverables with emphasis on overall system aspects of electricity supply systems and acceptable balance between cost and quality for the users of electrical energy. Electricity supply system encompasses transmission and distribution networks, generators and loads with their network interfaces.  This scope includes, but is not limited to, standardization in the field of:  Terminology for the electricity supply sector;  Characteristics of electricity supplied by public networks;  Network management from a system perspective;  Connection of network users (generators and loads) and grid integration;  Design and management of de-centralized electricity supply systems (e.g. microgrids, systems for rural electrification).  While relying on efficient and secure data communication and exchange, TC 8's scope does not include standards for communication with appliances and equipment connected to the electric grid or for communication infrastructure serving the electric grid.  TC 8 is responsible for basic publications (horizontal standards) on standard voltages, currents and frequencies ensuring the consistency of the IEC publications in these fields.  TC 8 cooperates also with several organizations active in the field of electricity supply such as CIGRE, CIRED, IEEE, AFSEC, IEA.			
10	Working Groups directly under the Technical Committee			
WG 11	Power Quality			
MT 1	Maintenance of IEC 60038, IEC 60059 and IEC 60196			
	Maintenance of IEC 60038, I	EC 60059 and IEC 60196		
MT 8			ance of electrical energy suppl	ly networks
MT 8 JWG 1		rk and procedures for mainten	ance of electrical energy supp	ly networks
	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S	rk and procedures for mainten , SC 8B, SC 8C yC LVDC		ly networks
JWG 1	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource	rk and procedures for mainten , SC 8B, SC 8C yC LVDC s connection with the grid linke	ed to TC 120, TC 82, SC 22E	
JWG 1 JWG 9 JWG 10 JWG 12	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource Requirements for measurem	rk and procedures for mainten , SC 8B, SC 8C yC LVDC s connection with the grid linke ents used to control DER and		
JWG 1 JWG 9 JWG 10 JWG 12 AG 1	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource Requirements for measurem Chairman's Advisory Group (	rk and procedures for mainten , SC 8B, SC 8C  yC LVDC s connection with the grid linke ents used to control DER and (CAG)	ed to TC 120, TC 82, SC 22E	
JWG 1 JWG 9 JWG 10 JWG 12 AG 1 AG 13	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource Requirements for measurem Chairman's Advisory Group ( Digital content and system a	rk and procedures for mainten , SC 8B, SC 8C  yC LVDC s connection with the grid linke ents used to control DER and (CAG)  pproach	ed to TC 120, TC 82, SC 22E	
JWG 1 JWG 9 JWG 10 JWG 12 AG 1 AG 13 ahG 14	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource Requirements for measurem Chairman's Advisory Group ( Digital content and system a Good working practice docur	rk and procedures for mainten , SC 8B, SC 8C  yC LVDC s connection with the grid linke ents used to control DER and (CAG)  pproach	ed to TC 120, TC 82, SC 22E	
JWG 1 JWG 9 JWG 10 JWG 12 AG 1 AG 13 ahG 14	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource Requirements for measurem Chairman's Advisory Group (Digital content and system al Good working practice docur Sub-Committees	rk and procedures for mainten , SC 8B, SC 8C  yC LVDC s connection with the grid linke ents used to control DER and (CAG) oproach nent development	ed to TC 120, TC 82, SC 22E	
JWG 1 JWG 9 JWG 10 JWG 12 AG 1 AG 13 ahG 14	To define a general framewor Terminology linked to SC 8A LVDC distribution linked to SC Distributed energy ressource Requirements for measurem Chairman's Advisory Group ( Digital content and system at Good working practice docur Sub-Committees Grid Integration of Renewable	rk and procedures for mainten , SC 8B, SC 8C  yC LVDC s connection with the grid linke ents used to control DER and (CAG) oproach ment development e Energy Generation	ed to TC 120, TC 82, SC 22E	
JWG 1 JWG 9 JWG 10 JWG 12 AG 1 AG 13 ahG 14	To define a general framewo Terminology linked to SC 8A LVDC distribution linked to S Distributed energy ressource Requirements for measurem Chairman's Advisory Group (Digital content and system al Good working practice docur Sub-Committees  Grid Integration of Renewabl Decentralized electrical energy	rk and procedures for mainten , SC 8B, SC 8C  yC LVDC s connection with the grid linke ents used to control DER and (CAG) oproach ment development e Energy Generation	ed to TC 120, TC 82, SC 22E loads linked to TC 85, TC 95, \$	





CENELEC	CLC/TC 8X	System aspects	of electrical energy supply
71	30 Standards	5 Projects	National delegates: 0
Scope	To prepare the necessary standards framework and coordinate the development, in cooperation with other TC/SCs, of CENELEC standards needed to facilitate the functioning of electricity supply systems in open markets.  TC8X also covers High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV.		
3	Working Groups directly under the Technical Committee		
WG 01	Physical characteristics of electrical energy (former BTTF 68-6)		
WG 03	Requirements for connection	of generators to distribution ne	etworks
WG 06	System aspects for HVDC gr	rid	

IEC	IEC/TC 13	Electrical energ	y measurement and control
	79 Standards	7 Projects	National delegates: 0
Scope	metering equipment and syst and at energy users and p equipment and methods.	ems forming part of smart grids roducers, as well as to prepare or the interface of metering	ergy measurement and control, for smart s, used in power stations, along the network, are international standards for meter test equipment for interconnection lines and
8	Working Groups directly under the Technical Committee		
WG 11	Electricity metering equipment		
WG 14	Data exchange for meter reading, tariff and load control		
WG 15	Smart Metering Functions and Processes		
PT 62057	Test equipment, techniques and procedures for electrical energy meters		
PT 62057-3	Test equipment, techniques and procedures for electrical energy meters - Part 3: Automatic Meter Testing System (AMTS)		
JWG 16	Mapping between the comme message profiles linked to TO		DLMS/COSEM data models and
JAHG 17	Initial study into synergy and	interplay between IEC/TC 13	and IEC/TC 69 linked to TC 69
AG 18	Chair Advisory Group		

CENELEC	CLC/TC 13	Electrical energ	y measurement and control
7/ *	91 Standards	6 Projects	National delegates: 0
Scope	Standardization in the field for metering equipment and systems (using whenever possible IEC standards), including smart metering systems, for electrical energy measurement, tariff- and load control, customer information and payment, for use in power stations, along the network and at energy end users, as well as to prepare international standards for meter test equipment and methods. Excluded: Standardization for the interface of metering equipment for interconnection lines and industrial consumers and producers requiring energy management type interfaces to the control system, covered by IEC/TC 57.		
2	Working Groups directly under the Technical Committee		
WG 01	Electricity meters for active e	nergy of class a, b and c	
WG 03	Measuring systems for statio	nary supply equipment	

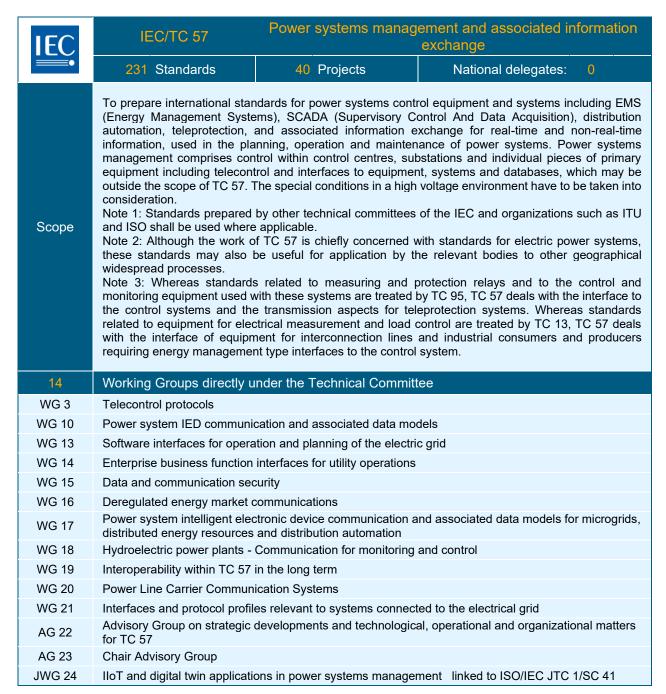
CENELEC	CLC/BTTF 128-2 Erection and operation of electrical test equipment		
07/,	1 Standards	1 Projects	National delegates: 0
Scope	To revise EN 50191:1999 "Erection and operation of electrical test equipment".		



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CENELEC	CLC/TC 57	Power systems management and associated information exchange	
71	129 Standards	18 Projects	National delegates: 0
Scope (Extract)	(Energy Management Syste automation, teleprotection, information, used in the pla management comprises con equipment including telecont	ems), SCADA (Supervisory Co and associated information e anning, operation and mainten atrol within control centres, sub trol and interfaces to equipmer	rol equipment and systems including EMS ontrol And Data Acquisition), distribution exchange for real-time and non-real-time nance of power systems. Power systems betations and individual pieces of primary nt, systems and databases, which may be a voltage environment have to be taken into



80



IEC	IEC/TC 22	Power electron	ic systems and equipment	
	137 Standards	26 Projects	National delegates: 0	
Scope	To prepare international standards regarding systems, equipment and their components for electronic power conversion and electronic power switching, including the means for their control, protection, monitoring and measurement.  Note 1 Components which are comprised within the scope include electronic devices.  Note 2 The scope does not include telecommunications apparatus other than power supplies to such apparatus.  Group Safety Function: Power electronic converter systems and equipment for solar, wind, tidal, wave, fuel cell or similar energy sources.			
6	Working Groups directly u	nder the Technical Commit	tee	
WG 11	Application independent definitions			
MT 3	Maintenance Team for IEC 60146 series and 61148			
MT 8	Maintenance team for IEC/TS 62578			
MT 9	Maintenance team for IEC 62477-1			
AG CAG	Chairman's Advisory Group (	CAG)		
JMT 10	Maintenance team for IEC 62	2477-2 linked to TC 99		
4	Sub-Committees			
SC 22E	Stabilized power supplies			
SC 22F	Power electronics for electric	Power electronics for electrical transmission and distribution systems		
SC 22G	Adjustable speed electric power drive systems (PDS)			
SC 22H	Uninterruptible power system	s (UPS)		

CENELEC	CLC/TC 22X	Power electronics		
	93 Standards	16 Projects	National delegates: 0	
Scope	To prepare standards dealing with power electronics. The standards will deal with equipment, the component parts (especially electronic devices) and their extension to the system aspect. Standard for power converters interfacing general power systems to dedicated systems, for example railways shall be dealt with jointly by TC 22X and relevant product committees.  The following are excluded: - converters for rolling stock; - converters and charging equipment for electrical vehicles; - emitters for telecommunication; - dimmers for lighting.		extension to the system aspect. Standards dedicated systems, for example railways, ommittees.	
3	Working Groups directly u	nder the Technical Commit	tee	
WG 07	Power supplies			
WG 08	Management of New Approa	ch Directives		
WG 09	Material Efficiency for Circula	ar Economy		







## 1.3 INSTALLATION

ELECTRICITY

PLUMBING

HEATING

AIR CONDITIONING

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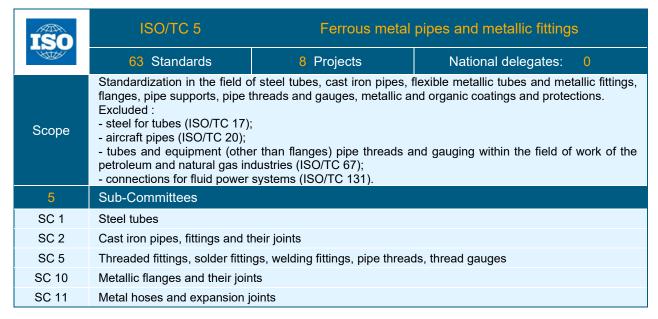
## 1.3 Installation



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## **1.3.1 Piping**

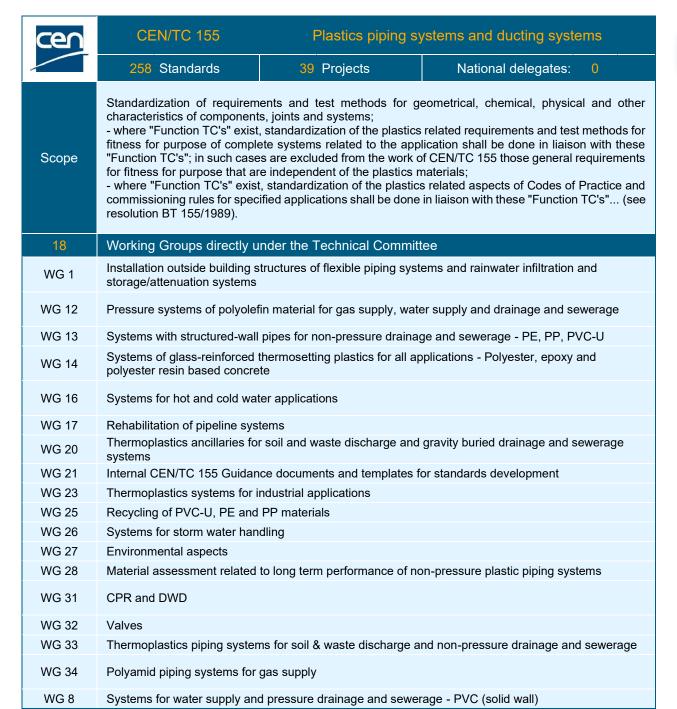


cen	CEN/TC 342 Metal hoses, hose assemblies, bellows and expansion joints		
	12 Standards	3 Projects	National delegates: 0
Scope	Standardization in the field of metal hoses, hose assemblies, bellows and expansion joints for general applications and for specific applications as required by the market, but avoiding overlap conflict with other functional CEN/TC's.		
3	Working Groups directly under the Technical Committee		
WG 1	Hose assemblies and fittings		
WG 2	Expansion joints		
WG 3	Hose assemblies for gas app	olications	

TSO	ISO/TC 138	Plastics pipes, fittings a	and valves for the transport of fluids	
MIN	357 Standards	40 Projects	National delegates: 0	
Scope	Standardization of pipes, fittings, valves and auxiliary equipments intended for the transport of fluids and made from all types of plastic materials, including all types of reinforced plastics.  Metal fittings used with plastics pipes are also included.  This standardization includes - for pipes, flanges, fittings, valves and auxiliary equipments - dimensions and their tolerances; requirements for chemical, mechanical and physical properties and appropriate test methods; requirements and test methods for other properties relevant to particular applications; temperature and pressure ratings.			
1	Working Groups directly u	nder the Technical Commit	tee	
AG 0	Advisory group			
8	Sub-Committees			
8 SC 1		soil, waste and drainage (inclu	uding land drainage)	
		, , ,	uding land drainage)	
SC 1	Plastics pipes and fittings for	water supplies	uding land drainage)	
SC 1 SC 2	Plastics pipes and fittings for Plastics pipes and fittings for	water supplies industrial applications	uding land drainage)	
SC 1 SC 2 SC 3	Plastics pipes and fittings for Plastics pipes and fittings for Plastics pipes and fittings for Plastics pipes and fittings for	water supplies industrial applications the supply of gaseous fuels fittings and valves of plastic ma	uding land drainage) aterials and their accessories - Test	
SC 1 SC 2 SC 3 SC 4	Plastics pipes and fittings for Plastics pipes and fittings for Plastics pipes and fittings for Plastics pipes and fittings for General properties of pipes,	water supplies industrial applications the supply of gaseous fuels fittings and valves of plastic ma-	Ç Ç,	
SC 1 SC 2 SC 3 SC 4 SC 5	Plastics pipes and fittings for Plastics pipes and fittings for Plastics pipes and fittings for Plastics pipes and fittings for General properties of pipes, methods and basic specificat	water supplies industrial applications the supply of gaseous fuels fittings and valves of plastic mations d fittings for all applications	J J	



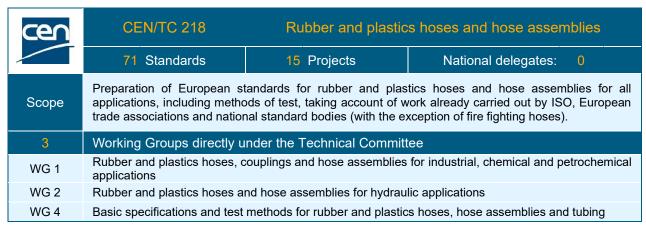


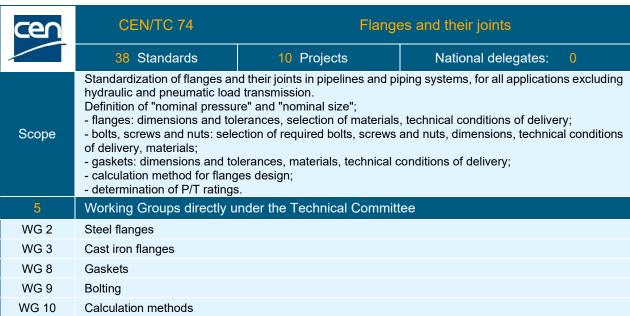


cen	CEN/TC 208	Elastomeric seals for joints in pipework and pipelines	
	21 Standards	0 Projects	National delegates: 0
Scope	Standardization of material requirements and test methods for elastomeric seals for joints and diaphragms used in systems for the conveyance of fluids, for example, cold and hot water, waste water, gas, hydrocarbons and other fluids.		
3	Working Groups directly under the Technical Committee		
WG 1	Elastomeric seals for hot and cold water and waste water		
WG 2	Elastomeric seals for gas, hy	drocarbons and other fluids	
WG 4	Seals and diaphragms for ga	s appliances and gas equipme	nt







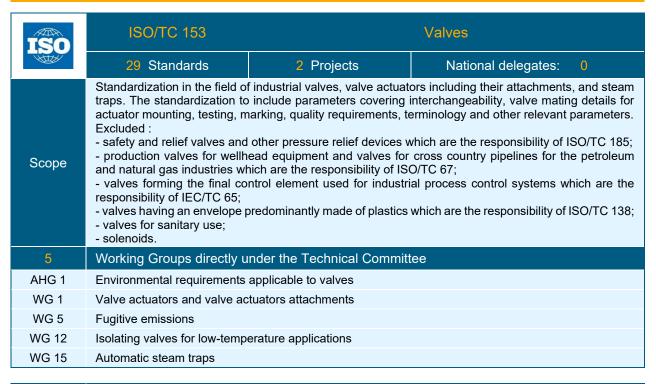


cen	CEN/TC 267	Industrial	piping and pipelines	
	24 Standards	15 Projects	National delegates: 0	
Scope	Standardization of rules constituting a design and manufacturing code comprising the choice of materials, design, fabrication, installation, inspection and testing of industrial piping and pipeline, including the choice of safety systems.  The meaning of "industrial piping" is the following: Pipes or pipe networks located on the premises of an industrial site. The meaning of "pipelines" is the following: Pipes or pipe networks located outside premises of an industrial site.  The following are excluded from the scope of CEN/TC 267:  - Pipelines for waste water, and piping for waste water, the latter being directly evacuated via the sewer system outside of industrial premises and/or in the environment (dealt within CEN/TC 165);  - Pipelines for gaseous fuels (that is to say any fuel that is in gaseous state at a temperature of 15°C and at a pressure of 1 bar (dealt with in CEN/TC 234);  - Piping and pipelines for water for human consumption (dealt with in CEN/TC 164).  - Pipelines for petroleum and natural gas industries (dealt with in CEN/TC 12).			
7	Working Groups directly under the Technical Committee			
WG 1	General			
WG 2	Metallic materials			
WG 3	Design and calculation	Design and calculation		
WG 4	Manufacturing and installation	Manufacturing and installation		
WG 5	Inspection and testing			
WG 8	Maintenance of EN 13480 se	eries		
WG 9	Aluminium and aluminium all	oy piping		





## 1.3.2 Valves, Pumps & Compressors



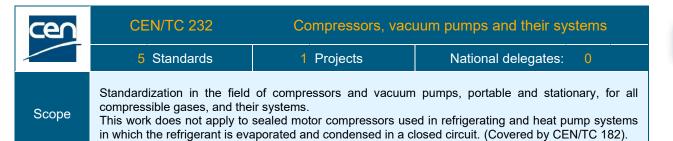
cen	CEN/TC 69	Industrial valves	
	84 Standards	9 Projects	National delegates: 1
Scope	The standardization of valves for all industrial applications and for all types of fluids, including: - steam traps; - valve actuator interface; - safety devices against excessive pressure (safety valves and bursting disks); - control valves (excluding the actuator element and their interface); but excluding: sanitary valves (as defined by CEN/TC 164/WG 8).		
6	Working Groups directly under the Technical Committee		
WG 1	Basic standards		
WG 4	Butterfly valves		
WG 10	Safety devices against excessive pressure		
WG 12	Valves for the process industry		
WG 15	Diaphragm valves		
WG 19	Valves for hydrogen applicat	ions and networks	

cen	CEN/TC 197		Pumps	
	52 Standards	3 Projects	National delegates:	0
Scope	Standardization in the field of safety and all other aspects of pumps and pumping machinery for liquids including machines using pumps for their principal mode of action.			ery for liquids
6	Working Groups directly under the Technical Committee			
WG 1	Water pumps efficiency			
WG 2	Circulation pumps			
WG 3	Test Procedure for Packings for Rotary Applications			
WG 5	High-pressure water jet machines - Safety requirements			
WG 6	Vehicle cleaning appliances safety standard			
WG 7	Pumps and pump units for lice	quids		





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## 1.3.3 Cooling & Ventilation Systems

TSO	ISO/TC 86	Refrigeration and air-conditioning		
WID!	52 Standards	25 Projects	National delegates: 0	
Scope	Standardization in the fields of refrigeration and air-conditioning, including terminology, mechanical safety, methods of testing and rating equipment, measurement of sound levels, refrigerant and refrigeration lubricant chemistry, with consideration given to environmental protection. The scope includes factory-assembled air-conditioners (cooling), heat pumps, dehumidifiers, refrigerants, and refrigerant reclaiming and recycling equipment as well as other devices, components and equipment such as humidifiers, ventilation equipment and automatic controls used in air-conditioning and refrigeration systems that are not covered by other ISO technical committees.			
5	Sub-Committees			
SC 1	Safety and environmental red	quirements for refrigerating sys	tems	
SC 4	Testing and rating of refrigerant compressors			
SC 6	Testing and rating of air-cond	ditioners and heat pumps		
SC 7	Testing and rating of commercial refrigerated display cabinets			
SC 8	Refrigerants and refrigeration	lubricants		

cen	CEN/TC 44	Commercial and Professional Refrigerating Appliances and Systems, Performance and Energy Consumption		
	14 Standards	5 Projects	National delegates: 0	
Scope	Standardization of Appliances and Systems for refrigeration for preparation, catering retail and wholesale of food and beverage related products such as: - refrigerated & frozen food display cabinets with or without incorporate condensing unit; - refrigerators & frozen food storage cabinets, Walk In Cold Room, ice maker and ice cream machines; - refrigeration systems composed of remote elements with respect to: - performance requirements and related test methods; - requirements and test methods for determination of energy consumption; Industrial scale production plants are excluded. Condensing Units and Chillers appliances are excluded. Safety and Environmental matters are excluded.			
6	Working Groups directly under the Technical Committee			
WG 1	Commercial refrigerated disp	Commercial refrigerated display cabinets		
WG 2	Service refrigerated cabinets and counters for use in commercial kitchens			
WG 4	Walk-in cold rooms			
WG 5	Refrigerated display cabinets for artisan and self made gelato			
WG 6	Commercial beverage coolers and ice cream freezers			
WG 7	Walk-in cold rooms package	d Refrigerating Units		





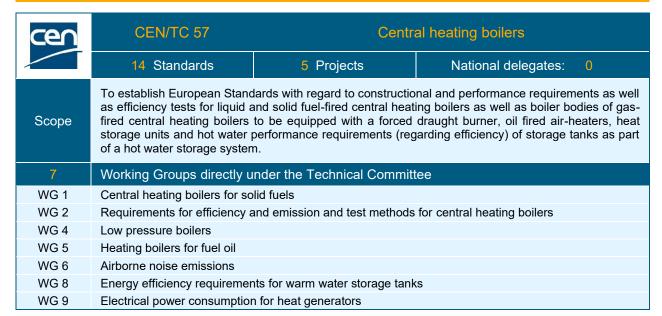
cen	CEN/TC 182	Refrigerating systems, safety and environmental requirements	
	20 Standards	11 Projects	National delegates: 0
Scope	Standardization of requirements in the field of safety and environment for the design, construction, installation, testing, operation, maintenance, repair and disposal of refrigerating systems used for cooling and/or heating. Performance of Appliances and Systems for refrigeration for preparation, catering retail and wholesale of food and beverage related products are excluded. Standardization of requirements in the field of safety and environment for the design, construction, installation, testing, operation, maintenance, repair and disposal of refrigerating systems used for cooling and/or heating.		
6	Working Groups directly under the Technical Committee		
WG 2	Design and testing		
WG 4	Competence		
WG 6	Revision of EN 378		
WG 7	JWG CEN/TC 182/CEN/TC 5	4 Pressure vessels for refriger	rating systems
WG 9	Tightness of components		
WG 11	Revision of EN 14624		

cen	CEN/TC 156	Ventilation for buildings			
	88 Standards	28 Projects	National delegates: 0		
Scope	Standardization of terminology, testing and rating methods, dimensioning and fitness for purpose of natural and mechanical ventilation systems and components for buildings subject to human occupancy.				
17	Working Groups directly u	nder the Technical Commit	tee		
WG 1	Terminology				
WG 2	Natural and mechanical power	ered residential ventilation			
WG 3	Ductwork				
WG 4	Air terminal devices	Air terminal devices			
WG 5	Air handling units				
WG 8	Installation				
WG 9	Fire precautions for air distribution systems in buildings				
WG 14	Ventilation of commercial kitchens				
WG 16	Joint Working Group between CEN/TC 156 and CEN/TC 113 - Multifunctional balanced ventilation units for single family dwellings, including heat pumps				
WG 17	Fans				
WG 18	Ventilation in hospitals				
WG 20	Ventilation and Room-Condit	Ventilation and Room-Conditioning Systems in non-Residential Buildings			
WG 21	Energy performance calculation of ventilation and cooling systems				
WG 23	Ventilation for Buildings - Inspection and checking				
WG 24	Chairman Advisory Group				
WG 25	Indoor Air Quality				
WG 26	c-PCR for ventilation compor	nents			





## 1.3.4 Heating Systems



cen	CEN/TC 58		vices for burners and appliances aseous or liquid fuels	
	21 Standards	3 Projects	National delegates: 0	
Scope	Safety and control devices for equipment burning gaseous or liquid fuels, ranging from small domestic appliances to large industrial burners.  Excluding the following:  - mechanical controls other than gas controls  - devices for transmission and distribution equipment			
5	Working Groups directly under the Technical Committee			
WG 11	Generics			
WG 12	Electronics			
WG 13	Mechanics			
WG 14	Sensors			
WG 15	Advisory Group 1 Hydrogen			

cen	CEN/TC 109	Central heating boilers using gaseous fuels		
	16 Standards	9 Projects	National delegates: 0	
Scope	All the gas-fired central heating boilers, including the boilers of the condensing type, with or without integrated domestic hot water production, of all types and all nominal inputs, i.e.:  - the boilers fitted with atmospheric burners or premixed burners (fan-assisted or not),  - the units composed of a boiler body and its fan-assisted burner, constituting an indissociable entity,  - the assemblings of a boiler body (according to the requirements prescribed by the CEN/TC 57) and a fan-assisted burner (according to the requirements prescribed by the CEN/TC 131), but only for the specific characteristics suited to the utilisation of gaseous fuels.			
5	Working Groups directly under the Technical Committee			
WG 1	Domestic central heating boi	lers using gaseous fuels		
WG 3	Assembly of boiler bodies and forced draught burners			
WG 4	Hot water production of central heating boilers for domestic use			
WG 5	Steering Group ECOTEST			
WG 6	Material efficiency			





cen	CEN/TC 269	EN/TC 269 Shell and water-tube boilers		
	34 Standards	19 Projects	National delegates: 0	
Scope	Standardization of rules for the design, manufacture, materials, equipment and testing of shell boilers and water-tube boilers.			
2	Working Groups directly under the Technical Committee			
WG 1	Water-tube boilers			
WG 2	Shell boilers			

cen	CEN/TC 295	Residential solid fuel burning appliances		
	10 Standards	7 Projects	National delegates: 0	
Scope	Standardization in the field of residential heating and cooking appliances burning solid fuels: to include solid mineral fuel burning appliances, wood- burning appliances and multifuel appliances. The standardization to cover appliance construction, performance, (e.g. efficiency and emissions), safety and commissioning requirements, together with their associated test methods and installation and operating instructions.  The standardization of test fuels and test methods for the assessment of the suitability of fuels for the various appliance types.			
6	Working Groups directly under the Technical Committee			
WG 1	Appliances fired by solid fuel	Appliances fired by solid fuels		
WG 2	Appliances fired by pellets			
WG 3	Heat storage stoves (SHRA)	and sauna stoves		
WG 4	Tiled Stoves			
WG 5	Measurement methods			
WG 6	CPR and Mandates			

cen	CEN/TC 46 Firep		ces for liquid fuels
	4 Standards	4 Projects	National delegates: 0
Scope	Standardisation in the field of fireplaces for liquid fuels, this includes oil stoves (oil stoves with vaporising burners) and appliances operated with ethanol (liquid or gel).  The standardisation covers appliance construction, performance, (e.g. efficiency and emissions), safety and commissioning requirements, together with their associated test methods and installation and operating instructions.		
2	Working Groups directly under the Technical Committee		
WG 1	Oil stoves with vaporizing burners		
WG 2	Fireplaces for Ethanol/Gel		

cen	CEN/TC 48	Domestic gas-fired water heaters	
	2 Standards	2 Projects	National delegates: 0
Scope	Preparation of European standards for domestic gas-fired water heaters, i.e. instantaneous water heaters and storage water heaters, excluding central heating boilers derived from these appliances and also excluding appliances combining these two preceding types.		
1	Working Groups directly under the Technical Committee		
WG 1	Revision of EN 26 and EN 89	9	









cen	CEN/TC 228	Heating systems and	water based cooling systems in buildings	
	49 Standards	8 Projects	National delegates: 0	
Scope	water production, water bas generation systems in the dir energy performance of buildi - General performance requi - General requirements for generation systems; - Requirements for installation based cooling system as a water - Requirements for preparation based cooling systems; - Requirements for inspection - Methods for calculation of comparation systems in the composition of the photovoltaic), including energeneration systems in the composition of the photovoltaic), including energeneration systems of the photovoltaic of the photovoltaic of the products in order to establish can be used for both product of the wind turbines handled by and use of electricity in condescribes a process by which photovoltaic systems in the condescribes a products of the products of the photovoltaic systems in the condescribes a process by which are in the responsibility of the products of the products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems in the condescribes and products of the photovoltaic systems	sed cooling emission and dis- ect environment of the building ngs. The work includes: rements for heating systems, design of heating systems, on and commissioning, including thole; on of instructions for operation, on of heating systems; lesign heat loads, as basis for series and environment of the building economy and environment energy certification of heating systems; or building or building unit level; or mance of district heating and centre (such as CEN/TC 1 or a common terminology and a declaration and design inform or CEN/TC 228 are small plants nection with buildings. The sa or helectrical energy, which is pelirect environment of the buildir uch as heating and cooling unit or of dedicated Technical Common centre of the buildir uch as heating and cooling unit or of dedicated Technical Common centre of the buildir uch as heating and cooling unit or of dedicated Technical Common centre of the buildir uch as heating and cooling unit or of dedicated Technical Common centre of the centre of th	r, water based cooling systems and power ding (e.g. wind power, thermo solar and al impact, as basis for supporting energy systems, water based cooling systems and cooling systems;  56) responsible for related systems and a common set of technical parameters that ation.  The as they may occur in domestic production ame applies to photovoltaic, CEN/TC 228 produced by building integrated or additive ing, is determined.  The systems and photovoltaic units in the system and photovoltaic unit	
2	Working Groups directly u	nder the Technical Commit	tee	
WG 1	General performance require	rements of heating systems and sub-systems in buildings		
WG 4	Calculation methods and sys	tem performance and evaluation	on	





cen	CEN/TC 113	Heat pumps and air conditioning units		
	17 Standards	7 Projects	National delegates: 0	
Scope	Standardization of testing and requirements for the performance of factory assembled heat pumps, air conditioning units (ducted and non ducted), hydronic room fan coil units, and liquid chilling packages whether vapour compression or sorption, regardless of energy used, for domestic or commercial purposes excluding industrial processes and also excluding the rational use of gas energy which is within the scope of CEN/TC 299. Also the standardization of rating conditions, performance testing and the presentation of data of refrigerant compressors and condensing units.			
8	Working Groups directly under the Technical Committee			
WG 6	Refrigerant compressors - Presentation of performance data			
WG 7	Heat Pumps, air conditioners and chilling liquid packages - testing and rating at part load conditions			
WG 8	Rating and testing for performance			
WG 9	Sound rating of heat pumps, air conditioners and liquid chilling packages			
WG 10	Heat pumps for domestic hot water production and revision of EN 16147			
WG 11	Direct expansion-to-water units			
WG 14	Hydronic fan coil units			
WG 15	Roof-top units			

# 1.3.5 Gas

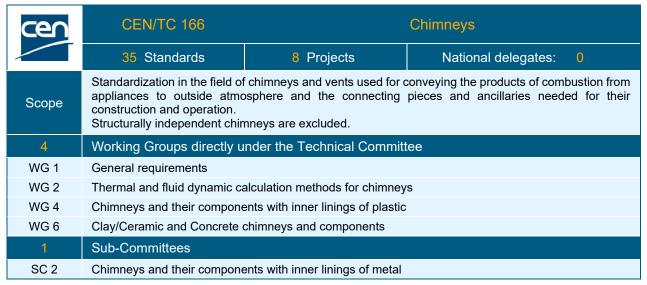
cen	CEN/TC 236	Non industrial manually operated shut-off valves for gas and particular combinations valves-other products		
	2 Standards	0 Projects	National delegates: 0	
Scope	Standardization of the requirements for fitness for purpose (for design, performance, testing, marking, packing, instructions for installation and use) of manually operated shut-off valves for domestic and commercial not directly buried installations inside or outside of buildings, and other particular types of valves strictly combined to particular products or component considered as a whole (e.g. safety flexible metallic hose assemblies and connection valves for domestic gas appliances).			
1	Working Groups directly under the Technical Committee			
WG 1	Revision of existing standards			

CENELEC	CLC/TC 216	Gas detectors		
3-71,1	18 Standards	1 Projects	National delegates: 0	
Scope	To standardize general and specific requirements for the construction, safety, performance and testing for electrical apparatus for sensing the presence of gas or vapour and for providing an indication, alarm and/or other output function, the purpose of which is to give a warning of explosion hazard, fire hazard or health hazard. The standardization work of TC 216 concerns domestic gas detectors and those industrial and commercial gas detectors that are not included in the scope of CLC/SC 31-9. To provide information and guidance, as appropriate, on the selection, installation and operation of such apparatus.			
4	Working Groups directly under the Technical Committee			
WG 05	Detectors in car parks and tunnels			
WG 13	Revision of EN 50379-2			
WG 14	Specification for portable electrical apparatus designed to measure draught & gas pressures of heating appliances and systems			
WG 15	Working group for the revision	n of EN 50194-1		





## 1.3.6 Chimneys



cen	CEN/TC 297	Free-standi	ing industrial chimneys
	10 Standards	3 Projects	National delegates: 0
Scope	Standards 3 Projects National delegates: 0  Standardization in the field of free-standing chimneys for industrial and utility applications including terminology, performance requirements, safety aspects, design as far as not covered by the Eurocodes, construction and maintenance of the shell, lining and accessories. A chimney may also be considered as free-standing, if it is guyed or supported or if it stands on another structure.  All flue gas ducts to the chimney are outside the scope.  Note: "Utility applications" can include schools, hospitals, assembly rooms, theatres, swimming pools, prisons etc.		

## 1.3.7 Domestic Appliances for Water

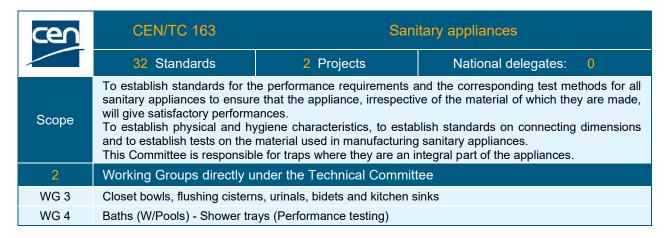
cen	CEN/TC 402	Domestic Pools and Spas	
	9 Standards	0 Projects	National delegates: 0
Scope	Standardization in the field of domestic swimming pools, spas and other types of pools and their related materials, equipment and accessories, used for domestic/private purposes.		
5	Working Groups directly under the Technical Committee		
WG 1	Pool structure - design, product and installation		
WG 2	Pool water circulation, filtration and treatment		
WG 3	Mini pools		
WG 4	Domestic spas and hot tubs		
WG 5	Domestic pools - Environmental impacts		

cen	CEN/TC 426	Domestic appliances used for water treatment not connected to water supply	
	1 Standards	1 Projects	National delegates: 0
Scope	sparkling etc. appliances use treatment of drinking water o This Project Committee cove are not connected to water s instruction manuals, so that	ed in domestic and similar envi nly. rs safety requirements and tes supply in buildings and provide	d labelling of water treatment like filtration, ironment for which the intended use is the at methods for water treatment devices that as requirements and recommendations for and maintained properly. Appliances with Project Committee.





## 1.3.8 Sanitary Appliances



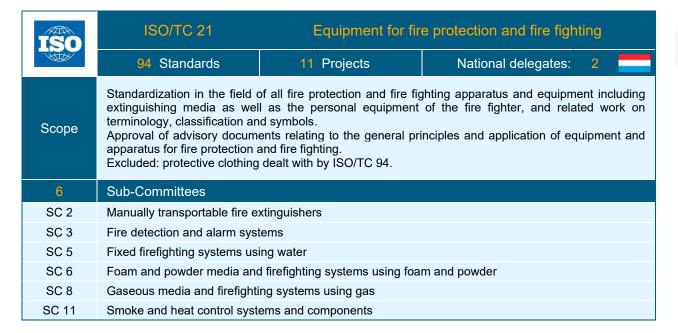
## 1.3.9 Fire Safety

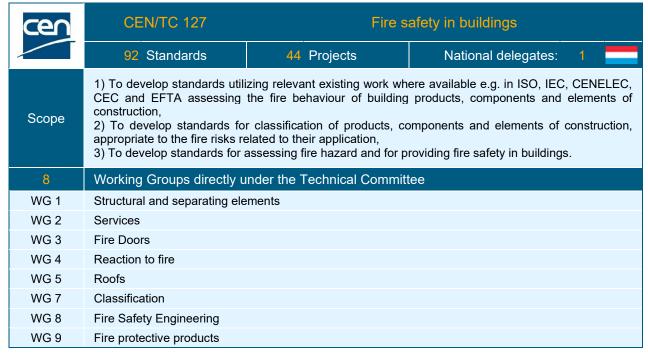
ISO	ISO/TC 92	Fire safety		
MIN	162 Standards	26 Projects	National delegates: 1	
Scope	Standardization of the methods of assessing - fire hazards and fire risk to life and to property; - the contribution of design, materials, building materials, products and components to fire safety and methods of mitigating the fire hazards and fire risks by determining the performance and behaviour of these materials, products and components, as well as of buildings and structures.  Excluded: - materials and equipments already covered by other technical committees; - fields covered by other ISO and IEC committees.			
6	Working Groups directly u	nder the Technical Commit	tee	
CAG 1	Technical programme management group (TPMG)			
TG 2	Fire fighters			
WG 8	Fire terms and definitions			
WG 13	Fire safety – Statistical data collection			
WG 14	Large outdoor fires and the built environment			
WG 15	Fire safety for tunnels			
4	Sub-Committees			
SC 1	Fire initiation and growth			
SC 2	Fire containment			
SC 3	Fire threat to people and environment			
SC 4	Fire safety engineering			

cen	CEN/CLC/JTC 4	Services for fire safety and security systems		
CENELEC	2 Standards	0 Projects	National delegates: 0	
Scope	The Technical Committee should develop standards for services for fire safety and security systems. The standards specify the requirements for quality of services supplied by companies and the competencies of their involved staff charged with the planning and design, engineering, installation and hand over, maintenance and repair of fire safety and/or security systems*.  * Examples of fire safety and/or security systems, are fire detection-, fire extinguishing -, voice alarm-, intruder alarm-, hold up-, access control , social alarm-, smoke and heat exhaust ventilation-, CCTV systems, control equipment for escape and evacuation route, and combination of such systems as mentioned before.			
1	Working Groups directly under the Technical Committee			
WG 1	Remote Services for fire safe	ety and security systems		





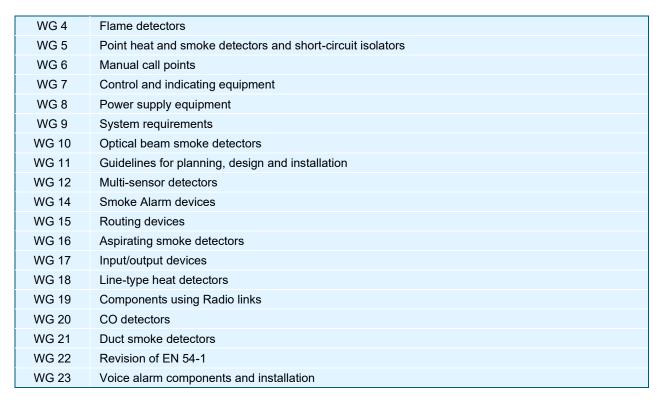


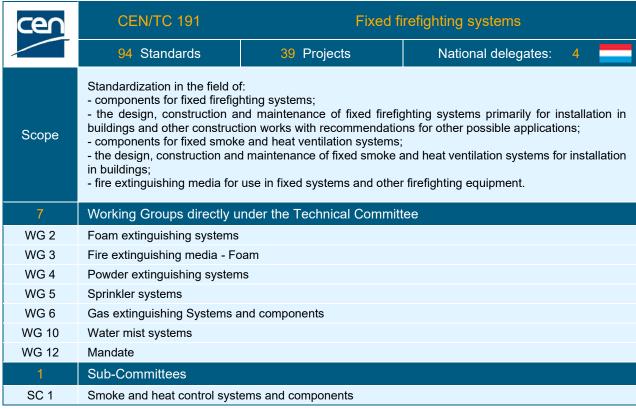


cen	CEN/TC 72	Fire detection and fire alarm systems		
	41 Standards	18 Projects	National delegates: 0	
Scope	To prepare standards, harmonised where necessary to meet the essential requirement 'Safety in case of fire' of the Construction Products Directive, in the field of fire detection and fire alarm systems in and around buildings, covering test methods, requirements and recommendations for:  - components;  - the combination of components into systems;  - the planning, design and installation of systems for use in and around buildings;  - usage, maintenance and servicing;  - the connections to and control of other fire protection systems;  - the combination with other systems to form integrated systems;  - the combination with fixed firefighting systems;  - the contribution of fire detection and fire alarm systems to fire safety engineering.			
21	Working Groups directly under the Technical Committee			
WG 2	Environmental tests			
WG 3	Fire alarm devices			





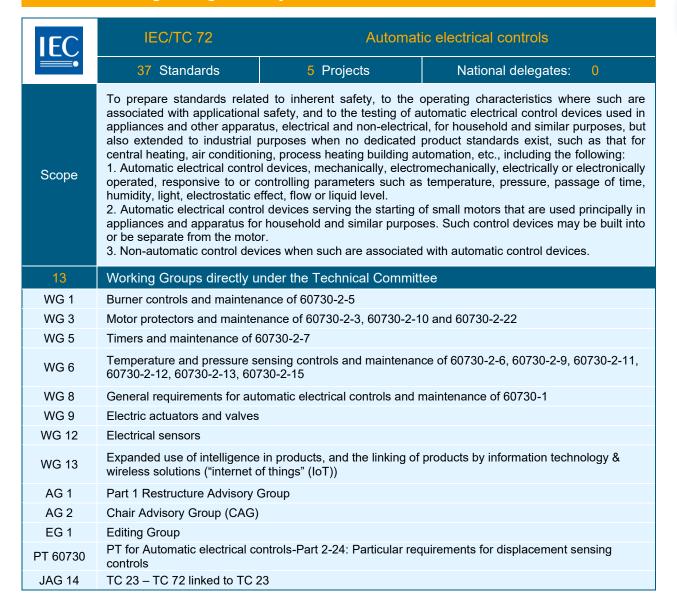








#### 1.3.10 Building Management Systems

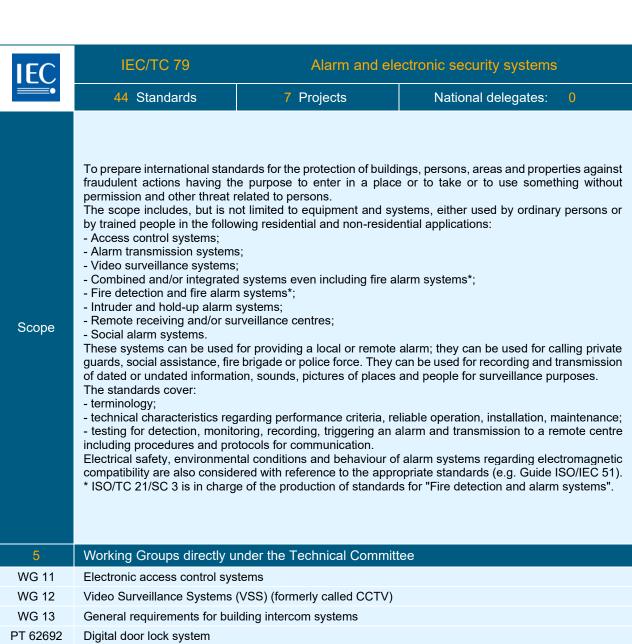


CENELEC	CLC/TC 72	Automatic electrical controls		
37/4	50 Standards	6 Projects	National delegates: 0	
Scope	where such are associated and devices used in appliances as purposes such as those for control operated responsive to or er control operated responsive to other control operated responsive to other control oper	with applicational safety and to nd other apparatus, electrical a entral heating, air conditioning il devices mechanically, electro ontrolling such parameters as iffect, flow or liquid level. of devices serving the starting of r household and similar purposon.	ent safety, to the operating characteristics the testing of automatic electrical control nd non-electrical for household and similar etc. including the following: e-mechanically, electrically or electronically temperature, pressure, passage of time, of small motors that are used principally in esc. Such control devices may be built into the with automatic control devices.	
2	Working Groups directly u	nder the Technical Commit	tee	
WG 03	Updating EN 60730 series for the emc directive			
WG 04	Editing Committee			





cen	CEN/TC 247	Building Automation, Controls and Building Management		
	31 Standards	6 Projects	National delegates: 0	
Scope	Standardisation of building automation, controls and building management systems and services for residential and non-residential buildings. These standards include the definitions, requirements, functionality and test methods of building automation products and systems for automatic control of building services installations. The primary integration measures include application interfaces, systems and services to ensure an efficient technical building management in cooperation with commercial and infrastructural building management. Excluded from this scope are areas of building automation which are under the responsibility of other CEN/CENELEC TC's.			
2	Working Groups directly under the Technical Committee			
WG 4	Open System Data Transmission			
WG 6	Electronic control equipment management systems	for HVAC applications, integra	ated room automation, controls and	

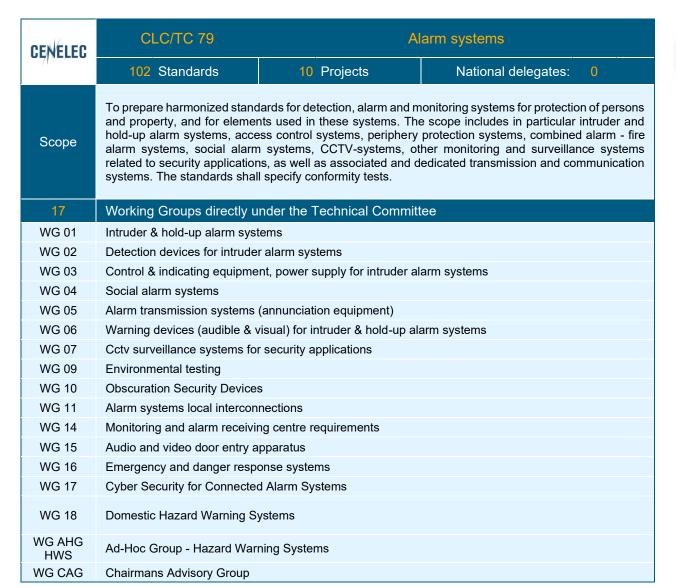




ahG 14

Interoperability





## 1.3.11 Lifts, Escalators and Moving Walks

TSO	ISO/TC 178	Lifts, escala	tors and moving walks	
MIN	43 Standards	15 Projects	National delegates:	0
Scope	Standardization of all aspects, including safety, of lifts, service lifts, escalators, passenger conveyors and similar apparatus.  Excluded: continuous mechanical handling equipment and lifts in mines.			
10	Working Groups directly u	Working Groups directly under the Technical Committee		
WG 1	Lifts on ships			
WG 4	Safety requirements and risk assessment			
WG 5	Escalators and moving walks			
WG 6	Lift installation			
WG 8	Electrical requirements			
WG 9	Measurement of lift and esca	Measurement of lift and escalator ride quality		
WG 10	Energy efficiency			
WG 11	Methodology for the improvement of safety of existing passenger and goods passenger lifts			
WG 12	Cybersecurity			
WG 13	New technologies			





cen	CEN/TC 10	Lifts, escala	ators and moving walks
	42 Standards	20 Projects	National delegates: 0
Scope	Establishment of safety rules for the construction and installation: - of lifts and service lifts; - of escalators and passenger conveyors.		
11	Working Groups directly u	nder the Technical Commit	tee
WG 1	Lifts and service lifts		
WG 2	Escalators and moving walks		
WG 4	Data logging and remote control		
WG 6	Fire related issues		
WG 7	Accessibility to lifts for persons including persons with disability		
WG 8	Stairlifts and vertical platforms for the disabled		
WG 9	Inclined lifts		
WG 10	Improvement of safety of exis	sting lifts	
WG 11	Lifting appliances for wind tu	rbines	
WG 12	Lifting tables		
WG 13	Vertical lifting appliance with enclosed carrier		
1	Sub-Committees		
SC 1	Building hoists		

## 1.3.12 Lighting

Scope

ISO	ISO/CIE	International Commission on Illumination		
	13 Standards	4 Projects	National delegates: 0	

The International Commission on Illumination (abbreviated as CIE from its French title) is an organization devoted to international cooperation and exchange of information among its member countries on all matters relating to the science and art of lighting.

The objectives of the CIE are:

- to provide an international forum for the discussion of all matters relating to science, technology and art in the fields of light and lighting and for the interchange of information in these fields between countries:
- to develop basic standards and procedures of metrology in the fields of light and lighting;
- to provide guidance on the application of principles and procedures in the development of international and national standards in the fields of light and lighting;
- to prepare and publish standards, reports and other publications concerned with all matters relating to science, technology and art in the fields of light and lighting;
- to maintain liaison and technical interaction with other international organizations concerned with matters related to science, technology, standardization and art in the fields of light and lighting.

Within these objectives, light and lighting embrace such fundamental subjects as vision, photometry and colorimetry, involving natura1 and man-made radiations in the ultraviolet, visible and infrared regions of the spectrum, and also applications covering all uses of light, indoors and out, including environmental and aesthetic effects, as well as means for the production and control of light and radiation

Standards produced by the CIE are a concise documentation of data defining aspects of light and lighting for which international harmony requires a unique definition. CIE Standards are therefore a primaty source of internationally accepted and agreed data, which can be taken, essentially unaltered, into universal standard systems.

For the development of some standards in the field of light and lighting, ISO has established a working relationship with the International Commission on Illumination, which has been recognized by the ISO Council as an international standardizing body.

Further information about the CIE can be found on the CIE Web site.









cen	CEN/TC 169	Light and lighting	
	30 Standards	12 Projects	National delegates: 0
Scope	CEN/TC 169 is responsible for standards in the field of vision, photometry and colorimetry, involving natural and man-made optical radiation over the UV, the visible and the IR regions of the spectrum, and application subjects covering all usages of light, indoors and outdoors, including environmental, energy and sustainability requirements and aesthetics and nonimage forming biological aspects as well as lighting related information modelling systems.		
12	Working Groups directly under the Technical Committee		
WG 1	Basic terms and criteria		
WG 2	Lighting of work places		
WG 3	Emergency lighting in buildings		
WG 4	Sports lighting		
WG 6	Tunnel lighting		
WG 7	Photometry		
WG 8	Photobiology		
WG 9	Energy performance of buildings		
WG 11	Daylight		
WG 12	Joint Working Group with CEN/TC 226 - Road lighting		
WG 13	Non-visual effects of light on human beings		
WG 15	Assessment and control of ol	otrusive light in outdoor spaces	8

<b>IEC</b>	IEC/TC 34	Lighting		
	612 Standards	51 Projects	National delegates: 0	
Scope	performance and compatibilit - Electric light sources and co - Caps and holders; - Controlgear and control dev - Luminaires; - Lighting systems; - Miscellaneous equipment re Compatibility specifications re interchangeability between co It is recognized that the bord	ty specifications for: components thereof; vices for electric light sources, a elated to items (a), (b), (c), (d) a may include requirements nece components in a lighting system	essary for coexistence, interoperability and i. bility, the interfaces and protocols to other	



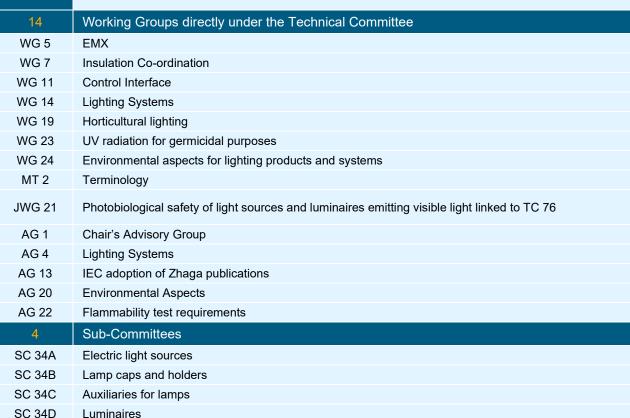


For lighting systems within building premises, TC 34 is responsible for light sources, luminaires, control gear, dedicated protocols, and certain aspects of dedicated networks.

Details of the work on control devices and lighting systems are currently under consideration in SEG 9/WG 5 "Advisory group on lighting systems".

For the purpose of the scope, the terms and definitions according to IEC 60050-845:2020 apply. Terms not provided there but included in TC/SC 34 standards are available in the IEC Glossary.

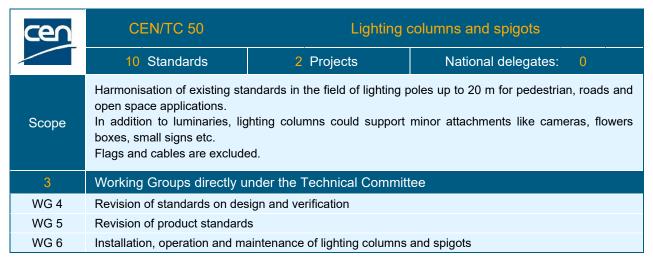
Working Groups directly under the Technical Committee



CENELEC	CLC/TC 34	Lighting		
OL/NELLO	495 Standards	50 Projects	National delegates: 0	
Scope	<ul> <li>electrical light sources inclusions</li> <li>lamp caps and holders,</li> <li>lamp control gear,</li> <li>luminaires.</li> <li>To ensure that any deviation conditions and A-deviations,</li> <li>European mandates and European mandates and European mandates for applicable mandates from when necessary.</li> <li>To coordinate with IEC/TC requirements in IEC standard</li> </ul>	from the IEC standards, such a is only in response to a clear opean and national legislative other standardisation organisation the European Commission 34 and its subcommittees the standardisation organisation the European Commission is subcommittees the standardisation organisation the European Commission is subcommittees the standard its	ational Standards in the field of:  as common modifications, special national ar and justifiable European need, such as needs. ons at European level, taking responsibility and developing European standards only to encourage the inclusion of European CC/TC 34 and its subcommittees in order to	
1	Working Groups directly u	under the Technical Committee		
WG 01	to revise EN 50172:2004			







IEC	IEC/TC 97		ns for lighting and beaconing of aerodromes
	9 Standards	2 Projects	National delegates: 0
To prepare international standards for design, installation, verification and maintenance ground lighting of aerodromes. The activity covers requirements which apply to the who the incoming power to the aerodrome up to and including the luminaires used in aero lighting.  The activity will not cover: - electrical installations already standardized by TC 64; - luminaires not used as aeronautical ground lights standardized by TC 34; - special cables for the constant current series circuit standardized by TC 20.  Note: Operational requirements for aeronautical ground lights are specified in Ar Convention on International Civil Aviation.			
8	Working Groups directly under the Technical Committee		
PT 61820	Electrical installation for the lighting and beaconing of aerodromes- Constant current series circuits for aeronautical ground lighting- System design and installation requirements		
PT 61820-9- 2	Electrical installation for lighting and beaconing of aerodromes – Mobile photometric in-field measurement of precision approach and runway light fixtures		
MT 1	Maintenance of IEC 61822: Electrical installations for lighting and beaconing of aerodromes - Constant current regulators		
MT 2	Maintenance of IEC 61823: Electrical installations for lighting and beaconing of aerodromes - AGL series transformers		
MT 3	Maintenance of IEC 62870: Electrical installations for lighting and beaconing of aerodromes - Safety secondary circuits in series circuits - General safety requirements		
AG 7	Chair Advisory Group		
ahG 5	General requirements for ma	intenance	
ahG 6	Requirements for inset and e	elevated luminaires	

G		ns for lighting and beaconing of aerodromes	
// -	10 Standards	3 Projects	National delegates: 0





# 1.3.13 Solar Energy



TSO	ISO/TC 180	Solar energy		
MIN	21 Standards	4 Projects	National delegates: 0	
Scope	Standardization in the field of solar energy utilization in space and water heating, cooling, industrial process heating and air conditioning.  This includes developing standards on the instrumentation and procedures used for measuring solar energy and solar measurement.			
3	Working Groups directly under the Technical Committee			
AHG 1	Measurement of CO2			
WG 3	Collector components and materials			
WG 4	Solar collectors			
2	Sub-Committees			
SC 1	Climate - Measurement and data			
SC 4	Systems - Thermal performa	nce, reliability and durability		



IEC	IEC/TC 82	Solar photo	voltaic energy systems
<b>==</b> •	200 Standards	66 Projects	National delegates: 0
Scope	To prepare international standards for systems of photovoltaic conversion of solar energy into electrical energy and for all the elements in the entire photovoltaic energy system. In this context, the concep "photovoltaic energy system" includes the entire field from light input to a photovoltaic cell to and including the interface with the electrical system(s) to which energy is supplied.  NOTE: It is recognized that there is some common interest between TC 47 and TC 82, therefore these two Committees shall maintain liaison.		
11	Working Groups directly under the Technical Committee		
WG 1	Glossary		
WG 2	Modules, non-concentrating		
WG 3	Systems		
WG 6	Balance-of-system components		
WG 7	Concentrator modules		
WG 8	Photovoltaic (PV) cells		
WG 9	BOS Components – Support	Structures	
PT 600	Vehicle Integrated Photovoltaic Systems		
JWG 1	Renewable energy off grid systems linked to TC 88	stems, including access to ele	ectricity, rural electrification and hybrid
JWG 11	Building-Integrated Photovol	taics (BIPV) linked to ISO/TC 1	60/SC 1
AG 12	Chair's Advisory Group (CAC	G)	



CENELEC	CLC/TC 82	Solar photo	voltaic energy systems
37/11	111 Standards	41 Projects	National delegates: 0
Scope	To prepare European Standards for systems of and components for photovoltaic conversion of solar energy into electrical energy and for all elements in the entire photovoltaic energy system. The standards will deal with EMC, Machine, CPD and LVD directives. The CLC/TC 82 will especially develop standards in areas where there are special European concerns. The CLC/TC 82 will cooperate closely with IEC/TC 82 and the National Committees. The aim will be to support the accelerated market introduction by harmonization of standards.		
2	Working Groups directly under the Technical Committee		
WG 01	Wafers, cells and modules		
WG 02	Bos components and system	IS	













WG 3	Custom built systems		
IEC	IEC/TC 117	Solar the	ermal electric plants
•	10 Standards	10 Projects	National delegates: 0
Scope	To prepare international standards for systems of Solar Thermal Electric (STE) plants for the conversion of solar thermal energy into electrical energy and for all the elements (including all subsystems and components) in the entire STE energy system.  The standards would cover all of the current different types of systems in the STE field, as follows:  - Parabolic trough;  - Solar tower;  - Linear Fresnel;  - Dish;  - Thermal storage.  The standards would define terminology, design and installation requirements, performance measurement techniques and test methods, safety requirements, "power quality" issues for each of the above systems.  The standards would also address issues of connectivity and interoperability with the power grid related to connections, bi-directional communicates and centralized control (Smart Grid) and environmental aspects.		
15	Working Groups directly u	nder the Technical Commit	tee
PT 62862-1- 4	Solar thermal electric plants - Part 1-4: Thermal insulation for solar thermal electric plants		
PT 62862-1- 5	Performance code test for solar thermal electric plants		
PT 62862-1- 6	- Solar thermal electric plants - Part 1-6: Silicone-based heat transfer fluids for the use in line focusing CSP applications		
PT 62862-2- 2	<ul> <li>Solar thermal electric plants - Part 2-2: Thermal energy storage systems - Technical requirements for molten salt used as heat storage and heat transfer medium</li> </ul>		
PT 62862-3- 1	Solar thermal electric plants thermal electric plants	- Part 3-1: General requiremen	ts for the design of parabolic trough solar
PT 62862-3- 4	Solar thermal electric plants thermal power plant	- Part 3-4: Code of solar field p	erformance test for parabolic trough solar
PT 62862-3- 5	Laboratory reflectance meas	urement of concentrating solar	thermal reflectors
PT 62862-3- 6	Accelerated aging tests of sil	vered-glass reflectors for conc	entrating solar technologies
PT 62862-4- 1	Solar thermal electric plants	- Part 4-1: General requiremen	its for the design of solar tower plants
PT 62862-4- 2	Heliostat field control system		
PT 62862-4- 3	<ul> <li>Solar thermal electric plants - Part 4-3: Technical requirements and design qualification of heliostats for solar power tower plants</li> </ul>		
PT 62862-5- 2	Solar thermal electric plants - Part 5-2: Linear Fresnel systems - General requirements and test methods for linear Fresnel collectors		
MT 1	Terminology		
MT 5		-2:2017 ED1 and IEC TS 6286	2-1-3:2017 ED1
EG 4	Editing Committee		





CENELEC

# CLC/SR 117 Solar thermal electric plants 1 Standards 1 Projects National delegates: 0



# 1.3.14 Wind Energy



IFC	IEC/TC 88 Wind energy generation system		gy generation systems
	52 Standards	27 Projects	National delegates: 0
Scope	Standardization in the field of wind energy generation systems including wind turbines, wind power plants onshore and offshore and interaction with the electrical system(s) to which energy is supplied. These standards address site suitability and resource assessment, design requirements, engineering integrity, modeling requirements, measurement techniques, test procedures, operation and maintenance.  Their purpose is to provide a basis for design, quality assurance and technical aspects for certification. The standards address site-specific conditions, all systems and subsystems of wind turbines and wind power plants, such as mechanical, and electrical systems, support structures, control and protection as well as communication systems for monitoring, centralized and distributed control and evaluation, implementation of grid connection requirements for wind power plants, and environmental aspects of wind power development. The TC 88 standards will be developed based on and in agreement with appropriate IEC/ISO standards.		
35	Working Groups directly u	nder the Technical Committ	ee
WG 3	Design requirements for offsh	nore wind turbines	
WG 15	Assessment of wind resource	e, energy yield and site suitabil	ity input conditions for wind power plants
WG 21	Measurement and assessme	nt of power quality characterist	tics of grid connected wind turbines
WG 26	Availability and reliability for v	wind turbines and wind turbine	plants
WG 27	Wind turbines - Electrical sim	ulation models for wind power	generation
PT 61400-8	Wind energy generation systematics	ems - Part 8: Design of wind tu	rbine structural components
PT 61400-9	Wind energy generation systems - Part 9: Probabilistic design measures for wind turbines		
PT 61400- 11-2	Wind energy generation systems - Part 11-2: Measurement of wind turbine noise characteristics in receptor position		
PT 61400-16	Standard file format for sharing power curve information		
PT 61400-28	Wind energy generation systems - Part 28: Through life management and life extension of wind power assets		
PT 61400- 28-2	Decommissioning and preparation for recycling		
PT 61400-29	Marking and lighting of wind		
PT 61400-30	design		Systems (WTGs) - General principles for
PT 61400-31		ems - Part 31: Siting Risk Asse	essment
PT 61400-32	Operations and maintenance		
PT 61400-40	Electromagnetic Compatibility	y (EMC) - Requirements and to	est methods
PT 61400- 50-4	Wind energy generation system	ems - Part 50-4: Use of floating	g lidars for wind measurements
PT 61400- 50-5	Use of scanning doppler lidar		
PT 61400-60	Wind energy generation system	ems – Part 60: Validation of co	mputational models
PT 61400- 101		ems - Part 101: General requir	ements for wind turbine plants
MT 1	Design requirements for wind		
MT 2	Safety of small wind turbines		
MT 3-2	Design requirements for float		
MT 5	** *	energy generation systems - Part 5: Wind turbine blades	
MT 6	Wind turbines - Tower and fo	undation design	



MT 11	Acoustic noise measurement technique
MT 12	Power performance
MT 13	Measurement of mechanical loads
MT 23	Full-scale structural testing of rotor blades
MT 24	Lightning protection for wind turbines
JWG 1	Wind turbine gearboxes linked to ISO/TC 60
JWG 25	Communications for monitoring and control of wind power plants linked to TC 57
ahG 1	Terminology in the field of wind turbines
ahG 28	Strategy for sustainability
ahG 29	Revision of TC 88 scope





CENELEC	CLC/TC 88	Wind turbines		
OL/ NELEO	50 Standards	18 Projects	National delegates:	0
Scope	plants onshore and offshore These standards address sit integrity, modelling require maintenance. Their purpose for certification. The standard turbines and wind power plan and protection as well as coand evaluation, implemental environmental aspects of wire	and interaction with the electrice suitability and resource assements, measurement technics to provide a basis for designeds address site-specific conditions, such as mechanical, and elementary and site of grid connection required.	tems including wind turbines, very cal system(s) to which energy ssment, design requirements, eques, test procedures, open, quality assurance and technitions, all systems and subsystem ectrical systems, support structuritoring, centralised and distributivements for wind power parts and standards will be developed.	is supplied. engineering ration and cal aspects ems of wind ures, control uted control plants, and

# 1.3.15 High Voltage

IEC	IEC/TC 17	High-voltage switchgear and controlgear		
•	73 Standards	18 Projects	National delegates: 0	
Scope	and controlgear as well as the	neir assemblies having a rated	al reports covering high-voltage switchgear d voltage above 1 kV a.c. and 1,5 kV d.c., suring, signaling, protective, regulating and	
7	Working Groups directly u	nder the Technical Commit	tee	
WG 6	Common specifications for DC switchgear			
WG 10	High-voltage switchgear and controlgear - Part 320: Environmental aspects and life cycle Assessment rules			
WG 11	Elaborate on catalogue data			
MT 1	Maintenance of IEC 62271-1			
MT 2	Maintenance of IEC 62271-3: High-voltage switchgear and controlgear - Part 3: Digital interfaces based on IEC 61850			
MT 3	Maintenance of IEC 62271-4			
MT 9	Maintenance of IEC TR 62063			
2	Sub-Committees			
SC 17A	Switching devices			
SC 17C	Assemblies			

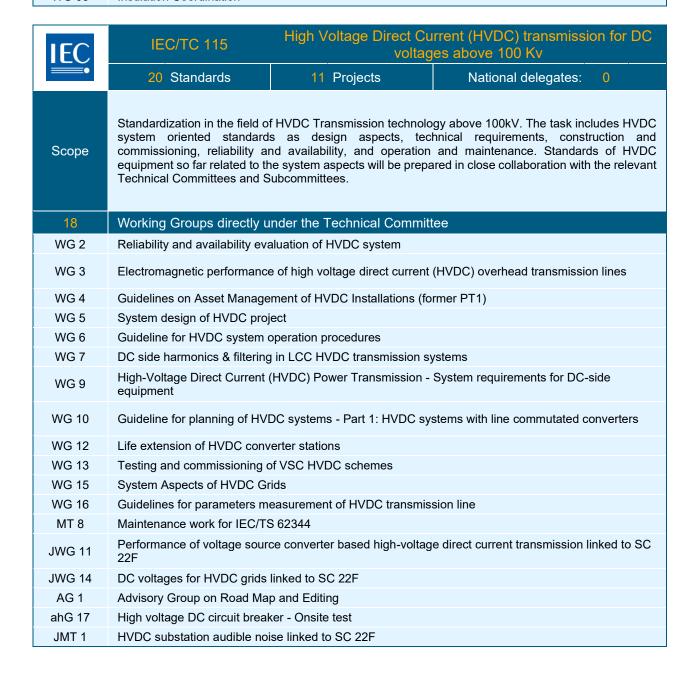


CENELEC	CLC/TC 17AC	High-voltage switchgear and controlgear		
OL/ NELLO	73 Standards	7 Projects	National delegates: 0	
Scope	To prepare harmonized standards for high-voltage switchgear and controlgear including their assemblies for rated voltages above AC 1 kV or above DC 1,5 kV.  Note: In general, relevant IEC standards will be transposed into EN via the Dresden Agreement.  To prepare and revise harmonized standards for enclosures of gas-filled high-voltage switchgear having a design pressure higher than atmospheric pressure.  To observe and support European activities related to standardization in the field of high voltage switchgear and controlgear in order to ensure the availability of EN suitable to cover the essential requirements of European Directives.			
3	Working Groups directly under the Technical Committee			
WG 02	Maintenance of EN 50052			
WG 03	Revision of EN 50089			
WG 04	Revision of EN 50187			

IEC	Insulation co-ordination and system engineering of high IEC/TC 99 voltage electrical power installations above 1,0 kV AC and 1,5 kV DC		
	13 Standards	6 Projects	National delegates: 0
Scope	Standardisation of: a) insulation co-ordination for high voltage systems in specifying basic principles of insulation co-ordination, definitions and standard insulation levels for all type of electrical equipment considering field of applications, minimum air clearances, test requirements and test procedures; and b) common rules and particular requirements for system engineering and erection of high voltage electrical power installations for power generation, transmission, distribution, and consumer premises, in both indoor and outdoor situations, with particular consideration of safety aspects. High voltage (HV) covers nominal voltages above 1,0 kV AC and 1,5 kV DC and includes the voltages referred to as medium voltage (MV), extra-high voltage (EHV) and ultra-high voltage (UHV).		
10	Working Groups directly under the Technical Committee		
MT 4	Maintenance of IEC 61936-1		
MT 9	Maintenance of IEC 60071-2 (former TC 28/MT9)		
MT 10	Maintenance of IEC 60071-1 (former TC 28/MT10)		
MT 12	Principles to be observed in the design and erection of high voltage installations - Safety of high voltage installations		
MT 14	Maintenance of IEC TR 60071-4		
JWG 13	Insulation co-ordination for HVDC systems linked to TC 115		
AG 11	Advisory Group on Strategy		
ahG 15	Establish a proposal for Grou	ıp Safety Function	
ahG 16	Establish alignment of DC voltages in the range above 1,5 kV up to 100 kV		
JMT 7	Maintenance of IEC/TS 6193	6-2 linked to TC 115, SC 22F	



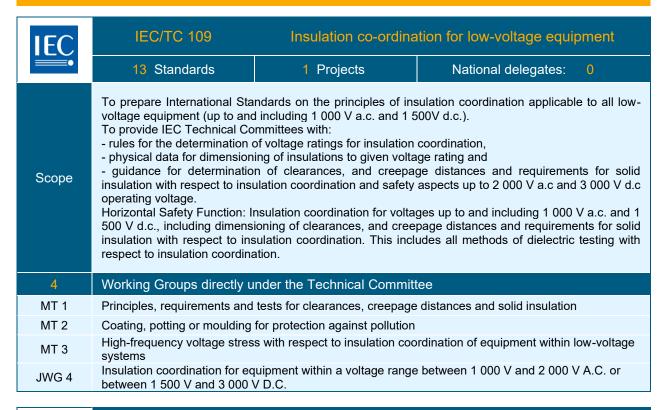
CENELEC	CLC/TC 99X Power installations exceeding 1 kV a.c. (1,5 kV d.c.)		
37/11223	14 Standards	3 Projects	National delegates: 0
Scope	To prepare harmonized standards for high voltage power installations (exceeding 1 kV a.c. or 1,5 kV d.c.) located indoors or outdoors, including earthing. The standards will specify the design requirements of the installations, and the selection and erection of electrical equipment in order to ensure the safety of persons and the proper operation of the installations.  The standards will not be applicable to factory built and type tested equipment, but will be relevant to the installation of this equipment. The standards will not be applicable to overhead and underground lines between separate installations.		
3	Working Groups directly under the Technical Committee		
WG 01	Earthing aspects		
WG 02	Technical Details		
WG 03	Insulation Coordination		







#### 1.3.16 Low Voltage



CENELEC	CLC/SR 109	Insulation co-ordination for low-voltage equipment	
05/12220	5 Standards	1 Projects	National delegates: 0
	IEC/TC 121	Switchgear and contro	lgear and their assemblies for low
<b>IEC</b>	voltage		
<b></b>	101 Standards	24 Projects	National delegates: 0
Scope	To prepare international standards for low-voltage switchgear and controlgear equipment for industrial, commercial and similar use rated below or equal to 1 kV a.c. and 1,5 kV d.c, electromechanical as well as semiconductor (solid state) equipment. The scope includes open and enclosed separate items of equipment as well as assemblies which are the combinations of items of equipment into complete functional units.		
6	Working Groups directly u	nder the Technical Commit	tee
WG 1	Energy Efficiency		
WG 2	Environmental aspects for Low-Voltage Switchgear and Controlgear and their assemblies.		
WG 3	Product data and properties for information exchange		
WG 4	Digital aspects		
PT 63482	Maintenance of low voltage switchgear and controlgear and their assemblies		
JPT 63404	Integration of radiocommunication of IEC 63404 linked to TC 23		
2	Sub-Committees		
SC 121A	Low-voltage switchgear and	controlgear	
SC 121B	Low-voltage switchgear and	controlgear assemblies	

CENELEC	CLC/SR 121	Switchgear and controlgear and their assemblies for low voltage	
OL VILLE	0 Standards	5 Projects	National delegates: 0





CENELEC	CLC/TC 121A	Low-voltage s	witchgear and controlgear
	68 Standards	21 Projects	National delegates: 0
Scope	To prepare harmonized standards for low-voltage apparatus, based on concluded international standards (normally prepared by IEC/SC 121A).		
1	Working Groups directly u	nder the Technical Commit	tee
WG 3	Control switches		



## 1.3.17 Electrical Energy Storage Systems

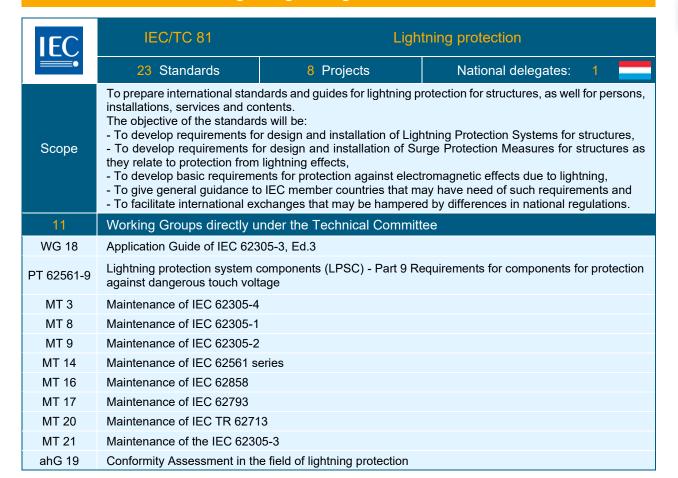
IEC	IEC/TC 120 Electrical Energy Storage (EES) Systems			
	13 Standards	11 Projects	National delegates: 0	
Scope	- TC 120 focuses on system - TC 120 investigates system - TC 120 also focuses on the 2. For the purpose of TC120, a) transmission grids b) distri d) industrial grids e) residenti g) MUSH(Municipal/Military, h) ICI (Institutional, Commerce It is also confirmed that TC1: contributes as an EES Systee Note: grid: electricity supply information exchange and concentration exchange and contributes as an EES System - to integrate the behaviour area to efficiently deliver sustainance to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver to efficiently deliver.	a aspects and the need for new interaction between EES Sysi "grid" includes and is not limit bution grids c) commercial grid al grids f) islanded grids Utilities/Universities, Schools, cial and Industrial) grids 20 can include "smart grid." St m to the grid as referenced in 2 network (ISO/IEC 15067-3) smontrol technologies, distribute as: and actions of the network user able, economic and secure election of the source and provide election electrical energy demand a etechnologies as long as the rage itself is not in the scope of the prepare normative documents.	er than energy storage devices. v standards for EES Systems. tems and Electric Power Systems (EPS). ted to applications in: ds  Hospitals) grids  torage in railway systems is considered if it 2 a-f. nart grid: electric power system that utilizes ed computing and associated sensors and ers and other stakeholders extricity supplies (IEV 617-04-13) Systems which can both store electrical extrical energy to a grid. By that feature it and supply over a period of time. ey are capable to store and to discharge of the work.) Note: Thermal storage systems point of view. Unidirectional energy storage 120. ts dealing with the system aspects of EES parameters, testing methods, planning and	
8	Working Groups directly u	nder the Technical Commit	tee	
WG 1	Terminology			
WG 2		Unit parameters and testing methods		
WG 3	Planning and installation			
WG 4	Environmental issues			
WG 5	Safety considerations			
MT 7	systems - Electrochemical-ba	ased systems	requirements for grid-integrated EES	
MT 8	Maintenance of IEC 62933-5	2933-5-1 Ed.1		
CAG 6	Chairman Advisory Group			

CENELEC	CLC/SR 120	Electrical Energy Storage (EES) Systems	
71 "	4 Standards	6 Projects	National delegates: 0





## 1.3.18 Protection from Lightning & Surges



CENELEC	CLC/TC 81X	Lightning protection		
	25 Standards	8 Projects	National delegates: 1	
Scope	To prepare European Standards or, where not possible, guides for lightning protection for structures and buildings as well as for persons, services and contents.			
4	Working Groups directly under the Technical Committee			
WG 01	Maintenance of EN62305 - Part1			
WG 02	Lightning protection components			
WG 03	Protection against LEMP			
WG 04	Assessment of the risk of da	mage due to lightning		

IEC	IEC/TC 37	Surge arresters		
	29 Standards	17 Projects	National delegates: 0	
Scope	To prepare international standards regarding: - Specifications for surge arresters and other surge protective devices (SPDs) - The choice of arresters to provide adequate protection of the system with satisfactory reliability, and the definitions of conditions of use enabling this result to be obtained.			
4	Working Groups directly under the Technical Committee			
PT 60099-11	Prepare Surge Arresters - Part 11: Metal-oxide Surge Arresters to Protect Power Line Insulation			
MT 4	Metal-oxide surge arresters - Maintenance of high voltage surge arrester test standards			
MT 10	Maintenance of IEC 60099-5			
WG 14	Surge Arc Suppressors			





2	Sub-Committees
SC 37A	Low-voltage surge protective devices
SC 37B	Components for low-voltage surge protection



CENELEC	CLC/SR 37	Surge arresters	
71	4 Standards	2 Projects	National delegates: 0

CENELEC	CLC/TC 37A	Low voltage	surge protective devices
37/11-13	12 Standards	9 Projects	National delegates: 0
Scope	To prepare European standards (ENs), Technical specifications (TSs) and Technical reports (TRs). These documents will cover surge protective devices (SPDs) for protection against surges due to lightning and/or other transient overvoltages and their selection and application. These devices are to be used in power, telecommunication and/or signalling networks with voltages up to 1 000 V a.c. or 1 500 V d.c.		
2	Working Groups directly under the Technical Committee		
WG 01	Development of SPDs for Po	wer systems and for special ap	oplications including d.c.
WG 02	Development of SPDs conne	ected to Telecommunications a	ns Signalling Networks

CENELEC	CLC/SR 37B	Components for low-voltage surge protection	
7,,	7 Standards	4 Projects	National delegates: 0

## 1.3.19 Electric Cables & Electrical Accessories

IFC	IEC/TC 20	Electric cables		
	260 Standards	11 Projects	National delegates: 0	
Scope	current ratings) for insulated for use in wiring and in powe The applications cover an uncables for photovoltaic install sea), High Temperature Supto create heat.  Cables specifically designed All cables for communication	re international standards for the design, testing and end-use recommendations (including tings) for insulated electrical power and control cables, their accessories and cable systems, wiring and in power generation, distribution and transmission. cations cover an unlimited range of voltage and current, and includes applications such as photovoltaic installations, charging cables for electric vehicles, HVDC cables (land and sub-material temperature Superconducting (HTS) cables and heating cables where the current is used neat.  The ecifically designed for marine applications covered by SC 18A are excluded. The ecifically designed for marine applications are covered at the excluded and the excluded are covered at the excluded are covered as TC 20 holds a Group Safety Function for fire hazard testing on cables comprising: copagation tests; tance tests; ptical density tests;		
4	Working Groups directly u	nder the Technical Commit	tee	
WG 16	High voltage cables (1kV and above), their accessories and cable systems			
WG 17	Low voltage cables below 1kV			
WG 18	Burning characteristics of ele	characteristics of electric cables		
WG 19	Current rating and short-circu	g and short-circuit limits of cables		



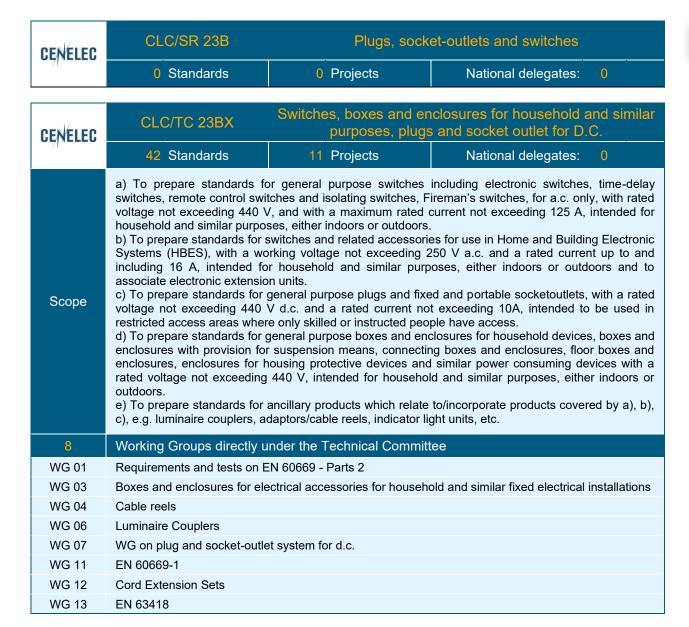
CENELEC	CLC/TC 20	Electric cables		
97/*	229 Standards	7 Projects	National delegates: 0	
Scope	To prepare harmonized standards in the field of insulated conductors, cables and flexible cords and their accessories, for both low and high voltage with the exception of telecommunications wires and cables.			
5	Working Groups directly under the Technical Committee			
WG 09	Cables for use by electricity supply companies			
WG 10	Fire performance tests for cables			
WG 11	Harmonisation of joints, accessories and terminations of electric cables			
WG 12	Harmonisation of cables for railway rolling stock			
WG 13	Covered overhead line condu	uctors		

IEC	IEC/TC 23	Electrical accessories		
	256 Standards	53 Projects	National delegates: 0	
Scope	To coordinate between the different subcommittees of TC 23 and with other technical bodies within and outside IEC, aspects concerning safety, EMC, coordination, performance, compatibility interoperability, interchangeability, energy efficiency and terminology for electrical accessories contributing to the global management of the electrical energy.  To prepare standards for electrical accessories and related systems, for AC and DC, for household and similar purposes, the word "similar" including locations such as offices, commercial and industrial premises, hospitals, public buildings, etc.  These accessories and related systems are:  - Intended for fixed installations or for use in or with appliances and other electrical or electronic equipment, and may include electronic components, and related software and digital interfaces.  - normally installed by instructed or skilled persons and are normally used by ordinary persons.  ()			
9	Working Groups directly u	nder the Technical Commit	tee	
WG 8	Electrical accessories for dire	ect current		
WG 9	Energy Efficiency Aspects in	TC 23		
WG 12	Home and Building Electronic Systems (HBES) and Building Automation and control systems (BACS)			
MT 1	Sound signalling devices for household and similar porposes - Maintenance of IEC 62080			
MT 6	Installation couplers intended for permanent connection, maintenance of IEC 61535			
MT 11	Maintenance of IEC/TR 6191	6 - Electrical accessories - Ha	rmonization of general rules	
AG 10	Co-ordinating Group of TC 2	3		
ahG 1	Conditions for electrical accestandards	ssories to be used at temperat	tures outside the range of the existing	
JAG 13	TC 23 - TC 34 linked to TC 3	4		
7	Sub-Committees			
SC 23A	Cable management systems			
SC 23B	Plugs, socket-outlets and sw	itches		
SC 23E	Circuit-breakers and similar	Circuit-breakers and similar equipment for household use		
SC 23G	Appliance couplers			
SC 23H	Plugs, Socket-outlets and Co	Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles		
SC 23J	Switches for appliances			
SC 23K	Electrical Energy Efficiency p	products		

CENELEC	CLC/SR 23	Electrical accessories	
	12 Standards	1 Projects	National delegates: 0







CENELEC	CLC/TC 23E	Circuit breakers and similar devices for household and similar applications		
71	59 Standards	10 Projects	National delegates: 0	
Scope	To prepare harmonized standards for electrical circuit breakers for overcurrent protection, devices protecting against electric shock and all related accessories. These devices are used for household and similar purposes. The word "similar" includes locations such as offices, commercial and industrial premises, hospitals, public buildings etc.  This equipment is intended for fixed installations or for use in or with appliances or other equipment. This equipment may include electronic components.			
3	Working Groups directly under the Technical Committee			
WG 01	Maintenance of TC23E standards			
WG 02	Self-reclosing devices (SRD)			
WG 04	Power frequency overvoltage	e protective device for househo	ld and similar applications (POP)	

CENELEC	CLC/SR 23G Appliance couplers	liance couplers	
7/ *	19 Standards	0 Projects	National delegates: 0



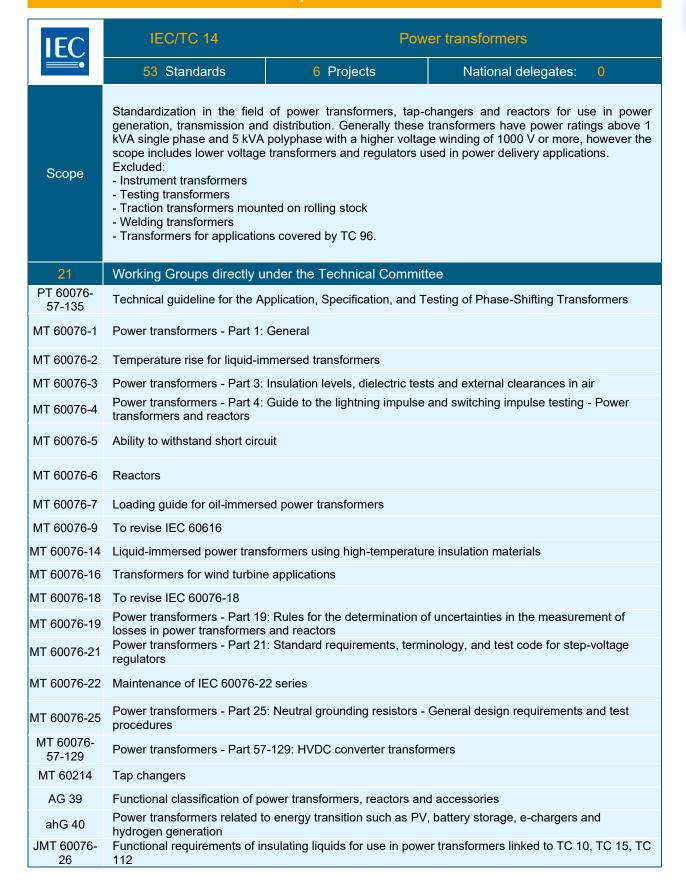


CENELEC	CLC/TC 23H	Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles		
//	27 Standards	6 Projects	National delegates: 0	
Scope	To prepare standards for industrial plugs, socket-outlets and couplers suitable for use in industrial, commercial, private or public locations, either indoors or outdoors.  To prepare standards for other accessories, such as industrial cable reels among others, intended for use with industrial plugs, socket-outlets and couplers.  To prepare standards for connection products intended for the connection of electric vehicles to the supply network and/or to dedicated supply equipment.  The rated voltages of products covered by these standards lie within IEC 60038.			
4	Working Groups directly under the Technical Committee			
WG 1	Low voltage plugs, socket-outlets and couplers for industrial purpose, industrial cable reels, and conversion adapters for industrial use			
WG 2	Plugs, socket-outlets and couplers for electric vehicles			
WG 4	High-voltage accessories			
WG 5	Contact interface for automa	ted connection devices (ACD)		

WG 5	Contact interface for automated connection devices (ACD)			
	OLO/OD 03 I	Cuite	h	
CENELEC	CLC/SR 23J	SWILC	hes for appliances	
71 *	13 Standards	1 Projects	National delegates:	0
CENELEC	CLC/SR 23K	Electrical er	nergy efficiency products	
7,	1 Standards	2 Projects	National delegates:	0
CENELEC	CLC/TC 213	Cable m	nanagement systems	
7,	53 Standards	15 Projects	National delegates:	0
Scope	To prepare European standardization publications for products and systems used for the management of all types of cables, information and communication lines, electrical power distribution conductors and associated accessories.  Management includes support and/or containment and/or retention and/or protection against external influences.			
13	Working Groups directly under the Technical Committee			
WG 01	Cable trunking systems and cable ducting systems			
WG 02	Conduit systems including conduit fixing devices and liquid tight sheathing (underground conduit is excluded).			
WG 04	Conduit systems intended to be buried underground			
WG 05	Cable tray systems and cable ladder systems			
WG 06	Cable ties for electrical instal	lations		
WG 07	Fire performances and environmental performances of cable management systems			
WG 07-01	Resistance to fire			
WG 08	Cable cleats for electrical installations			
WG 09	Cover plates and cover tapes for the protection and warning of the location of buried cables or buried conduits in underground installations			
WG 10	Powertrack systems			
WG 11	Electromagnetic characteristi	Electromagnetic characteristics of linear cable management systems		
WG 12	Articulated systems and flexible systems for cable guiding			
WG CAG	Chairman's advisory group			



#### 1.3.20 Power Transformers & Capacitors







CENELEC	CLC/TC 14	Power transformers		
97/**===	47 Standards	10 Projects	National delegates: 0	
Scope	Standardization in the field of power transformers, tap-changers and reactors for use in power generation, transmission and distribution. Generally these transformers have power ratings above 1 kVA single phase and 5 kVA polyphase with a higher voltage winding of 1 000 V or more, however the scope includes lower voltage transformers and regulators used in power delivery applications. Excluded: - Instrument transformers - Testing transformers - Traction transformers mounted on rolling stock - Welding transformers - Transformers for applications covered by TC 96.			
5	Working Groups directly under the Technical Committee			
WG 21	Maintenance of EN50708-2 series			
WG 28	Plug in cable-connections			
WG 29	Maintenance of EN 50708-3 series			
WG 32	Maintenance of EN50708-1 series			
WG 33	Adoption of the IEC/IEEE du	al logo standard IEC/IEEE 600	76-57-1202	

<b>IEC</b>	IEC/TC 33	Power capacitors and their applications		
•	51 Standards	5 Projects	National delegates: 0	
Scope	Standardization of Power Ca	pacitors and their Applications		
8	Working Groups directly under the Technical Committee			
MT 13	Series capacitor banks and protective equipment			
MT 18	Power electronics capacitors			
MT 19	Shunt power capacitors for AC systems having a rated voltage above 1000 V			
MT 20	Coupling capacitors and capacitor dividers			
MT 21	Shunt power capacitors for AC systems having a rated voltage up to and including 1000 V			
MT 24	Special applications			
MT 25	AC motor capacitors			
JMT 17A	(TC 33 - SC 17A) - Grading (	capacitors linked to SC 17A		

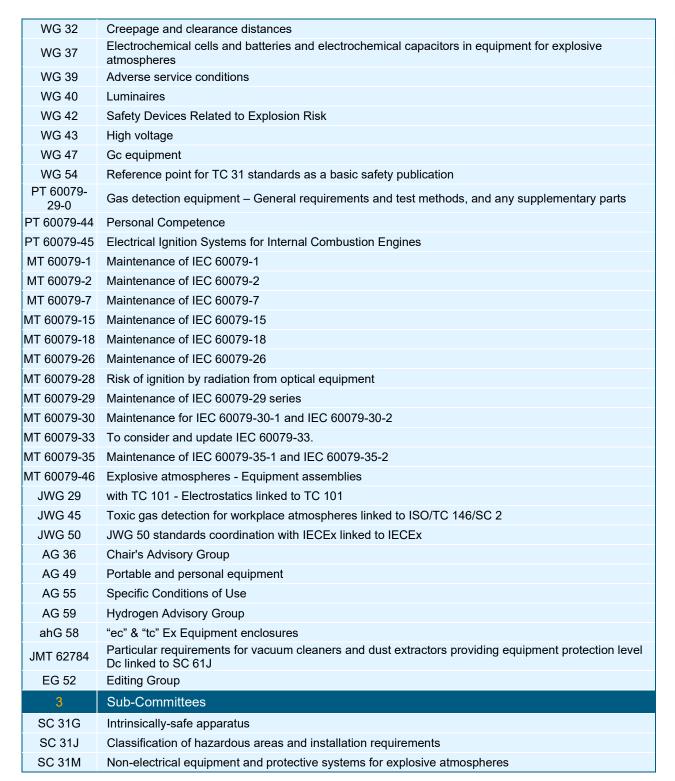
CENELEC	CLC/SR 33	Power capacitors and their applications	
	36 Standards	8 Projects	National delegates: 0

## 1.3.21 Electrical Installations

<b>IEC</b>	IEC/TC 31	Equipment for explosive atmospheres		
•	96 Standards	29 Projects	National delegates: 0	
Scope	To prepare and maintain international standards relating to equipment for use where there is a hazard due to the possible presence of explosive atmospheres of gases, vapours, mists or combustible dusts.			
38	Working Groups directly under the Technical Committee			
WG 22	Responsible for MT 60079-0, maintenance of IEV 60050.426 and other specific tasks assigned by TC 31			
WG 27	Electric Machines (motors and generators)			
WG 28	Dusts			
WG 30	Equipment process sealing	Equipment process sealing		
WG 31	Gas/dust hybrid mixtures			







CENELEC	CLC/TC 31 Electrical apparatus for potentially explosive atmospheres		
07/,===0	77 Standards	26 Projects	National delegates: 0
Scope	To prepare and maintain European standards relating to equipment for use where there is a hazard due to the possible presence of explosive atmospheres of gases, vapours, mists or combustible dusts.		
7	Working Groups directly under the Technical Committee		
WG 09	Reliability of safety-related devices		
WG 20	Electrostatics		
WG 21	IEC 60079-30-X		





WG 22	Editing Group Annex ZZ
WG 23	Marking
WG 24	Vacuum Cleaner EPL Dc, Joint WG between CLC/TC 31 and CLC/TC 61 under Mode 4 Cooperation
WG 25	Batteries
2	Sub-Committees
SC 31-8	Electrostatic painting and finishing equipment
SC 31-9	Electrical apparatus for the detection and measurement of combustible gases to be used in industrial and commercial potentially explosive atmospheres



IEC	IEC/TC 32	Fuses	
	60 Standards	17 Projects	National delegates: 0
Scope	To prepare international standards regarding specifications of all types of fuses, with the object of determining:  1. The characteristics which are essential in specifying the conditions for installation and operation of the fuses.  2. The requirements to be met by the fuses and the tests designed to ascertain their compliance with such requirements as well as the procedures to be followed for these tests;  3. Markings.  To prepare for these fuses international standards for standard value of:  1. characteristics: rated voltages, currents and breaking capacities;  2. dimensions in connection with the fixing and interchangeability of high-voltage and low-voltage fuses.		
4	Working Groups directly under the Technical Committee		
WG 1	New standard for HV fuses / DC and /or special application		
MT 2	Revise IEC 60943 TR	Revise IEC 60943 TR	
MT 3	Revision of IEC 60050-441		
AG CAG	Chairman's Advisory Group		
3	Sub-Committees		
SC 32A	High-voltage fuses		
SC 32B	Low-voltage fuses		
SC 32C	Miniature fuses		

CENELEC	CLC/SR 32	Fuses		
0-7/11-1-0	0 Standards	1 Projects	National delegates: 0	
CENELEC	CLC/SR 32A	High-voltage fuses		
7/1	5 Standards	0 Projects	National delegates: 0	
CENELEC	CLC/SR 32B	Low-voltage fuses		
OL/ILLEO	13 Standards	5 Projects	National delegates: 0	
CENELEC	CLC/SR 32C	Miniature fuses		
OLINELLO	18 Standards	7 Projects	National delegates: 0	





CENELEC	CLC/SR 73	Short-circuit currents	
	5 Standards	1 Projects	National delegates: 0

IEC	IEC/TC 64	Electrical installations ar	nd protection against electric shock
<b></b>	84 Standards	21 Projects	National delegates: 0
Scope	systems without limit of voltage for the design, erection for electrical installations at supp by the following IEC committee in co-ordination with TC 98 erection and verification of electrical installation of electron and verification of electron and verification of electron and verification of electron and down requirements for to lay down basic safety recommittees to lay down safety requirement (e.g. thermal effects, overcurtors and to specify the operational equipment for installation appeto give general guidance to and to facilitate international The standards will not cover thorizontal Safety Function: Flimitation of voltage.  Group Safety Function: Protest	nst electric shock arising from ge; reseeable correct use, proper ly voltage up to 1 kV AC. or 1,5 ees: TC 9, TC 18, TC 44, TC 9 described in the concerning requirements addrectrical installations of building hall be: requirements for protection against othe requirements for protection against othe rent, fault currents, voltage distance of the concerning requirements and perform polications. IEC member countries that may be the protection against electrical equirements of electrical equirements of electrical equirements.	Iditional to those of TC 99 for the design, is above 1 kV up to 35 kV.  of electrical equipment gainst electric shock for use by technical er hazards arising from the use of electricity turbances) cance criteria necessary for selection of any have need of such requirements ered by differences in national regulations. The properties of the properties of
29	Working Groups directly under the Technical Committee		
WG 43	Application guides parts 6120	00-200 complying with IEC 603	364
WG 46	Residential electrical installation in direct current not intended to be connected to Public Distribution Network		
WG 48		ation and electrical energy stor	-
PT 60364-5- 57	Low-voltage electrical installa 57: Stationary secondary bat		rection of electrical equipment - Clause
PT 60364-7- 716	DC power distribution over In	formation Technology Cable Ir	nfrastructure
PT 60364-7- 720	Requirements for special inst	allations or locations – DC pow	ver supply system in the data centre
PT 60364-7- 725		allations or locations - Resilien	
MT 1	Terms and definitions (IEV 82 IEC 60364 Part 1)	26 and IEV 195 in collaboration	n with TC 1, and existing MT 1 - revision of
MT 2	Current carrying capacity of c	conductors and related overcur	rent protection
MT 3	External influences		
MT 4	Effects of current passing through the body		
MT 9	Disconnecting times and related matters		
MT 12	Verification of electrical instal	lations	



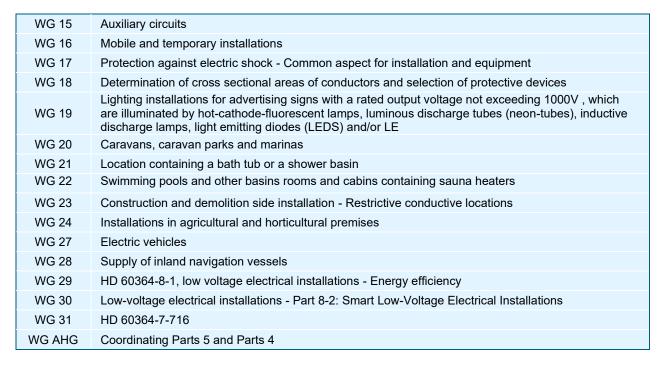


MT 17	Basic requirements for protection against electric shock
MT 32	Maintenance of IEC 60364-7-705: Electrical installations of buildings -Electrical installations of agricultural and horticultural premises
MT 33	Maintenance of IEC 60364-7-708, IEC 60364-7-709 709 and IEC 60364-7-721
MT 34	Electrical installations of buildings - Part 7-718: Requirements for special installations or locations - Communal facilities and workplaces
MT 36	Maintenance of IEC 60364-5-53, Clause 531
MT 37	Maintenance of IEC 60364-5-53, Clause 532
MT 38	Maintenance of IEC 60364-5-53, Clause 533
MT 39	Maintenance of IEC 60364-5-53, Clause 535 to 537
MT 40	Maintenance of IEC 60364-7-710 - Medical locations
MT 41	Low voltage electrical installations - Part 8-1
MT 42	Low voltage electrical installations - Supply of electric vehicles
JWG 32	Electrical safety of PV system installations linked to TC 82
JWG 44	Prosumer's Low Voltage Installation linked to TC 8, SC 8B
AG 45	Chair Advisory Group: administration and organization of TC 64 Working Groups
ahG 35	Review of TC 64 publications
JAG 47	Low voltage electrical installations - Supply of electric vehicles

CENELEC	CLC/TC 64 Electrical installations and protection against electric shock		
37/ 1-1-9	93 Standards 21 Projects National delegates: 0		
Scope	To prepare International standards - concerning protection against electric shock arising from equipment, from installations and from systems without limit of voltage, - for the design, erection foreseeable correct use and verification of all kind of electrical installations at supply voltage up to 1 kV a.c or 1,5 kV d.c., except those installations covered by the following IEC committees: TC 9X, TC 18X, TC 44X, TC 97, TC 99X, - in co-ordination with TC 99X, concerning requirements additional to those of TC 99X for the design, erection and verification of electrical installations of buildings above 1 kV up to 35 kV. The object of the standards shall be: - to lay down requirements for installation and co-ordination of electrical equipment, - to lay down basic safety requirements for protection against electric shock for use by technical committees, - to lay down safety requirements for protection against other hazards arising from the use of electricity, - to give general guidance to IEC member countries that may have need of such requirements, and - to facilitate international exchanges that may be hampered by differences in national regulations. The standards will not cover individual items of electrical equipment other than their selection for use.		
31	Working Groups directly under the Technical Committee		
JWG 64/82	Installation of PV - Equipment		
WG 01	Fundamental principles		
WG 02	Wiring systems - Protective measures against thermal effects, overcurrent		
WG 03	Earthing arrangements, protective conductors and protective bonding conductors		
WG 04	Protection against overvoltages of atmospheric origin or due to switching		
WG 05	Selection and erection of electrical equipment - Common rules		
WG 06	Medical locations		
WG 07	Selection and erection of electrical equipment - Switchgear and controlgear		
WG 08	Luminaires and lighting installations - Coupler and boxes for luminaires		
WG 09	Disconnecting times and related matters		
	Low-voltage generating sets		
WG 10	Low-voltage generating sets		
WG 10 WG 11	Low-voltage generating sets Safety services, communal facilities and workplaces		
WG 11	Safety services, communal facilities and workplaces		







### 1.3.22 Communication Cables & Equipments

IEC	IEC/TC 46		guides, RF connectors, RF and components and accessories
	375 Standards	54 Projects	National delegates: 0
Scope	To establish and maintain standards for the terminology, design, characteristics, related test methods and requirements for quality assessment of metallic conductors, wires, waveguide, RF connectors, RF and microwave passive components and accessories for analogue and digital transmission systems and equipment for communication networks and cabling.  Note: Magnetic components and ferrite devices covered by the scope of TC 51 will not be dealt with by this technical committee.		
6	Working Groups directly under the Technical Committee		
WG 5	Test methods for electromagnetic compatibility (EMC) of metallic cables and other passive components		
WG 6	Passive Intermodulation Measurement (PIM)		
WG 9	Metallic Cable Assemblies for ICT		
WG 13	Leaky wave guides		
MT IEV-726	IEV 726		
JWG 1	Raw materials and environm	ental issues linked to SC 86A	
3	Sub-Committees		
SC 46A	Coaxial cables		
SC 46C	Wires and symmetric cables		
SC 46F	RF and microwave passive of	omponents	

CENELEC	CLC/SR 46F	RF and microv	vave passive components
	93 Standards	10 Projects	National delegates: 0





CENELEC	CLC/SR 46X	Communication cables	
7,,	170 Standards	17 Projects	National delegates: 0
Scope	To establish standards related to wires, symmetric cables, coaxial cables and waveguides with metallic conductors for use in telecommunication, data transmission, radio frequency, video communication and signalling equipment to satisfy the advances in developing technologies. Particular requirements for materials, if necessary, will be evaluated in liaison with other technical committees.		
3	Working Groups directly under the Technical Committee		
JWG TC46XTC86 A	JWG 1 - Fire test methods and raw materials		
WG 02	Electrical Test method (excepting EMC and Raw materials)		
WG 04	Mechanical and Environmental Test Procedures		
2	Sub-Committees		
SC 46XA	Coaxial cables		
SC 46XC	Multicore, multipair and quad	I data communication cables	

IEC	IEC/TC 86		Fibre optics
<b>—</b>	645 Standards	102 Projects	National delegates: 0
Scope	To prepare standards for fibre optic systems, modules, devices and components intended primarily for use with communications equipment.  This activity covers terminology, characteristics, related tests, calibration and measurement methods, functional interfaces, optical, environmental and mechanical requirements to ensure reliable system performance.		
4	Working Groups directly under the Technical Committee		
WG 1	Terminology and symbology		
WG 4	Fibre optic test equipment calibration		
JWG 9	Optical functionality for electronic assemblies linked to TC 91		
JAG 10	(Joint Advisory Group) Laser safety linked to TC 76		
3	Sub-Committees		
SC 86A	Fibres and cables		
SC 86B	Fibre optic interconnecting de	evices and passive component	s
SC 86C	Fibre optic systems and activ	ve devices	

CENELEC	CLC/SR 86	1	Fibre optics
-71,	24 Standards	2 Projects	National delegates: 0

CENELEC	CLC/TC 86A	Optical fibres	and optical fibre cables	
7,,	119 Standards	35 Projects	National delegates:	0
Scope	To prepare and maintain specifications for optical fibres and optical fibre cables, excluding image transmission types.			
4	Working Groups directly under the Technical Committee			
JWG TC46X	Fire issues			
JWG TC86A/TC86B XA	Interaction between connectors and cables			
WG 04	Ad-hoc working group for the	revision of CLC/TR 50510		
WG 05	Topics covering the repair of	optical fibre cables		





CENELEC	CLC/SR 86B	Fibre optic interconnecting devices and passive components	
	0 Standards	0 Projects	National delegates: 0



CENELEC	CLC/TC 86BXA Fibre optic interconnect, passive and connectorised components		
71,,	298 Standards	55 Projects	National delegates: 0
Scope	To prepare and maintain European Standards and specifications for fibre optic interconnecting devices, passive and/or connectorised components, fibre optic protective housings, fibre management systems, fusion splice protectors, mechanical splices, unprotected microduct tubes and microduct tube connectors.		
3	Working Groups directly under the Technical Committee		
JWG TC86BXATC8 6A	Interaction between connectors and cables		
WG 01	Fibre optic connectors & pas	sive components	
WG 02	Fibre management systems	and protective housings	

CENELEC	CLC/SR 86C	Fibre optic sys	stems and active devices
71,	126 Standards	5 Projects	National delegates: 0

CENELEC	CLC/TC 209		evision signals, sound signals and ractive services	
//	39 Standards	3 Projects	National delegates: 0	
Scope	To develop harmonised and other European standards and deliverables relating to cable networks including equipment and associated methods of measurement for headend reception, processing and distribution of television and sound signals and for processing, interfacing and transmitting all kinds of data signals for interactive services using all applicable transmission media.  These signals are typically transmitted in networks by frequency-multiplexing techniques.  This includes for instance  - regional and local broadband cable networks,  - extended satellite and terrestrial television distribution systems,  - individual satellite and terrestrial television receiving systems, and all kinds of equipment, systems and installations used in such cable networks, distribution and receiving systems.  The extent of this standardization work is from the antennas and/or special signal source inputs to the headend or other interface points to the network up to the terminal input of the customer premises equipment.  The standardization work will consider coexistence with users of the RF spectrum in wired and wireless transmission systems.  The standardization of any user terminals (i.e. tuners, receivers, decoders, multimedia terminals etc.) as well as of any coaxial, balanced and optical cables and accessories thereof is excluded.			
7	Working Groups directly u	nder the Technical Commit	tee	
WG 01	Safety requirements			
WG 02	EMC for equipment and cabl	e networks		
WG 03	Equipment for coaxial cable	networks		
WG 05	Equipment and systems for o	ptical cable networks		
WG 07	System performance	System performance		
WG 08	Ad-hoc WG « SAT » - Satelli	te systems and equipment		
WG CAG	Chairman's advisory group			



CENELEC	CLC/TC 215	Electrotechnical aspect	s of telecommunication equipmen	ent	
37/11113	55 Standards	1 Projects	National delegates: 4		
Scope	and associated infrastructure - To prepare harmonized sta specific telecommunications - These documents also co related to the effective inst reference to the existing or technical inputs from them To provide contributions to detailed above To serve as a mediator in ETSI indicates to CENELEC deliverables) of electrotechni - Identification of the appropt technical work to the respons - Where an appropriate TC w Working Group to resolve as - To review international st equipment with respect to concerned. This includes	es and liaise with other standard andards (EN, TS or TR) covering cabling (e.g. ISDN, LAN and other the requirements and recordallation and operation of asset forthcoming standards provided the need of standardization acceptance of the standards (EN and/or other those cases where in accordance the need of standardization acceptance of the standardization acceptance of the standardization of the standardization results of ISO/IC Customer Premises Cabling coordination of harmonization	l aspects of telecommunication equipmer dization bodies as appropriate. ing all aspects of generic and application thers) within all types of premises. commendations for building infrastructure ociated telecommunication equipment be ded by the relevant committees or using their deliverables) in areas related to those ance with the CENELEC-ETSI-Agreementivities (EN/TS/TR or contributions to ETSI ereby providing proper assignment of the entified, TC 215 may decide to establish and Energy Efficient Data Centres aron and assignment to the responsible JTC 1 being a joint ISO/IEC-Committee.	on- ires by sing ose nent TSI the h a tion are ible	
3	Working Groups directly u	nder the Technical Committ	tee		
WG 01	Cabling design	Cabling design			
WG 02	Cabling installation - Quality	assurance and installation prac	ctices		
WG 03	Facilities and infrastructures				

IINAS	ILNAS/TC 108	Vertical cabling		
	0 Standards	1 Projects	National delegates:	12
Scope	The purpose of the national standard is to specify technical and functional guidelines for vertical cabling in new and existing residential and mixed-use buildings.			







# 1.4 COMPLETION & FINISHING

PLASTERING

**JOINERY** 

FLOOR AND WALL COVERING

PAINTING

GLAZING

ROOFING

• • •



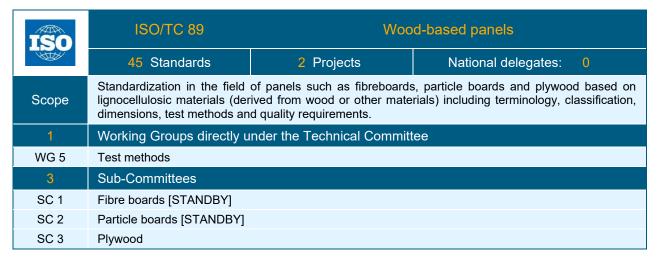
# 1.4 Completion & Finishing



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### 1.4.1 Wood & Timber



cen	CEN/TC 112	Wood-based panels		
	69 Standards	9 Projects	National delegates: 0	
Scope	Preparation of standards for wood-based panels and panels of other lignocellulosic materials covering: - terminology; - classification; - requirements; - product specifications; - methods of tests.			
7	Working Groups directly under the Technical Committee			
WG 2	Plywood			
WG 4	Test methods			
WG 5	Regulated dangerous substances			
WG 7	Semi-finished and finished products			
WG 8	Oriented strand boards (OSB)			
WG 11	Particleboards and fibreboard	ds		
WG 13	Mandate			

cen	CEN/TC 38	Durability of wood and wood-based products		
	56 Standards	16 Projects	National delegates: 0	
Scope	Standardization of natural or conferred durability of wood and wood-based products against biological agents and their characteristics associated with exposure.			
8	Working Groups directly under the Technical Committee			
WG 21	Durability - Classification ( Use classes-natural durability)			
WG 22	Performance - Assessment and specifications (treated wood - Wood preservatives)			
WG 23	Fungal testing (basidiomycetes-microfungi)			
WG 24	Insect testing - (beetles - termites)			
WG 25	External Factors and Preconditioning			
WG 26	Physical/chemical factors (analytical methods)			
WG 27	Exposure Aspects			
WG 28	Performance classification			





cen	CEN/TC 175	Round and sawn timber		
	64 Standards	12 Projects	National delegates: 0	
Scope	Standardization of round and sawn timber in all uses, including timber prefabricated products and excluding structural aspects.			
10	Working Groups directly under the Technical Committee			
WG 1	General matters, definitions, measurement methods			
WG 2	Sawn timber			
WG 4	Round timber			
WG 5	Environmental topics			
WG 32	Specific user requirements - Timber in joinery			
WG 33	Specific user requirements - Timber in flooring			
WG 34	Specific user requirements - Timber in packaging and pallets, and other timber products			
WG 37	Specific user requirements - Timber in stairs			
WG 38	Specific user requirements - Timber in cladding and panelling			
WG 39	Specific user requirements - Fire retardant treated wood			

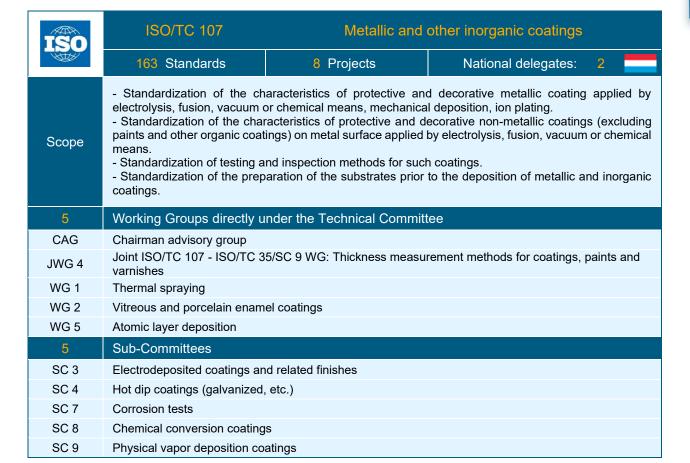
# 1.4.2 Gypsum

cen	CEN/TC 241	Gypsum and gypsum based products			
	27 Standards	1 Projects	National delegates: 0		
Scope	To prepare European standards for gypsum plasterboard, gypsum plasters, gypsum units, gypsum based and ancillary products as well as for design and application of the products: definitions, performance requirements, specifications & test methods.				
3	Working Groups directly under the Technical Committee				
WG 1	Powders				
WG 3	Board products				
WG 5	Framework and coordination				





### 1.4.3 Coatings



cen	CEN/TC 262	Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys		
	162 Standards	16 Projects	National delegates: 0	
Scope	Standardization in the field of metallic and other inorganic coatings, for corrosion protection of metals and for decorative and engineering purposes.			
5	Working Groups directly under the Technical Committee			
WG 2	Hot dip galvanized coatings			
WG 5	Vitreous enamel coatings			
WG 12	Maintenance and ISO co-ordination			
WG 13	Coating qualification tests			
WG 14	Guidelines and specifications for electrodeposited coatings of zinc or cadmium (including supplementary treatments) on iron or steel			

cen	CEN/TC 240	Thermal spraying and thermally sprayed coatings		
	41 Standards	5 Projects	National delegates: 0	
Scope	specifications for spraying m	naterials and sprayed coatings	control for thermal spraying equipment, including technical requirements, health les for training and minimum requirements	



N



### 1.4.4 Sealing



cen	CEN/TC 254	Flexible sheets for waterproofing		
	70 Standards	6 Projects	National delegates: 1	
Scope	Preparation of European Star construction and civil engine		sheets for waterproofing for use in building	
7	Working Groups directly u	nder the Technical Commit	tee	
WG 1	Coordination			
WG 3	Material properties relevant to wind uplift resistance			
WG 6	Bridge deck waterproofing			
WG 9	Underlays for discontinuous roof coverings			
WG 10	Ageing			
WG 15	PCR			
WG 16	Extrapolation rules for resistance to root penetration			
2	Sub-Committees			
SC 1	Bitumen sheeting			
SC 2	Synthetic sheets			

## 1.4.5 Sealant

TSO	ISO/TC 59/SC 8	Sealants		
	38 Standards	2 Projects	National delegates:	0
Scope	Standardization in the field of buildings and civil engineering regarding: - general terminology; - test methods; - performance specifications; and - technical reports related to functional and user requirements of flexible sealing materials. Exclusion: Cementitious/mineral material (e.g., grouts)			
2	Working Groups directly under the Technical Committee			
WG 1	UV influence	UV influence		
WG 10	Aesthetic issues			

cen	CEN/TC 349	Sealants for joints in building construction	
	10 Standards	5 Projects	National delegates: 0
Scope	European standardization on sealants for joints in building construction, by the preparation of European standards for their diverse applications.		
1	Working Groups directly under the Technical Committee		
WG 2	Sealants for glazing		

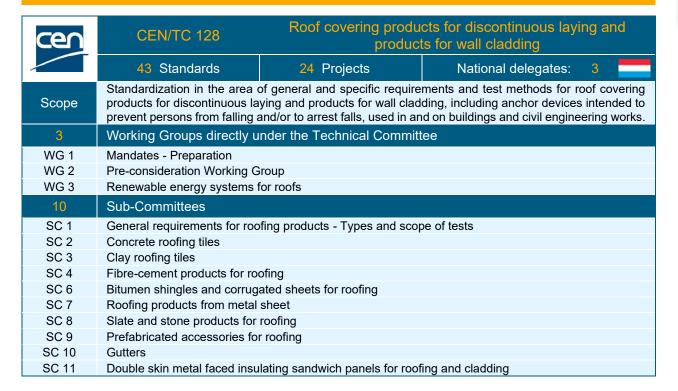
cen	CEN/SS B02		Structures	
	16 Standards	1 Projects	National delegates:	0



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### 1.4.6 Roof



### 1.4.7 Doors & Windows

ISO	ISO/TC 162	Doors, windows and curtain walling		
MIN	21 Standards	2 Projects	National delegates: 0	
Scope	Standardization in the field of doors, doorsets, windows, and curtain wall including hardware, manufactured from any suitable material covering the specific performance requirements, terminology, manufacturing sizes and dimensions, and methods of test.  Excluded: The responsibility for dimensional coordination with other parts of buildings and general performance requirements derived from buildings as a whole, which devolves upon ISO/TC 59.			
3	Working Groups directly under the Technical Committee			
WG 3	Terminology			
WG 4	Windows and doors			
WG 5	Curtain walling			

cen	CEN/TC 33	Doors, windows, shutters, building hardware and curtain walling	
	157 Standards	28 Projects	National delegates: 0
Scope	Definition of functions of doors, windows, shutters, building hardware, and curtain walls and performance levels and classification associated with these functions which characterize the usage including the ability to meet the essential requirements (of the Construction Products Directive), tests requirements and, if necessary, the essential dimensions, terminology, symbols, packaging, marking and labelling.		
7	Working Groups directly under the Technical Committee		
WG 1	Windows and doors		
WG 3	Blinds and shutters		
WG 4	Building hardware		
WG 5	Industrial, commercial and garage doors and gates		
WG 6	Curtain walling		
WG 7	Burglary resistance		
WG 9	Powered Pedestrian Doors (	PPD)	



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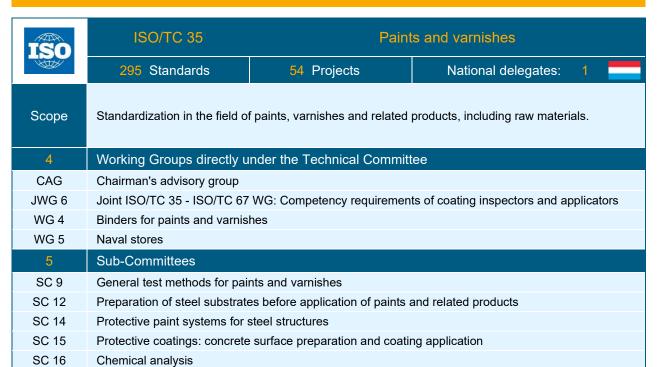
# 1.4.8 Glass in Building

	TSO	ISO/TC 160	Gla	ass in building		
	WITH THE PARTY OF	58 Standards	10 Projects	National delegates: 0		
	Scope	Standardization in the field of glass in building, including terminology, performance requirements and methods of calculation and test, design and construction rules, classification and specification of materials, including dimensional properties.				
	11	Working Groups directly under the Technical Committee				
	CAG	Chair's Advisory Group				
	WG 1	Basic glass products				
	WG 2	Toughened glass				
	WG 3	Laminated glass				
	WG 4	Insulating glass units				
	WG 5	Assembly rules and structural sealant glazing				
	WG 6	Safety glazing tests				
F	WG 7	Airborne sound insulation of	glazing			
B	WG 8	Light and energy transmission properties and thermal properties of glazing				
Fð	WG 9	Glass in building - Building in	tegrated photovoltaics			
	WG 10	Vacuum glass				
	1	Sub-Committees				
	SC 1	Product considerations				

	cen	CEN/TC 129	Gla	ass in building	
		86 Standards	13 Projects	National delegates: 0	
	Scope		racteristics;		
	18	Working Groups directly u	nder the Technical Committe	ee	
	WG 1	Basic glass products			
	WG 2	Toughened, heat strengthened and enamelled glass			
	WG 3	Laminated glass			
	WG 4	Insulating glass units			
	WG 5	Coated glass for mirrors			
	WG 6	Coated glass for windows			
	WG 8	Mechanical strength			
BD	WG 9	Light and energy transmission, thermal insulation			
	WG 10	Sound insulating glazed asse	emblies		
	WG 11	Fire resistant glazed assemb	lies		
	WG 12	Glass in building - Assembly	rules		
	WG 14	Security			
	WG 16	Bonded glazing			
	WG 17	Management			
	WG 18	Filmed glass			
	WG 19	Acid etched glass and sand b	plasted glass		
FÐ	WG 20	Health, Hygiene, Environmer	t and Sustainability		
	WG 21	Digital communication of glas	s in building characteristics		



### 1.4.9 Paints & Varnishes



cen	CEN/TC 139	Paints and varnishes	
	347 Standards	49 Projects	National delegates: 0
Scope	Standardization in the field of paints, varnishes and related products. Establishment of methods of test and requirements for coating materials and coatings. Definition of terms.		
5	Working Groups directly under the Technical Committee		
WG 1	Interior wall and facade coatings		
WG 2	Coating systems for wood		
WG 9	Testing of coil coated metals		
WG 10	Microbiology and leaching of substances		
WG 13	Reactive coatings for fire pro	tection	

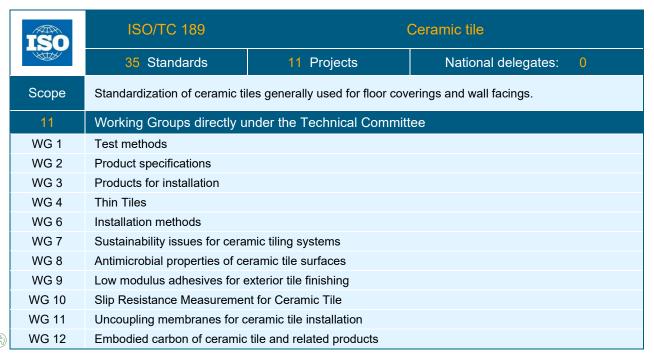
### 1.4.10 Wallcoverings

cen	CEN/TC 99	Wallcoverings	
	11 Standards	0 Projects	National delegates: 0
Scope	of flexible webs supplied in includes "finished wallcov	roll form for hanging onto wall	m "wallcoverings" is used to cover all forms is or ceilings by means of an adhesive; it subsequent decoration", "heavy duty erings in roll and panel form.





### 1.4.11 Ceramic Tiles



cen	CEN/TC 67	Ceramic tiles		
	27 Standards	5 Projects	National delegates:	0
Scope	To establish European Standards concerning terminology, technical characteristics, dimensional characteristics and tolerances, test and control methods, design and installation of ceramic tiles.			
4	Working Groups directly under the Technical Committee			
WG 1	Test methods			
WG 2	Specifications			
WG 3	Products for installation of ceramic tiles			
WG 5	Product category rules for ceramic tiles and installation products for ceramic tiling			

### 1.4.12 Ceilings

cen	CEN/TC 277	Suspended ceilings		
	1 Standards	0 Projects	National delegates: 0	
Scope	as terminology, fire, acousti	cs, thermal performances and	ivil engineering works covering items sud d also specifications for installations at suspended ceilings in other functional at	nd

cen	CEN/TC 357	Stre	etched ceilings
	1 Standards	0 Projects	National delegates: 0





### 1.4.13 Floor Coverings



cen	CEN/TC 134	Resilient, textile, laminate and modular mechanical lock floor coverings		
	96 Standards	18 Projects	National delegates: 0	
Scope	Standardization of definitions, requirements, classification and test methods, and development of guidance documents and reports for resilient, textile, laminate and modular mechanical locked floor coverings. The main use areas for floor coverings within the scope of CEN/TC 134 are residential (homes, apartments) and commercial, (health care, education, hospitality, public buildings, offices, retail, transportation). These areas are limited to indoor use.  Excluded are screeds, raised access floors, paving, surfaces for sports areas, as well as parquet, wood veneer and bamboo floorings.			
5	Working Groups directly under the Technical Committee			
WG 7	Resilient floor coverings			
WG 8	Textile floor coverings			
WG 9	Laminate floor coverings			
WG 10	Harmonization			
WG 11	Modular mechanical locked f	loor coverings (MMF)		

### 1.4.14 Floor Screeds

cen	CEN/TC 303	Floor screeds and screed materials		
	13 Standards	3 Projects	National delegates: 0	
Scope	Standardization of floor screeds and screed materials for floorings in buildings and civil engineering works.			
2	Working Groups directly under the Technical Committee			
WG 1	Terminology and properties			
WG 2	Test methods			

### 1.4.15 Surfaces for Sports Areas

cen	CEN/TC 217	Surfaces for sports areas		
	50 Standards	6 Projects	National delegates: 0	
Scope	This European Standard specifies a method for the determination of the slip resistance of a sports surface in relation to a studded or smooth soled sports shoe.			
3	Working Groups directly under the Technical Committee			
WG 2	Surfaces of sports halls			
WG 6	Synthetic surfaces primarily used outdoor			
WG 11	Test methods for sports surfaces.			







# 1.5 SAFETY, MACHINERY & EQUIPMENT

SAFETY ON CONSTRUCTION SITES

SAFETY IN USE OF EQUIPMENT AND MACHINERY

DESIGN AND USE OF MATERIALS AND MACHINERY

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# 1.5 Safety, Machinery & Equipment



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1.5.11	Temporary Works Equipment	141



### 1.5.1 Personal Protective Equipment

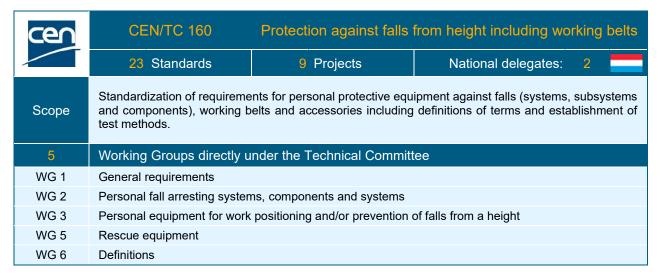


cen	CEN/TC 158	Head protection		
	32 Standards	13 Projects	National delegates: 0	
Scope	To develop European standardization documents in the field of head protection designed to safeguard wearers against known and potential hazards that cause head injuries. Hazards are identified by thorough risk assessment and the requirements reflect state of the art science as well as technical and economic considerations.			
7	Working Groups directly under the Technical Committee			
WG 1	Industrial safety helmets			
WG 3	Firefighters helmets			
WG 4	Helmets for cyclists			
WG 5	Helmets for horse riders			
WG 11	Headforms and test methods			
WG 13	Helmets for mountaineers	Helmets for mountaineers		
WG 15	Helmets for S-EPAC users			

cen	CEN/TC 159	Hearing protectors		
	15 Standards	9 Projects	National delegates: 0	
Scope	To prepare European standards related to personal hearing protective equipment to be used when sound exposure is expected to be hazardous to the ear including fit testing systems for determination of the individual hearing protection performance.			
3	Working Groups directly under the Technical Committee			
WG 2	Electronic and amplitude-sensitive hearing protectors			
WG 5	Hearing protectors - Selection and use			
WG 6	Hearing protectors - General	requirements and test method	s	







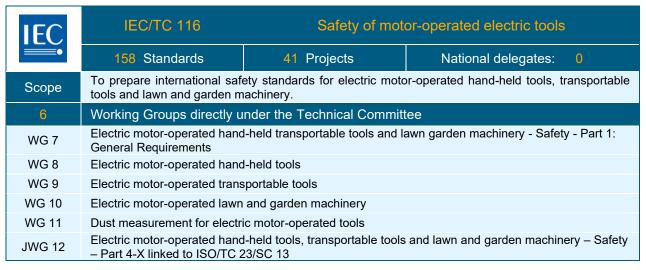
cen	CEN/TC 161	CEN/TC 161 Foot and leg protectors		
	22 Standards	10 Projects	National delegates: 0	
Scope	To prepare European standards in the field of protective footwear and leg protectors. Note: leg protectors are defined as an extension of protective footwear.			
2	Working Groups directly under the Technical Committee			
WG 1	PPE footwear - Test methods			
WG 2	PPE footwear - Requirement	S		

cen	CEN/TC 162	Protective clothing including hand and arm protection and lifejackets		
	157 Standards	48 Projects	National delegates: 2	
Scope		ds. Hand and arm protectors ar	g) in the field of clothing to protect against re included as well as high visibility clothing	
13	Working Groups directly	under the Technical Comm	ittee	
WG 1	General requirements for pro	tective clothing		
WG 2	Resistance to heat and fire o	f protective clothing		
WG 3	Protective clothing against chemicals, infective agents and radioactive contamination			
WG 4	Protective clothing against foul weather, wind and cold			
WG 5	Resistance to mechanical impact of protective clothing			
WG 6	Lifejackets			
WG 7	Visibility clothing and accessories			
WG 8	Protective gloves			
WG 9	Motorcycle rider protective clothing			
WG 10	Buoyant aids for swimming instruction			
WG 11	Body protection for sports			
WG 12	Diving suits			
WG 13	· ·	n CEN/TC 162 and CEN/TC 16 for protective footwear, gloves	61 - Test methods for permeation of and clothing	





### 1.5.2 **Tools**



CENELEC	CLC/TC 116	Safety and environmental aspects of motor-operated electric tools		
37/11	143 Standards	72 Projects	National delegates: 0	
Scope	To prepare European safety and environmental aspects standards for electric motor-operated handheld and transportable tools and lawn and garden machinery.			
4	Working Groups directly under the Technical Committee			
WG 02	Electric motor-operated hand-held and transportable tools			
WG 04	Dust			
WG 05	Electric motor-operated lawn and garden machinery			
WG 06	Environmental aspects of mo	otor-operated electric tools		

cen	CEN/TC 213	Cartridge operated hand-held tools – Safety		
	1 Standards	1 Projects	National delegates: 0	
Scope	Standardization in the field of hand-held machines, using propulsive charges. Priority should be given to the development of a standard for safety requirements for the design, construction and use of cartridge operated fixing tools (system consisting of tool, fastener and cartridge, functioning as an integral whole). Safety standards relating to the fastening point made with the cartridge operated fixing systems are not included in the scope. Safety standards for other cartridge operated, hand-held machines must be investigated.			
1	Working Groups directly under the Technical Committee			
WG 1	Cartridge Operated Fixing ar	d Hard Marking tools		

cen	CEN/TC 255	Hand-held, non-electric power tools – Safety		
	15 Standards	1 Projects	National delegates: 0	
Scope	mounted in fixtures) which can of tools, and standards for space 2) Coordination with CLC/Tensuring the highest possible 3) Utilization of the work corganizations; 4) Consideration of how B1 suppression, should be achieved and the purpose;	an be both in one generic stan- lecific types of tools; C 61F, CEN/TCs 65, 142, 14 consistency in common safety arried out in PNEUROP and -Standards for eg. the measure eved in the field of responsability	cheld power tools (including their use when dard for aspects common to several types 4, 213, 151, 196 etc. for the purpose of y measures; dother European Sector Committees or curement of noise and vibration, and dust ty and with the aid of the CEN committees related to safety of hand-held tools.	



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CEN/SS 109		Small tools	
8 Standards	2 Projects	National delegates:	0



# 1.5.3 Work at Height

ISO	ISO/TC 214 Elevating work platforms		ng work platforms
WITH .	9 Standards	3 Projects	National delegates: 0
Scope	Standardization of terminology, ratings, general principles (technical performance requirements and risk assessment), safety requirements, test methods, maintenance and operation for elevating work platforms used to raise (elevate) and position personnel (and related work tools and materials) to a work position where a work task is to be performed.		
1	Working Groups directly under the Technical Committee		
WG 1	Mobile elevating work platfor	ms	

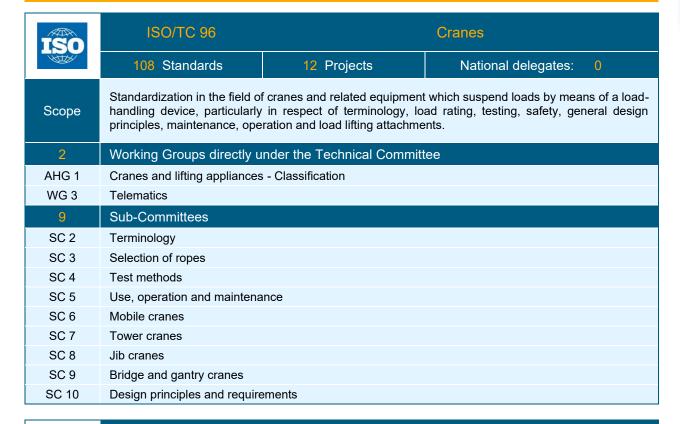
cen	CEN/TC 98	Lif	ting platforms
	12 Standards	5 Projects	National delegates: 2
Scope	Preparation of basic calculation and stability criteria, matters of construction, safety, testing and inspection of lifting platforms.		
9	Working Groups directly u	nder the Technical Commit	tee
WG 1	Mobile elevating work platforms		
WG 2	Lifting tables		
WG 3	Vehicle lifting devices		
WG 4	Tail lifts		
WG 5	Dock levellers		
WG 6	Jacks		
WG 7	Suspended access equipment		
WG 8	Mast climbing work platforms		
WG 9	Mechanical Parking Devices		

cen	CEN/TC 93		Ladders
	8 Standards	6 Projects	National delegates: 0
Scope	Standardization of portable ladders designed for general professional and non-professional use, attic stairs/loft ladders and ladders designed for specific professional use which are not covered by the scope of other Technical Committees.		
8	Working Groups directly under the Technical Committee		
WG 1	Step stools		
WG 2	Single and multiple hinge-joint ladders		
WG 3	User information		
WG 7	Accessories		
WG 9	Loft ladders		
WG 10	EN 131-1 and EN 131-2		
WG 12	Telescopic ladders		
WG 13	Ladders with separate platform		



### 1.5.4 Cranes

**CEN/TC 147** 



cen	CEN/1C 147	CI	anes - Salety	
	33 Standards	19 Projects	National delegates:	2
Scope	Development and maintenance of safety standards for the design, manufacture and information to be provided for the following products:  1. cranes (as defined in CEN/TC 147 Resolution 99);  2. equipment for the lifting of persons on/with certain cranes;  3. power driven winches and hoists, and their supporting structures;  4. hand-powered lifting machines;  5. non-fixed load lifting attachments;  6. manually controlled load manipulating devices.  Exceptions are:  - hoisting devices for gymnastic and playing field equipment;  - robotic lifting machinery;  - lifting attachments for the glass industry;  - lifting machinery and attachments for medical use;  - excavators used as cranes;  - cable cranes.			
11	Working Groups directly u	nder the Technical Commit	tee	
WG 2	Design - General			
WG 3	Design - Requirements for equipment			
WG 11	Mobiles cranes			
WG 12	Tower cranes			
WG 14	Bridge and gantry cranes			
WG 15	Offshore cranes			
WG 17	Power driven winches and ho	pists		
WG 18	Loader cranes			
WG 20	Hand powered cranes			
WG 21	Non-fixed load lifting attachm	nents		
WG 22	Manually controlled load mar	nipulating devices		



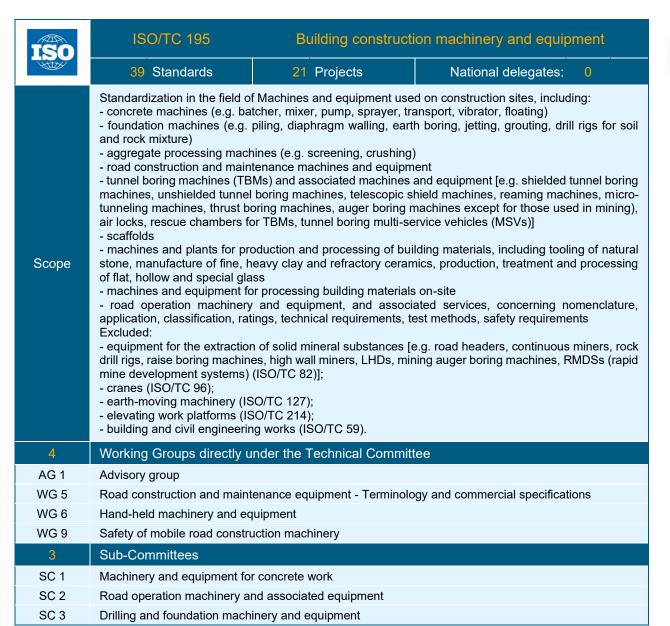


# 1.5.5 Machinery

TSO	ISO/TC 127	Earth-moving machinery	
MID	179 Standards	17 Projects	National delegates: 0
Scope	Standardization of nomenclature, use classification, ratings, technical requirements and test methods, safety requirements, operation, maintenance manual format for earth-moving and related machinery.		
5	Working Groups directly under the Technical Committee		
AHG 3	Investigation regarding the differences between block handlers and wheel loaders		
CAG	Chair's Advisory Group		
SG 1	ISO Off-Road Mobile Work Machine		
WG 8	Sustainability		
WG 17	Rechargeable Energy Storage System (RESS) application for EMM (ISO 5757)		
4	Sub-Committees		
SC 1	Test methods relating to safety and machine performance		
SC 2	Safety, ergonomics and general requirements		
SC 3	Machine characteristics, electrical and electronic systems, operation and maintenance		
SC 4	Terminology, commercial nor	menclature, classification and r	ratings

TSO	ISO/TC 110	Industrial trucks	
WITH .	85 Standards	17 Projects	National delegates: 0
Scope	Standardization in the field of power-operated industrial trucks, hand-operated industrial trucks (including sack trucks, hand carts, trailers), all types of wheels and castors excluding those with pneumatic tyres and rubber solid tyres for pneumatic tyre rims, comprising: - terminology and definitions; - safety requirements related to: design and construction; testing and inspection methods; operation and maintenance; - principal dimensions to facilitate interchangeability where essential to the interest of users and manufacturers Energy efficiency and other sustainability aspects Excluded: vehicles designed primarily for earth-moving or road transport.		
4	Sub-Committees		
SC 1	General terminology		
SC 2	Safety of powered industrial trucks		
SC 4	Rough-terrain trucks		
SC 5	Sustainability		





TSO	ISO/TC 199	Safe	ety of machinery
MILE	45 Standards	9 Projects	National delegates: 1
Scope	Standardization of basic concepts and general principles for safety of machinery incorporating terminology, methodology, guards and safety devices within the framework of ISO/IEC Guide 51 and in cooperation with other ISO and IEC technical committees.  Excluded: product safety standards, as defined in ISO/IEC Guide 51, and which are explicitly covered by the work of other ISO or IEC technical committees.		
9	Working Groups directly under the Technical Committee		
WG 2	Hygiene requirements for the design of machinery		
WG 3	Safety of integrated manufacturing systems		
WG 5	General principles for the design of machinery and risk assessment		
WG 6	Safety distances and ergonomic aspects		
WG 7	Interlocking devices		
WG 8	Safe Control Systems		
WG 10	Fire prevention and protection		
WG 11	Permanent means of access to machinery		
WG 12	Human-machine-interactions		



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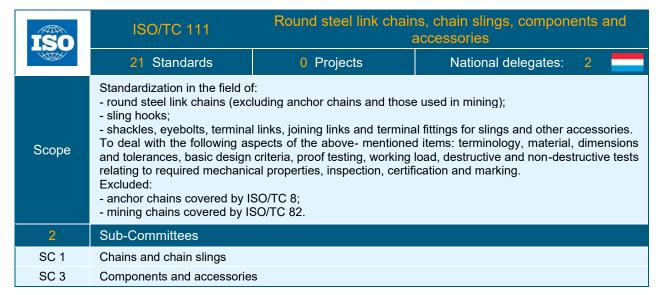
### 1.5.6 Mechanical Vibration & Shock

cen	CEN/TC 231 Mechanical vibration and shock			
	46 Standards	1 Projects	National delegates:	1
Scope	Standardization in the field of mechanical vibration and shock, including:  - methods for measuring and evaluating mechanical vibration and shock;  - methods for assessing human exposure to mechanical vibration and shock in any kind of environment;  - description of the effects caused by human exposure to mechanical vibration and shock and guidelines for the reduction of these effects;  - methods for evaluating the effects of mechanical vibration and shock on structures;  - methods for reducing by machine design, risks resulting from exposure to mechanical vibration and shock;  - methods for measuring and assessing the vibration and shock reduction characteristics of personal protective equipment (e.g. antivibration gloves), vibration isolators (e.g. resilient materials) and suspension systems (e.g. seats).		s of personal	
2	Working Groups directly under the Technical Committee			
WG 2	Hand-arm vibration			
WG 12	Machinery Regulation Relate	d Revisions		





### 1.5.7 Chains, Ropes, Webbing, Slings & Accessories



cen	CEN/TC 168 Chains, ropes, webbing, slings and accessories - Safety		/	
	48 Standards	9 Projects	National delegates: 2	
Scope	Standardization in terms of safety of: (i) welded round steel link chains and chain slings; (ii) steel wire ropes, their terminations and wire rope slings; (iii) fibre ropes, fibre rope slings, flat textile slings and round slings; (iv) hooks and other accessories; used for lifting (lifting includes: raising, lowering and suspending) purposes.			g)
5	Working Groups directly under the Technical Committee			
WG 1	Welded round steel link chains and chain slings			
WG 2	Steel wire ropes, their terminations and wire rope slings			
WG 3	Fibre ropes, fibre rope slings, flat textile slings and round slings			
WG 4	Hooks and other accessories			
WG 6	Load restraint assemblies			

### 1.5.8 Aerial Ropeways, Funicular Ropeways & Surface Lifts

cen	CEN/TC 242	Safety requirements fo	r passenger transportation by rope
	19 Standards	7 Projects	National delegates: 0
Scope	Safety standards for the construction and operation of aerial ropeways, funicular ropeways and surface lifts for passenger transportation.		
14	Working Groups directly under the Technical Committee		
WG 1	Terminology		
WG 2	General requirements and calculations		
WG 3	Ropes		
WG 4	Tensioning devices and mechanical systems		
WG 5	Carriers		
WG 6	Electrical installations		
WG 7	Civil engineering works		
WG 8	Tests, maintenance, inspection	on	



WG 9	Recovery and evacuation
WG 10	Operation
WG 13	Safety of travelators for tourist or sporting use, used to transport passengers mainly in ski areas
WG 14	Prevention and fight against fire
WG 15	Workers safety
WG 16	Freight cableway installation with restricted passenger transport

# 1.5.9 Live Working

CENELEC	CLC/TC 78	Equipment and tools for live working			
37/,,	68 Standards	11 Projects	National delegates: 0		
Scope	To prepare CENELEC standards for work equipment, devices and tools, including personal protective equipment used for work on or near live electrical systems or installations.				
10	Working Groups directly under the Technical Committee				
WG 05	Revision of EN 50321				
WG 06	Elaboration of Annex ZZ Electrical insulating gloves and sleeves				
WG 07	Revision of EN 50365				
WG 08	Revision of EN 50340				
WG 09	Revision of EN 50528				
WG 10	Revision of EN 50374				
WG 11	Revision of EN 50286				
WG 12	Harmonisation of IEC EN 62819 with PPE regulation				
WG 13	Cleaning for low and medium voltage equipement				
WG 13	Harmonisation of EN IEC 63232-2 according to PPE Regulation				

<b>IEC</b>	IEC/TC 78	Live working		
	64 Standards	10 Projects	National delegates: 0	
Scope	To prepare International standards for tools, equipment and devices for utilization in Live Working, including their performance requirements, care and maintenance. Excluded: Work practices and methods for Live Working.  To prepare technical publications related to the utilization of tools, equipment and devices on, and in the vicinity of, live parts of electrical installations and systems.			
24	Working Groups directly under the Technical Committee			
WG 1	Terminology and symbols			
WG 11	Technical support			
WG 12	Tools and equipment			
WG 13	Protective equipment			
WG 14	Diagnostic equipment			
WG 15	Arc Flash Protection			
PT 78-901	To develop an IEC Technical Report for correlating the results of arc test methods to electrotechnical applications in order to select the proper electric arc protective equipment			
PT 78-902	Guidance for the selection, use and maintenance of electrical arc flash personal protective equipment			



PT 78-904	Live working in the presence of RF fields
PT 63232	Electric arc performance of hand protection equipment - Test standard
PT 63247	Integration of EN 50321-1 to IEC 63247
MT 60855-1	Maintenance of 60855-1: Live working - Insulating foam-filled tubes and solid rods - Part 1: Tubes and rods of a circular cross-section
MT 60895	Maintenance of IEC 60895: Live working - Conductive clothing for use at nominal voltage up to 800 kV A.C. and $\pm$ 600 kV D.C.
MT 60903- 984	Maintenance of IEC 60903: Live working - Gloves of insulating material and of IEC 60984: Sleeves of insulating material for live working
MT 61057	Maintenance of 61057: Aerial devices with insulating boom used for live working
MT 61111- 61112	Maintenance of IEC 61111 and IEC 61112
MT 61243-1	Live working – Voltage detectors – Part 1: Capacitive type to be used for voltages exceeding 1 kV a. c.
MT 61482-1-	Maintenance of IEC 61482-1-1: Live working - Protective clothing against the thermal hazards of an electric arc - Part 1-1: Test methods - Method 1: Determination of the arc rating (ATPV or EBT50) of flame resistant materials for clothing
MT 61482-2	Maintenance of IEC 61482-2: Part 2: Live working - Protective clothing against the thermal hazards of an electric arc - Part 2: Requirements
MT 62192	Maintenance of IEC 62192: Live working - Insulating ropes
MT 61328/62263	Maintenance of IEC TR 61328 and IEC TR 62263
ahG 17	Electrical testing on insulating protective products
ahG 18	Review the existing scope of IEC/TC 78
ahG 19	Study the scope of IEC 60895

# 1.5.10 Measuring Equipment for Electrical & Electromagnetic Quantities

IEC	IEC/TC 85	Measuring equipment for electrical and electromagnetic quantities		
<b>==</b> •	93 Standards	10 Projects	National delegates: 0	
Scope	To prepare international standards for equipment, systems, and methods used in the fields of measurement, test, recurrent test, monitoring, evaluation, generation and analysis of steady state and dynamic (including temporary and transients) electrical and electromagnetic quantities, as well as their calibrators.  Such equipment includes devices for testing the safety of power distribution systems and connected equipment, devices for monitoring the power distribution systems, electrical measuring transducers, signal generators, recorders together with their accessories.  NOTE: Product safety aspects are covered by TC 66.			
8	Working Groups directly under the Technical Committee			
WG 8	Equipment for testing, monitoring or measuring the protective measures in energy distribution system			
WG 20	Equipment for measuring and monitoring of steady state and dynamic quantities in Power Distribution Systems			
WG 22	Waveform parameter measurements			
WG 23	Panel mounted electrical measuring instruments			
WG 24	Uncertainty Definition and Determination Process			
PT 85-1	Terminology			
JWG 26	Electrical safety in low voltage distribution systems up to 1.000 VAC and 1.500 VDC – Equipment for testing, measuring or monitoring of protective measures – Part 18: DC EV Supply Equipment Monitoring Device linked to TC 69			
AG CAG	Chair Advisory Group			





CENELEC	CLC/TC 85X	Measuring equipment for electrical and electromagnetic quantities		
	84 Standards	12 Projects	National delegates: 0	
Scope	To develop European standards for equipment and systems for measuring, testing, monitoring, generating, and analyzing simple and complex electrical and electromagnetic quantities, as well as their calibrators.  These standards apply to measuring equipment for industrial, commercial and building electrical installations (networks) always with the aim to preserve the quality of power supply in order to avoid malfunction and overheating of the connected devices, in particular due to an alteration of the mains voltage.  The development of harmonized standards is also intended to meet the challenges of controlling energy consumption and is likely to be used as a support to the Technical Bodies involved in the Smart Grid and Smart Metering activities, or to be used as a support for EC Directives.  Equipment in the scope of CLC/TC 85X include power meters and power quality instruments, calibrated measurement devices, signal generators, monitoring equipment, recorders and electrical measuring transducers, and devices for testing, measuring or monitoring of protective measures as given by European installation standards, together with their accessories.			
2	Working Groups directly u	nder the Technical Commit	tee	
WG 1	Pre-standardization, standardization and maintenance in the field of measurement applications			
WG 2	Testing and monitoring of protective measures			

### 1.5.11 **Temporary Works Equipment**

cen	CEN/TC 53	Temporary works equipment		
	27 Standards	3 Projects	National delegates:	1
Scope	Standardization of temporary works equipment used for maintenance, building, construction work and for temporary structures made of the same equipment. The products and systems are normally intended for repeated use. Standardization of machinery is excluded.			
4	Working Groups directly under the Technical Committee			
WG 4	Mobile access towers			
WG 7	Safety nets			
WG 10	Guardrails for temporary works			
WG 16	Basic requirements			





## 2 NATIONAL PARTICIPATION IN TECHNICAL STANDARDIZATION

# 2.1 Participation Statistics in the Construction Sector

Figure 1 shows the participation of national standardization delegates within the different standardization organization. The total number corresponds to national delegates who have registered for an active participation in a technical committee, a subcommittee and/or a working group. Some of them are registered in multiple standardization organizations, which is why the sum of delegates in each organization does not equal the total number.

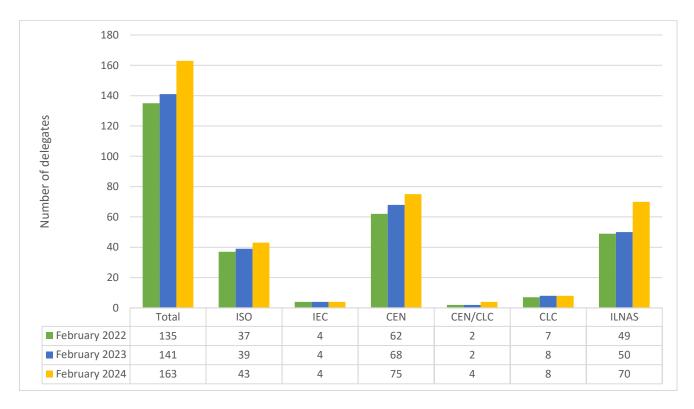


Figure 1: Number of national delegates registered in the standardization organizations

As of February 2023, 163 national delegates are participating in technical standardization, representing an increase in participation of 20.7% compared with February 2022.

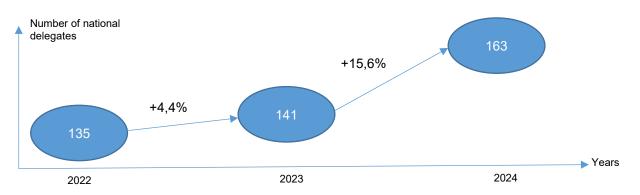




Figure 2 shows the evolution of national companies' participation in the various standardization organizations.

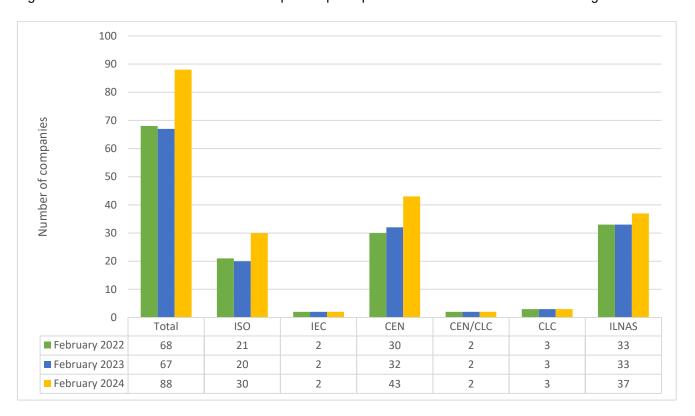
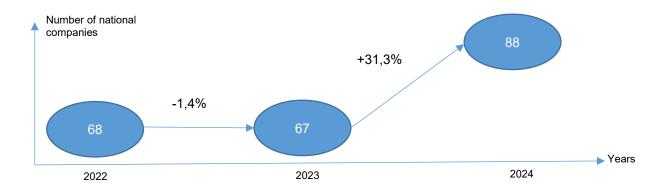


Figure 2: Number of national companies involved in technical standardization per standardization organization



In February 2024, for technical committees related to the construction sector, Luxembourg has:

163 delegates involved in standardization, representing88 different national companies.



## 2.2 National Delegates in the Construction Sector

## 2.2.1 List of technical committees with national delegates

This section lists all the technical committees, sub-committees and working groups related to the construction sector in which national delegates are involved.

N°	Technical Committees	Designations	
1	CEN/CLC/JTC 11	Accessibility in the built environment	
2	CEN/CLC/JTC 11/WG 1	Accessibility in the built environment; Revision of EN 17210	
3	CEN/CLC/JTC 14	Energy management and energy efficiency in the framework of energy transition	
4	CEN/CLC/JTC 14/WG 5	Energy management and energy efficiency in the framework of energy transition; Guanrantees of Origine and Energy Certificates	
5	CEN/TC 104	Concrete and related products	
6	CEN/TC 104/SC 1	Concrete and related products; Concrete - Specification, performance, production and conformity; Execution of concrete structures	
7	CEN/TC 104/SC 2	Concrete and related products; Execution of concrete structures	
8	CEN/TC 104/SC 8	Concrete and related products; Protection and repairs of concrete structures	
9	CEN/TC 121	Welding and allied processes	
10	CEN/TC 121/SC 4	Welding and allied processes; Quality management in the field of welding	
11	CEN/TC 125/WG 5	Application of external rendering and internal plastering	
12	CEN/TC 126	Acoustic properties of building elements and of buildings	
13	CEN/TC 127	Fire safety in buildings	
14	CEN/TC 128	Roof covering products for discontinuous laying and products for wall cladding	
15	CEN/TC 128/SC 7	Roof covering products for discontinuous laying and products for wall cladding; Roofing products from metal sheet	
16	CEN/TC 128/SC 9	Roof covering products for discontinuous laying and products for wall cladding; Prefabricated accessories for roofing	
17	CEN/TC 128/SC 9/WG 1	Roof covering products for discontinuous laying and products for wall cladding; Prefabricated accessories for roofing; Walkways and safety hooks	
18	CEN/TC 135	Execution of steel structures and aluminium structures	
19	CEN/TC 135/WG 14	Execution of steel structures and aluminium structures; Execution of aluminium structures and steel structures with cold formed structural sheeting	
20	CEN/TC 135/WG 17	Product category rules complementary to EN 15804 for Steel and Aluminium structural products for use in construction works	
21	CEN/TC 135/WG 2	Execution of steel structures and aluminium structures; Technical requirements for the execution of steel structures	
22	CEN/TC 147	Cranes - Safety	
23	CEN/TC 147/WG 21	Cranes - Safety; Non-fixed load lifting attachments	
24	CEN/TC 160	Protection against falls from height including working belts	
25	CEN/TC 160/WG 1	Protection against falls from height including working belts; General requirements	



N°	Technical Committees	Designations			
26	CEN/TC 160/WG 2	Protection against falls from height including working belts; Personal fall arresting systems, components and systems			
27	CEN/TC 162	Protective clothing including hand and arm protection and lifejackets			
28	CEN/TC 162/WG 3	Protective clothing including hand and arm protection and lifejackets; Protective clothing against chemicals, infective agents and radioactive contamination			
29	CEN/TC 168	Chains, ropes, webbing, slings and accessories - Safety			
30	CEN/TC 168/WG 4	Chains, ropes, webbing, slings and accessories - Safety; Hooks and other accessories			
31	CEN/TC 189	Geosynthetics			
32	CEN/TC 189/WG 1	Geosynthetics; ad hoc group Asphalt reinforcement			
33	CEN/TC 189/WG 2	Geosynthetics; Terminology, identification, sampling and classification			
34	CEN/TC 189/WG 3	Geosynthetics; Mechanical testing			
35	CEN/TC 189/WG 4	Geosynthetics; Hydraulic testing			
36	CEN/TC 189/WG 5	Geosynthetics; Durability			
37	CEN/TC 191/SC 1	Fixed firefighting systems; Smoke and heat control systems and components			
38	CEN/TC 191/SC 1/WG 5	Fixed firefighting systems; Smoke and heat control systems and components; Design and calculation methods for smoke and heat exhaust ventilation systems			
39	CEN/TC 191/SC 1/WG 9	Fixed firefighting systems; Smoke and heat control systems and components; Smoke control in covered vehicle parks			
40	CEN/TC 191/WG 10	Fixed firefighting systems; Water mist systems			
41	CEN/TC 191/WG 6	Fixed firefighting systems; Gas extinguishing Systems and components			
42	CEN/TC 226	Road equipment			
43	CEN/TC 227	Road materials			
44	CEN/TC 227/WG 1	Road materials; Bituminous mixtures			
45	CEN/TC 229	Precast concrete products			
46	CEN/TC 231	Mechanical vibration and shock			
47	CEN/TC 250	Structural Eurocodes			
48	CEN/TC 250/SC 1	Structural Eurocodes; Eurocode 1 - Actions on structures			
49	CEN/TC 250/SC 1/WG 2	Structural Eurocodes; Eurocode 1 - Actions on structures; Atmospheric icing of structures			
50	CEN/TC 250/SC 1/WG 4	Structural Eurocodes; Eurocode 1 - Actions on structures; Actions on structures exposed to fire			
51	CEN/TC 250/SC 2	Structural Eurocodes; Eurocode 2 - Design of concrete structures			
52	CEN/TC 250/SC 2/WG 1	Structural Eurocodes; Eurocode 2 - Design of concrete structures; Coordination and Editoral Panel			
53	CEN/TC 250/SC 2/WG 1/TG 2	Structural Eurocodes; Eurocode 2 - Design of concrete structures; Coordination and Editoral Panel; TG2			
54	CEN/TC 250/SC 3	Structural Eurocodes; Eurocode 3 - Design of steel structures			
55	CEN/TC 250/SC 3/WG 1	Structural Eurocodes; Eurocode 3 - Design of steel structures; General rules for buildings			
56	CEN/TC 250/SC 3/WG 10	Structural Eurocodes; Eurocode 3 - Design of steel structures; Part 1 - 10:Material toughness			



N°	Technical Committees	Designations		
57	CEN/TC 250/SC 3/WG 12	Structural Eurocodes; Eurocode 3 - Design of steel structures; Evolution of EN 1993-1-12 - High strength steels		
58	CEN/TC 250/SC 3/WG 18	Structural Eurocodes; Eurocode 3 - Design of steel structures; Evolution of EN 1993-5 - Piling		
59	CEN/TC 250/SC 3/WG 2	Structural Eurocodes; Eurocode 3 - Design of steel structures; Fire		
60	CEN/TC 250/SC 3/WG 20	Structural Eurocodes; Eurocode 3 - Design of steel structures; Evolution for EN 1993-1-13		
61	CEN/TC 250/SC 3/WG 22	Structural Eurocodes; EN 1993-1-14 – Design assisted by FEM		
62	CEN/TC 250/SC 3/WG 3	Structural Eurocodes; Eurocode 3 - Design of steel structures; Evolution of EN 1993-1-3 - Cold-formed members		
63	CEN/TC 250/SC 3/WG 8	Structural Eurocodes; Eurocode 3 - Design of steel structures; Evolution of EN 1993-1-8 - Joints and connections		
64	CEN/TC 250/SC 3/WG 9	Structural Eurocodes; Eurocode 3 - Design of steel structures; Part 1 - 9:Fatigue		
65	CEN/TC 250/SC 4	Structural Eurocodes; Eurocode 4 - Design of composite steel and concrete structures		
66	CEN/TC 250/SC 4/WG 4	Structural Eurocodes; Eurocode 4; Design of composite steel and concrete structures; Evolution of EN 1994-1-1, EN 1994-1-2 and EN 1994-2		
67	CEN/TC 250/SC 5	Structural Eurocodes; Eurocode 5 : Design of timber structures		
68	CEN/TC 250/SC 5/WG 4	Structural Eurocodes; Eurocode 5 : Design of timber structures; Structural fire design		
69	CEN/TC 250/SC 7	Structural Eurocodes; Eurocode 7 - Geotechnical design		
70	CEN/TC 250/SC 7/WG 1	General rules and coordination		
71	CEN/TC 250/SC 7/WG 2	Structural Eurocodes; Eurocode 7 - Geotechnical design; Ground investigation		
72	CEN/TC 250/SC 7/WG 3	Structural Eurocodes; Eurocode 7 - Geotechnical design; Geotechnical constructions		
73	CEN/TC 250/SC 8	Structural Eurocodes; Eurocode 8 - Earthquake resistance design of structures		
74	CEN/TC 250/SC 8/WG 1	Structural Eurocodes; Eurocode 8 - Earthquake resistance design of structures; Masonry		
75	CEN/TC 250/SC 8/WG 4	Structural Eurocodes; Eurocode 8 - Earthquake resistance design of structures; Seismic action and site classification		
76	CEN/TC 254	Flexible sheets for waterproofing		
77	CEN/TC 254/WG 9	Flexible sheets for waterproofing; Underlays for discontinuous roof coverings		
78	CEN/TC 256	Railway applications		
79	CEN/TC 256/SC 1	Railway applications; Infrastructure		
80	CEN/TC 256/SC 2	Railway applications; Rolling stock products		
81	CEN/TC 256/SC 3	Railway applications; Rolling stock systems		
82	CEN/TC 256/WG 19	Railway applications; Technical drawings		
83	CEN/TC 256/WG 32	Railway applications; Gauge		
84	CEN/TC 287	Geographic Information		
85	CEN/TC 288	Execution of special geotechnical works		
86	CEN/TC 288/WG 19	Execution of special geotechnical works; Sheet-pile walls		
87	CEN/TC 288/WG 26	Execution of special geotechnical works; Displacement piles		
88	CEN/TC 341	Geotechnical Investigation and Testing		



N°	Technical Committees	Designations	
89	CEN/TC 350	Sustainability of construction works	
90	CEN/TC 350/SC 1	Sustainability of construction works; Circular Economy in the Construction Sector	
91	CEN/TC 350/SC 1/WG 1	Sustainability of construction works; Circular Economy in the Construction Sector; Framework, principles and definitions	
92	CEN/TC 350/SC 1/WG 2	Sustainability of construction works; Circular Economy in the Construction Sector; Gap analysis, conclusions and recommendations	
93	CEN/TC 350/WG 1	Sustainability of construction works; Environmental performance of buildings	
94	CEN/TC 350/WG 3	Sustainability of construction works; Products Level	
95	CEN/TC 350/WG 6	Sustainability of construction works; Civil Engineering works	
96	CEN/TC 442	Building Information Modelling (BIM)	
97	CEN/TC 442/WG 1	Building Information Modelling (BIM); Strategy and Planning	
98	CEN/TC 442/WG 2	Building Information Modelling (BIM); Exchange information	
99	CEN/TC 442/WG 3	Building Information Modelling (BIM); Information Delivery Specification	
100	CEN/TC 442/WG 4	Building Information Modelling (BIM); Support Data Dictionaries	
101	CEN/TC 451	Geothermal and water boreholes	
102	CEN/TC 459/SC 12	ECISS - European Committee for Iron and Steel Standardization; General issues	
103	CEN/TC 459/SC 3	ECISS - European Committee for Iron and Steel Standardization; Structural steels other than reinforcements	
104	CEN/TC 459/SC 3/WG 1	ECISS; Structural steels other than reinforcements; Sheet piles	
105	CEN/TC 459/SC 3/WG 9	ECISS; Structural steels other than reinforcements; Eurocode prEN 1993-1-1 Annex E	
106	CEN/TC 459/SC 4	ECISS - European Committee for Iron and Steel Standardization; Concrete reinforcing and prestressing steels	
107	CEN/TC 459/SC 9	ECISS - European Committee for Iron and Steel Standardization; Coated and uncoated flat products to be used for cold forming	
108	CEN/TC 473	Circular Economy	
109	CEN/TC 51	Cement and building limes	
110	CEN/TC 53	Temporary works equipment	
111	CEN/TC 69	Industrial valves	
112	CEN/TC 69/WG 1	Industrial valves; Basic standards	
113	CEN/TC 69/WG 15	Industrial valves; Diaphragm valves	
114	CEN/TC 98/WG 7	Lifting platforms; Suspended access equipment	
115	CENELEC/TC 215	Electrotechnical aspects of telecommunication equipment	
116	CENELEC/TC 81X	Lightning protection	
117	CENELEC/TC 9X	Electrical and electronic applications for railways	
118	CENELEC/TC 9X/SC 9XA	Communication, signalling and processing systems	
119	IEC/TC 81	Lightning protection	
120	IEC/TC 9	Electrical equipment and systems for railways	
121	ILNAS/TC 102	Béton	



N°	Technical Committees	Designations		
122	ILNAS/TC 103	Acoustique		
123	ILNAS/TC 105	Missions de contrôle technique		
124	ILNAS/TC 108	Câblage vertical		
125	ILNAS/TC 109	Géotechnique		
126	ISO/CASCO	Committee on conformity assessment		
127	ISO/CASCO/WG 31	Committee on conformity assessment; Inspection		
128	ISO/TC 107/SC 4	Metallic and other inorganic coatings; Hot dip coatings (galvanized, etc.)		
129	ISO/TC 111	Round steel link chains, chain slings, components and accessories		
130	ISO/TC 17	Steel		
131	ISO/TC 17/SC 20	Steel; General technical delivery conditions, sampling and mechanical testing method		
132	ISO/TC 17/SC 21	Steel; Environment related to climate change in the iron and steel industry		
133	ISO/TC 17/SC 3	Steel; Steel for structural purposes		
134	ISO/TC 182	Geotechnics		
135	ISO/TC 182/WG 8	Geotechnics; Borehole expansion tests		
136	ISO/TC 199	Safety of machinery		
137	ISO/TC 207	Environmental management		
138	ISO/TC 207/SC 1	Environmental management; Environmental management systems		
139	ISO/TC 207/SC 4	Environmental management; Environmental performance evaluation		
140	ISO/TC 207/SC 5	Environmental management; Life cycle assessment		
141	ISO/TC 207/SC 7	Environmental management; Greenhouse gas management and related activities		
142	ISO/TC 207/SC 7/WG 13	Environmental management; Greenhouse gas management and related activities; Radiative forcing management		
143	ISO/TC 207/SC 7/WG 15	Environmental management; Greenhouse gas management and related activities; Carbon neutrality		
144	ISO/TC 207/TG 1	Environmental management; Sustainable Finance Coordination		
145	ISO/TC 209	Cleanrooms and associated controlled environments		
146	ISO/TC 209/WG 11	Cleanrooms and associated controlled environments; Assessment of suitability of equipment and materials for cleanrooms		
147	ISO/TC 21	Equipment for fire protection and fire fighting		
148	ISO/TC 21/SC 5	Equipment for fire protection and fire fighting; fixed fire fighting systems using water		
149	ISO/TC 21/SC 5/WG 10	Equipment for fire protection and fire fighting; fixed fire fighting systems using water; Valves		
150	ISO/TC 21/SC 5/WG 11	Equipment for fire protection and fire fighting; fixed fire fighting systems using water; Pipes and fittings		
151	ISO/TC 21/SC 5/WG 9	Equipment for fire protection and fire fighting; fixed fire fighting systems using water; Sprinklers and nozzles		
152	ISO/TC 21/SC 8	Equipment for fire protection and fire fighting; Gaseous media and firefighting systems using gas		
153	ISO/TC 21/SC 8/WG 11	Equipment for fire protection and fire fighting; Gaseous media and firefighting systems using gas; Small enclosure fire protection systems		
154	ISO/TC 211	Geographic information/Geomatics		



N°	Technical Committees	Designations	
155	ISO/TC 211/WG 6	Geographic information/Geomatics; Imagery	
156	ISO/TC 211/WG 7	Geographic information/Geomatics; Information communities	
157	ISO/TC 221	Geosynthetics	
158	ISO/TC 268	Sustainable cities and communities	
159	ISO/TC 269	Railway applications	
160	ISO/TC 269/SC 1	Railway applications; Infrastructure	
161	ISO/TC 269/SC 2	Railway applications; Rolling stock	
162	ISO/TC 269/SC 3	Railway applications; Operations and services	
163	ISO/TC 323	Circular economy	
164	ISO/TC 323/WG 1	Circular economy; Terminology, principles, frameworks and management system standard	
165	ISO/TC 323/WG 2	Circular economy; Practical approaches to develop and implement Circular Economy	
166	ISO/TC 323/WG 3	Circular economy; Measuring and assessing circularity	
167	ISO/TC 323/WG 4	Circular economy; Circular Economy in practice: experience feedback	
168	ISO/TC 323/WG 5	Circular economy; Product circularity data sheet	
169	ISO/TC 35/SC 12	Paints and varnishes; Preparation of steel substrates before application of paints and related products	
170	ISO/TC 35/SC 14	Paints and varnishes; Protective paint systems for steel structures	
171	ISO/TC 43/SC 1	Acoustics; Noise	
172	ISO/TC 43/SC 1/WG 42	Acoustics; Noise; Joint ISO/TC 43/SC 1 - ISO/TC 22 WG: Measurement of noise emission (external) from road vehicles	
173	ISO/TC 43/SC 2	Acoustics; Building acoustics	
174	ISO/TC 44/SC 10	Welding and allied processes; Quality management in the field of welding	
175	ISO/TC 59/SC 13	Buildings and civil engineering works; Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)	
176	ISO/TC 92	Fire safety	
177	ISO/TC 94/SC 13	Personal safety Protective clothing and equipment; Protective clothing	
178	ISO/TC 94/SC 13/WG 3	Personal safety Protective clothing and equipment; Protective clothing; Protective clothing against chemicals agents	
179	ISO/TC 94/SC 13/WG 6	Personal safety Protective clothing and equipment; Protective clothing; Protective clothing against hazardous biological agents	
180	ISO/TC 94/SC 14	Personal safety Protective clothing and equipment; Fire-fighter's personal equipment	
181	ISO/TC 94/SC 14/WG 4	Personal safety Protective clothing and equipment; Fire-fighter's personal equipment; Hazardous materials incidents (hazmat)	

Table 1: List of technical committees in the construction sector with a participation of national delegates – February 2024



## 2.2.2 List of national delegates in the construction sector

This section lists all the national delegates registered in a technical committee, sub-committee or working group related to the construction sector.

N°	Name	First Name	Company	
1	ALSWAITTI	Mohammed	Université du Luxembourg	
2	ANWAAR	Omer	ArcelorMittal Belval & Differdange S.A.	
3	ARNOLDY	René	Foyer Assurances S.A.	
4	AUBRY	Carole	Luxcontrol S.A.	
5	AYED	Anna-Christine	+Impakt Luxembourg S.àr.I.	
6	BACKES	Anne-Laure	DuPont de Nemours Luxembourg S.à r.l.	
7	BALL	Jean-Bernard	PASS INGENIERIE & EXPERTISE SARL	
8	BARTHELME	Marc	Administration des bâtiments publics	
9	BELICA	Andrej		
10	BENETTO	Enrico	Luxembourg Institute of Science and Technology (LIST)	
11	BERTHOME	Jean-Marie	ORGANISATION GESTION ET CONTRÔLE S.A.	
12	BINDER	Martin	ST QUADRAT Fall Protection S.A.	
13	BINSFELD	Nico	Eltrona Interdiffusion S.A.	
14	BLASEN	Georges	Administration des Ponts et Chaussées	
15	BLONDEL	Arnaud	Stugalux Construction S.A.	
16	BOERI	Pamela	Institut Luxembourgeois de Régulation	
17	BOGDAN	Teodora	Université du Luxembourg	
18	BOLLEN	Jan	ArcelorMittal S.A.	
19	BORRES	Stéphane	AlliA Insurance Brokers S.A.	
20	BRAND	Catherine	CRTI-B GIE	
21	BRAUN	Matthias	Simon-Christiansen & Associés S.A.	
22	BRUCH	Erwin	SECOLUX S.A.	
23	BUGIEL	Andreas	DuPont de Nemours Luxembourg S.à r.l.	
24	BUKNYS	Arunas	FANUC Europe S.A.	
25	BUTTEL	Luc	Administration de l'Environnement	
26	CAJOT	Louis-Guy	SECO EXPERT S.A.	
27	CALLEJAS	David	FALLPROTEC S.A.	
28	CANDEIAS	Miguel	ArcelorMittal Belval & Differdange S.A.	
29	CHAFI	Mostafa	ATEEL S.à r.l.	
30	CHAPELON	Maxime	SECO Luxembourg S.A.	
31	CHARLIER	Marion	ArcelorMittal Belval & Differdange S.A.	
32	COLBACH	Robert	Administration des Ponts et Chaussées	
33	COMBARRO SIMON	Manuel	Université du Luxembourg	
34	DAVID-CLOS	Elke	DuPont de Nemours Luxembourg S.à r.l.	
35	DE CARTIER D'YVES	Patrick	SECO Luxembourg S.A.	
36	DE MULLEWIE	Georges	SECOLUX S.A.	



N°	Name	First Name	Company			
37	DERAVET	Marcel	IFSB S.A.			
38	DJEDAI	Mohamed	HITEC Luxembourg S.A.			
39	DOSSMANN	Etienne	TPF Luxembourg S.A.			
40	DRETTAS	Christos	ArcelorMittal S.à r.l.			
41	DUMBRUCK	Roger	SECOLUX S.A.			
42	DUYCKAERTS	Olivier	Star Navigator S.àrl.			
43	EISCHEN	Christophe	Administration Luxembourgeoise Vétérinaire et Alimentaire			
44	EITNER	Volker	Geopartner S.à r.l.			
45	ENGELS	François	Ministère de la Famille, de l'Intégration et à la Grande Région			
46	FENUCCI	Mathieu	SECO EXPERT S.A.			
47	FERNANDES	Gilberto	Administration des Ponts et Chaussées			
48	FERRAND	Dominique	ILNAS			
49	FERRONE	Andrew	Administration des services techniques de l'agriculture			
50	FERY	Bruno	EBRC S.A.			
51	FLENER	Steve	POST Luxembourg			
52	FOURNY	David	SOCOTEC Luxembourg S.à r.l.			
53	FRANCOIS	Antoine	EBRC S.A.			
54	FRISING	Yves	Eltrona Interdiffusion S.A.			
55	GAGLIARDI	Jeremy	GAGLIARDI Jeremy			
56	GALMICHE	Alexis	Fondasol Luxembourg S.A.			
57	GAMBA	Antonio	ArcelorMittal S.A.			
58	GILL	Chris	Viking S.A.			
59	GLORIEUX	Antoine	ArcelorMittal S.A.			
60	GOEURY	Pierre-Yves	Fondasol Luxembourg S.A.			
61	GOLDSCHMIT	Marc	POST Luxembourg			
62	GRIFFATON	Simon	PREFALUX S.A.			
63	GRUSLIN	Steve	GEOCONSEILS S.A.			
64	HABIB	Karim	MyConnectivity G.I.E.			
65	HACKENBERGER	Bernd	SISTO Armaturen S.A.			
66	HADDAD	Hedieh	Université du Luxembourg			
67	HANUS	François	ArcelorMittal Belval & Differdange S.A.			
68	HEINEN	Laurent	Ordre des Architectes et Ingénieurs-Conseils			
69	HEINTZ	Robert	EURASOL S.A.			
70	HILGERS	Carsten	CFL			
71	HIRTZ	Thierry	Administration des bâtiments publics			
72	HITAJ	Claudia	Luxembourg Institute of Science & Technology			
73	HOCHSCHEIDT	Axel	Schroeder & Associés S.A.			
74	HOHL	Frederik	RINNEN Constructions Générales S.à r.l.			
75	HUET	Stéphane	ORGANISATION GESTION ET CONTRÔLE S.A.			
76	JUNG	Thierry	CFL			
77	KATSAVRIAS	Evangelos	Astron Buildings S.A.			



N°	Name	First Name	Company			
78	KECH	Rudy	RENE MARTH S.àr.I.			
79	KIRSCH	Thécla	Ökozenter Pafendall A.s.b.l.			
80	KNEIP	André	Foyer Assurances S.A.			
81	KOERFER	Magnus	Ministère de la Famille, de l'Intégration et à la Grande Région			
82	KOLBER	Carine	Simon-Christiansen & Associés S.A.			
83	KOLODKA	Marc	OFL			
84	LAMBERT	Gaetan	Lifteurop S.A.			
85	LAMBERT	Arnaud	Tractel Secalt S.A.			
86	LAMMAR	Laura	Corps grand-ducal d'incendie et de secours			
87	LANG	Eva-Maria	Chambre des Métiers			
88	LARIOS	Julien	MyConnectivity G.I.E.			
89	LEQUEUX	Jean-Marie	EQIOM BETONS S.A.			
90	LEROY	Joël	ArcelorMittal Luxembourg			
91	LION	Fabian	ENECO Ingénieurs-Conseils S.A.			
92	LOSANGE	Christophe	CODIPROLUX S.A.			
93	MAHJOUB	Raouf	Solutions30 S.A.			
94	MAISONNEUVE	Gaétan	Cabinet d'expertise LNExp			
95	MAJERUS	Samuel	Simon-Christiansen & Associés S.A.			
96	MANGERS	Jeff	Université du Luxembourg			
97	MARAI	Péter	Lindab S.A.			
98	MARCHETTO	Christophe	Soft dB Europe S.àr.I.			
99	MARTINS	João	ArcelorMittal Commercial RPS S.àr.I.			
100	MATIAS DE PAULA	José	ArcelorMittal Global R&D S.A.			
101	MEYER	Romain	Administration des ponts et chaussées			
102	MUELLER	Ralph	CFL			
103	MULHALL	Douglas	+Impakt Luxembourg S.àr.l.			
104	NEY	Michel	BETONS FEIDT S.A.			
105	NOËL	Xavier	Vinçotte Luxembourg A.s.b.l.			
106	NOSBUSCH	Patrick	INCA Ingénieurs Conseils Associes S.à r.l.			
107	NOWAK	Stéphane	DuPont de Nemours Luxembourg S.à r.l.			
108	OBIALA	Renata	ArcelorMittal S.A.			
109	ODENBREIT	Christoph	Université du Luxembourg			
110	OLY	René	Astron Buildings S.A.			
111	PASCUAL	Mickaël	Neobuild S.A.			
112	PETIT	Marc	Administration des bâtiments publics			
113	PETRY	Jérôme	Ministère de l'Economie			
114	POCHET	Albin	Goodyear S.A.			
115	POLETTI	Benoît	INCERT GIE			
116	PONCIN	Marc	Luxcontrol S.A.			
117	PREIS	Alain	SECOLUX S.A.			



N°	Name	First Name	Company		
118	PRÜM	Cécile	ArcelorMittal Belval & Differdange S.A.		
119	RADEMACHER	Dennis	ArcelorMittal Commercial Sections S.A.		
120	RAINGEVAL	Pascal	SECO Expert S.A.		
121	RAMIREZ CEDRES	Adrian	Rotarex S.A.		
122	RECH	Christian	CIMALUX S.A.		
123	RECKINGER	Georges	Schroeder & Associés S.A.		
124	RENAULD	Sébastien	EBRC S.A.		
125	RENAULT	Thibaut	Energie & Environnement		
126	RETTER	Felix	Luxembourg Online S.A.		
127	RICHARD	Sébastien	EBRC S.A.		
128	ROCK	Annick	Ministère du Logement		
129	SAIED	Mahmoud	ArcelorMittal Belval & Differdange S.A.		
130	SAYYAREH	Shahin	Université du Luxembourg		
131	SCHANTZEN	Steve	Administration des bâtiments publics		
132	SCHAUBROECK	Thomas	Luxembourg Institute of Science and Technology (LIST)		
133	SCHINTGEN	Guy			
134	SCHLEICH	Jean-Baptiste			
135	SCHUMACHER	Kim	Ministère de l'Environnement, du Climat et du Développement durable		
136	SCHWALL	François	Neobuild S.A.		
137	SCIOTTI	Sébastien	BETIC Ingénieurs-Conseils S.A.		
138	SCRIBE	Jean-Philippe	PROXIMUS Luxembourg S.A.		
139	SIMON	Claude	CIMALUX S.A.		
140	STATUCKI	David	Schroeder & Associés		
141	STEICHEN	Claude	Administration des Ponts et Chaussées		
142	SYRETT	Alison	AVL S.à r.l.		
143	TENEUL	Jean-François	DuPont de Nemours Luxembourg S.à r.l.		
144	THILL	Manon	Ministère de la Famille, de l'Intégration et à la Grande Région		
145	THILLEN	Ines	MFPRA - Service national de la sécurité dans la fonction publique		
146	THYES	Léon	IN-SITU S.A.		
147	TIBOLT	Mike	ArcelorMittal Belval & Differdange S.A.		
148	TOMASINI	Folco	FOLCO TOMASINI S.à r.l.		
149	TRESSER	Markus	Luxembourg Institute for Building and Technology S.A.		
150	URIOS	Thomas	ArcelorMittal Belval & Differdange S.A.		
151	VERHAMME	Geoffroy	SECOLUX S.A.		
152	VIOLA	Moreno	CRTI-B GIE		
153	WALDMANN- DIEDERICH	Danièle	Université du Luxembourg		
154	WAUTELET	Thibaut	+Impakt Luxembourg S.àr.l.		
155	WEBER	Ernst	ArcelorMittal Commercial RPS S.àr.I.		
156	WERN	Mario	ENECO Ingénieurs-Conseils S.A.		



N°	Name	First Name	Company
157	WEYDERT	Romain	RW CONSULT S.àr.I.
158	WOLF	Sébastien	ArcelorMittal Bissen & Bettembourg S.A.
159	YANG	Jie	ArcelorMittal Global R&D
160	ZANON	Riccardo	ArcelorMittal S.A.
161	ZDJELAR	Eric	ORGANISATION GESTION ET CONTRÔLE S.A.
162	ZIGNALE	Daniel	BIM Consult S.àr.I.
163	ZINCK	Sébastien	Luxembourg Institute of Science and Technology (LIST)

Table 2: List of national delegates in the construction sector – February 2024



## CONCLUSION

Construction has been identified as a sector with high growth potential in the national standardization strategy 2020-2030. In this context, ILNAS actively supports national actors wishing to get involved in technical standardization, as part of the implementation of <a href="Luxembourg's policy for technical standardization of the construction sector (2020-2025)">Luxembourg's policy for technical standardization of the construction sector (2020-2025)</a>. The main objective of this policy is to strengthen the involvement of national stakeholders in standardization activities and encourage the use of standards through three flagship projects:

- Promote technical standardization in the construction sector;
- Support the involvement of the national market in the standardization process;
- Develop and strenghten education on technical standardization and related research activities in the construction sector.

In addition to this new version of the standards analysis of the construction sector, many other tools and services are available to facilitate the national market's access to technical standardization:

- Reading stations where market players can consult published standards free of charge;
- The ILNAS <u>e-shop</u> offering the possibility to search and purchase national, European and international standards as well as participating in the public enquiries that precede the publication of a standard;
- <u>Specific standards watches</u> to update a standards catalog or to search for specific standards on a given topic of interest;
- Technical reports, including the technical report on sustainable construction published at the end of 2023;
- <u>Training courses on technical standardization</u>, dedicated to BIM (Building Information Modeling), sustainable construction, and others;
- <u>Technical information sheets</u> providing key standards information on specific topics (e.g., acoustics, Eurocodes, BIM, circular economy, timber structures, etc.).

ILNAS offers all economic actors in Luxembourg the opportunity to contribute to the development of European and international standards by registering as a national delegate, and welcomes any new proposals for the development of national standards that meet concrete needs expressed by the sector's national stakeholders.

If you have any questions or suggestions relating to standardization, please send an e-mail to normalisation@ilnas.etat.lu.







Please fill out the satisfaction survey:

https://gd.lu/cNZMDf





Institut Luxembourgeois de la Normalisation, de l'Accréditation, de la Sécurité et qualité des produits et services Agence pour la Normalisation et l'Economie de la Connaissance