

DRAFT – Amendments to the Model Administrative Regulations on Technical Building Regulations (MVV TB) - 2026/1 edition¹

Content:

The amendments shall relate to:

A 1

A 2

A 3

A 5

B 2

B 3

B 4

C 2

C 3

C 4

A 1 Mechanical strength and stability

A 1.2 Technical requirements for the planning, designing and execution of buildings and parts thereof pursuant to § 85a(2) MBO [in accordance with federal state law]

Seq. No.	Planning, designing and execution requirements pursuant to § 85a(2) MBO [in accordance with federal state law]	Technical rules/version	Further measures pursuant to § 85a(2) MBO [in accordance with federal state law]
1	2	3	4
A 1.2.1 Basics of structural design and impact on structural structures			
A 1.2.1.2 Impacts on structural structures			
	Volumetric masses, own weights and utility loads of buildings	DIN EN 1991-1-1:2010-12 DIN EN 1991-1-1/NA:2010-12 DIN EN 1991-1-1/NA/A1:2015-05	Annex A 1.2.1/2
	Actions on structures exposed to fire	DIN EN 1991-1-2:2010-12 DIN EN 1991-1-2 Corrigendum 1:2013-08 DIN EN 1991-1-2/NA:2015-09	Annex A 1.2.1/3
	Snow loads	DIN EN 1991-1-3:2010-12 DIN EN 1991-1-3/A1:2015-12 DIN EN 1991-1-3/NA:2019-04	Annex A 1.2.1/4
	Wind loads	DIN EN 1991-1-4:2010-12 DIN EN 1991-1-4/NA:2010-12	Annex A 1.2.1/5
	Accidental actions	DIN EN 1991-1-7:2010-12 DIN EN 1991-1-7/NA:2019-09	Annex A 1.2.1/6
	Actions induced by cranes and machinery	DIN EN 1991-3:2010-12 DIN EN 1991-3 Corrigendum 1:2013-08 DIN EN 1991-3/NA:2010-12	
	Silos and tanks	DIN EN 1991-4:2010-12 DIN EN 1991-4 Corrigendum 1:2013-08 DIN EN 1991-4/NA:2010-12 DIN FB 140:2005-01	Annex A 1.2.1/7

¹ Notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17/9/2015, p. 1).

A 1.2.4 Structural works in metal and composite construction			
A 1.2.4.1 Design of steel structures			
	General rules and rules for buildings	DIN EN 1993-1-1:2010-12 DIN EN 1993-1-1/A1:2014-07 DIN EN 1993-1-1/NA:2018-12	Annex A 1.2.3/2 and Annex A 1.2.4/1
	Structural fire design	DIN EN 1993-1-2:2010-12 DIN EN 1993-1-2/NA:2010-12	Annex A 1.2.3/3 and Annex A 1.2.4/9
	Supplementary rules for cold-formed components and sheeting	DIN EN 1993-1-3:2010-12 DIN EN 1993-1-3/NA:2017-05	Annex A 1.2.4/2
	Supplementary rules for stainless steels	DIN EN 1993-1-4:2015-10 DIN EN 1993-1-4/A2:2021-02 DIN EN 1993-1-4/NA:2020-11	
	Plated structural elements	DIN EN 1993-1-5:2019-10 DIN EN 1993-1-5 Corrigendum 1:2020-07 DIN EN 1993-1-5/NA:2018-11	Annex A 1.2.4/10
	Strength and stability of shell structures	DIN EN 1993-1-6:2010-12 DIN EN 1993-1-6/NA:2010-12	
	Plated structural elements with transverse loading	DIN EN 1993-1-7:2010-12 DIN EN 1993-1-7/NA:2010-12	
	Design of joints	DIN EN 1993-1-8:2010-12 DIN EN 1993-1-8/NA:2020-11	Annex A 1.2.4/11
	Fatigue	DIN EN 1993-1-9:2010-12 DIN EN 1993-1-9/NA:2010-12	
	Material toughness and through-thickness properties	DIN EN 1993-1-10:2010-12 DIN EN 1993-1-10/NA:2016-04	
	Design of composite steel structures	DIN EN 1993-1-11:2010-12 DIN EN 1993-1-11/NA:2010-12	Annex A 1.2.4/3
	Additional rules extending EN 1993 to steel grades up to S700	DIN EN 1993-1-12:2010-12 DIN EN 1993-1-12/NA:2011-08	
	Towers and masts	DIN EN 1993-3-1:2010-12 DIN EN 1993-3-1/NA:2015-11	
	Chimneys	DIN EN 1993-3-2:2010-12 DIN EN 1993-3-2/NA:2017-01	Annex A 1.2.4/4
	Silos	DIN EN 1993-4-1:2017-09 DIN EN 1993-4-1/NA:2018-11	Annex A 1.2.4.1/1
	Piling	DIN EN 1993-5:2010-12 DIN EN 1993-5/NA:2010-12	
	Crane supporting structures	DIN EN 1993-6:2010-12 DIN EN 1993-6/NA:2022-06	
	Execution of steel structures	DIN EN 1090-2:2024-09 DIN EN 1090-4:2018-09	Annex A 1.2.4/5
	Above ground cylindrical flat bottom tank structures	DIN EN 1993-4-2:2017-09 DIN EN 1993-4-2/NA:2018-12	Annex A 1.2.4/8
A 1.2.5 Structural works in timber construction			
A 1.2.5.1 Design of timber structures			
	Design of timber structures	DIN EN 1995-1-1:2010-12 DIN EN 1995-1-1/A2:2014-07 DIN EN 1995-1-1/NA:2013-08	Annex A 1.2.5/1
	Structural fire design	DIN EN 1995-1-2:2010-12 DIN EN 1995-1-2/NA:2010-12	Annex A 1.2.3/3
	Bridges	DIN EN 1995-2:2010-12 DIN EN 1995-2/NA:2021-06	Annex A 1.2.5/1

	Manufacture and execution of timber structures	DIN 1052-10:2024-12	Annex A 1.2.5/1
A 1.2.6 Structural works in masonry structures			
A 1.2.6.1 Design of masonry structures			
	General rules for reinforced and unreinforced masonry structures	DIN EN 1996-1-1:2013-02 DIN EN 1996-1-1/NA:2019-12	Annex A 1.2.6/1
	Structural fire design	DIN EN 1996-1-2:2011-04 DIN EN 1996-1-2/NA:2022-09 DIN EN 1996-1-2/NA/A1:2024-09	Annex A 1.2.6/2
	Design considerations, selection of materials and execution of masonry	DIN EN 1996-2:2010-12 DIN EN 1996-2/NA:2012-01 DIN EN 1996-2/NA/A1:2021-06	
	Simplified calculation methods for unreinforced masonry structures	DIN EN 1996-3:2010-12 DIN EN 1996-3/NA:2019-12	
A 1.2.6.2	"Prefabricated parts" deleted from MVV TB 2026/1		
A 1.2.6.4	Clay-brick masonry	DIN 18940:2023-06	Annex A 1.2.6.4/1
A 1.2.7 Glass structures			
A 1.2.7.1 Glass in building - Design and construction rules			
	Terms and general principles	DIN 18008-1:2020-05	Annex A 1.2.7/1 Annex A 1.2.7/2
	Linear glazings	DIN 18008-2:2020-05	Annex A 1.2.7/3
	Glazing with punctiform supports	DIN 18008-3:2024-12	
	Additional requirements for safety barrier glazing	DIN 18008-4:2024-12	
	Additional requirements for walk-in glazing	DIN 18008-5:2024-12	
	Additional requirements for glazing that can be walked on in case of maintenance procedures and for fall-through-proof glazing	DIN 18008-6:2018-02	
A 1.2.8 Special constructions			
A 1.2.8.9	Stationary cylindrical single-wall and double-wall steel containers (tanks) for the surface storage of liquids fuels hazardous to water for the energy supply of heating and cooling systems for buildings		Annex A 1.2.8/7
A 1.2.8.10	Stationary thermoplastic tanks for the surface storage of liquids fuels for the energy supply of heating and cooling systems for buildings		Annex A 1.2.8/8
A 1.2.9 Structural works in seismic zones			
A 1.2.9.1			
	General rules, seismic actions and rules for buildings	DIN EN 1998-1:2010-12 DIN EN 1998-1/A1:2013-05 DIN EN 1998-1/NA:2023-11	
	Foundations, retaining structures and geotechnical aspects	DIN EN 1998-5:2010-12 DIN EN 1998-5/NA:2023-11	

((unchanged))

Annex A 1.2.1/3

Re DIN EN 1991-1-2 in conjunction with DIN EN 1991-1-2/NA

When using natural fire models, please note:

1 The result of the assessment of fire resistance (fire exposure and detection) of load-bearing or stiffening components based on natural fire models (Section 3.3 of DIN EN 1991-1-2:2010-12) requires a derogation under § 67(1) MBO¹; it may also be authorised under § 51 MBO¹.

Note:

Fire resistance for building components is assessed in the building inspection processes on the basis of fire tests using the standard temperature-time curve (ETK) and results in fire resistance classification (DIN 4102-2:1977-09, DIN EN 13501-2:2016-12) attached to the building inspection requirements.

Building component measurements based on natural fire models take into account the actual use and characteristics of a room or building taking into consideration the existing fire protection infrastructure.

Such measurements do not fully cover the overall building inspection requirement system for fire resistance classification (building category, floor height, building type).

The applicability of natural fire models must therefore be decided in the context of a derogation under § 67 or a facilitation under § 51 MBO¹. In addition, the planning application or building documents must state why a standard temperature-time curve fire exposure is not required and specify which fire model was chosen for the building project (and why) and how the inevitable limited use of the facility is to be ensured (e.g. due to limited fire loads) (§ 67(1) MBO¹, § 11(2) sentence 1(1), sentence 2 MBauVorIV¹; see no. 5).

2 To verify stability (§ 10(1) MBauVorIV¹), the documents required to assess the effects of fire, in particular to determine thermal effects and design-relevant fire scenarios including the corresponding design fires, must also be provided (§ 2(8) MBauVorIV¹). The required documentation must be complete, clear and verifiable; the thermal effects must be determined and documented on a room-by-room basis. The input parameters must be selected in a representative and conservative manner; external fire effects and specific conditions of use must also be taken into account (e.g. vehicles in exhibition halls as part of the installation and dismantling phase of exhibition stands).

The test engineer/test expert¹ responsible for testing/certifying the proof of stability in accordance with § 66(3) MBO¹ shall either be a test engineer/test expert for fire protection¹ or use a test engineer/test expert for fire protection¹ experienced with such fire models to assess the fire effects. All input parameters shall be checked for completeness and correctness as part of the assessment of fire exposure; spot checks or plausibility checks alone are not sufficient.

3 For fire protection certification (§ 11 MBauVorIV¹), the building documents must also set out how building components of the load-bearing structure designed according to natural fire models are to be combined with the necessary (classified) space-enclosing components (such as fire walls and partition walls, ceilings, walls of required stairwells and floors) in an appropriate fire protection concept. This also includes statements on the connections of fire-protection components of different dimensions.

The requirements of MBO¹, the Model Special Building Code¹ and model guidelines for space-enclosing components¹ remain unaffected.

4 The fire resistance of the load-bearing structure is essential for effective firefighting. Before deciding on the derogation/facilitation, the competent fire protection service shall be consulted with regard to the interests of defensive fire protection; § 27 M-PPVO¹ remains unaffected.

5 The permitted type of use of the building project (e.g. office buildings) will be (spatially) set out and delimited by the (selected) input parameters (laid down by the planning permission) to determine the exposure to fire. Appropriate measures should therefore be laid down to ensure compliance with this restriction of use. This includes, in particular, appointing a fire protection officer to monitor operations and commissioning a test of the fire load assumption within one year after beginning use, as well as recurring tests (e.g. at intervals of 3-5 years), carried out by a testing engineer for fire protection¹.

The restriction of use and the measures intended to comply with it shall be laid down by appropriate ancillary provisions in the building permit. The planning permission must also specify that changes to the approved use that lead to increased exposure to fire (e.g. changed fire loads), require stability testing and, where applicable, a further planning application and approval procedure.

Note:

Buildings whose stability is designed based on natural fire models are subject to limitations on use ensured through operating measures and external inspections. The application of such models can therefore only be appropriate for certain building uses. It may be appropriate for uses involving low and constant fire loads, particularly in large-scale building structures; the situation is different for rooms with variable fire loads and uses, or for buildings with specific safety requirements (e.g. high-rise buildings); the need for operational measures generally precludes its application in residential properties or similar uses.

6 In relation to DIN EN 1991-1-2/NA:2015-09, Annex BB (NA.BB)

6.1 The fire load densities specified in Section NA.BB.3.2, Table BB.1, Column 3, must not be undercut even in individual case studies carried out in accordance with Section NA.BB.3.3; these values refer only to a typical room use for the respective building type and not to the room uses of the entire building (see NA.BB.3.2, paragraph 3, regarding office buildings); this applies to Table BB.2 accordingly.

6.2 The maximum heat release rate $Q_{\max,k}$ according to section NA.BB.4, equation (BB.7) shall also be determined for rooms with more than 400 m² using first the heat release rate $Q_{\max,f,k}$ for an assumed fire-load-controlled fire according to equation (BB.5) and the determination of the heat release rate $Q_{\max,v,k}$ assuming a ventilation-controlled fire according to equation (BB.6). The value derived from equation (BB.7) (characteristic value $Q_{\max,k}$) must always be on the safe side.

6.3 To assess the probability p_1 of an initial fire occurring per year and per unit, in accordance with Section NA.BB.5.1, the larger and therefore least favourable value derived from the data in accordance with Table BB.3 must be used to determine the probability p_{fi} of a destructive fire occurring in accordance with equation (BB.9).

To assess the probability of a failure of the public fire service, the value $p_{2.2} = 0.5$ in accordance with Table BB.4 should be used.

6.4 To determine the conditional probability of failure $p_{f,fi}$ according to section NA.BB.5.2, the probability of failure p_f for structural components shall always be taken into account in equation (BB.13) at least from the allocation to the damage result 'medium' according to Table BB.5.

For buildings used for offices or similar purposes and whose utilisation units have a gross floor area of 400 m² (see § 36(1)(2)(4) MBO¹), the value 4.7 must be used for the reliability index β and the value 1.3E-6 as per Table BB.5 must be used for the related failure probability p_f . Special constructions where the effects of failure or restriction of activity of a load-bearing structure may have severe consequences on life, health or natural resources (see DIN EN 1990:2010-12, Annex B), must be classified as 'high' damage under Table BB.5.

¹ under federal state law

Annex A 1.2.1/4

to DIN EN 1991-1-3 in conjunction with DIN EN 1991-1-3/A1 and DIN EN 1991-1-3/NA

1 Reference is made to the table 'Classification of snow load zones according to administrative limits' in respect of the classification of snow load zones according to administrative limits or ...¹. The table 'Allocation of snow load zones according to administrative boundaries' is available at <https://www.is-argbau.de> or <https://www.dibt.de/de/wir-bieten/technische-baubestimmungen>.

2 Re Section 4.3 (North-German plain):

In municipalities marked with the footnote ... in the table 'Classification of snow load zones according to administrative limits' or ...¹, the measurement situation with snow must be checked as an exceptional impact for all buildings in snow load zones 1 and 2, in addition to the permanent and

temporary measurement situations. The design value of the snow load shall be assumed to $s_i = 2,3 \mu_i \cdot s_k$.

3 The NCI Annex NA.F (informative) 'Ice loads' must be borne in mind.

4 Re Section 6.3:

Instead of the first sentence on NDP 6.3(2), the following applies: 'In Germany, the coefficient k for the shape of the overhang may be set at $k = 0.4$.'

¹ under federal state law

Annex A 1.2.1/5

to DIN EN 1991-1-4 in conjunction with DIN EN 1991-1-4/NA

5 Re Section NA.B.3.2 Table NA.B.3, column 2:

In the case of buildings (mid-row houses) with a total height of $h \leq 10.0$ m, which are substantially identical in profile on both sides and where it is (legally) ensured that the buildings are not permanently removed, the action of the wind may be demonstrated as variable effect from pressure or suction. In this connection, the least favourable value is decisive. The effect of pressure and suction must then be applied jointly as an exceptional impact.

6 Reference is made to the table 'Classification of wind load zones according to state administrative limits' in respect of the classification of wind load zones according to state administrative limits or ... ¹. The table 'Classification of wind load zones according to state administrative limits' is available at <https://www.is-argebau.de> or <https://www.dibt.de/de/wir-bieten/technische-baubestimmungen>.

¹ under federal state law

Annex A 1.2.1/6

((unchanged))

Annex A 1.2.1/7

((unchanged))

Annex A 1.2.4/1

((unchanged))

Annex A 1.2.4/2

((unchanged))

Annex A 1.2.4/3

((unchanged))

Annex A 1.2.4/4

((unchanged))

Annex A 1.2.4/5 to DIN EN 1090-2

The Technical Rule shall be applied as follows:

1 Load-bearing steel components in the execution classes listed may only be manufactured by a manufacturer whose in-house quality control is certified by a notified body in accordance with EN 1090-1:2009+A1:2011¹.

2 The execution of welded steel components, load-bearing structures and buildings in the execution classes listed may be carried out only on the construction site by companies which possess a proof of suitability for the execution of welding work in the relevant execution classes. Alternatively, the following shall be considered as proof of suitability:

- ☐ a welding certificate in line with EN 1090-1:2009+A1:2011¹ issued or certified by a notified body, if the firm's in-house production control is certified by this body in line with EN 1090-1:2009+A1:2011;¹
- ☐ a welding certificate issued on the basis of DIN EN 1090-2:2024-09 and/or DIN EN 1090-2:2018-09 in conjunction with EN 1090-1:2009+A1:2011¹, Table B.1, by a certification body recognised by the building inspection authorities.

§ 3 of the Manufacturer and User Ordinance [Muster-Hersteller und Anwenderverordnung] (March 2018)² remains unaffected.

¹ Implemented in Germany by DIN EN 1090-1:2012-02.

² under federal state law

Annex A 1.2.4/8

1. Basic principles

The technical rule shall also be applied to tank structures with a volume $\leq 100 \text{ m}^3$. DIN EN 1993-4-2:2017-09, Section 2.8 does not apply.

The rigid assignment of the damage order class of the tank building to a calculation method according to DIN EN 1993-4-2:2017-09, Section 4.2.2 does not apply. The design process of cylindrical walls is based on the rules in DIN EN 1993-1-6:2010-12, Section 2.2 depending on the tank geometry, the boundary conditions and the shape/load pattern of the impact.

The numerical values of the actions specified in the informative Annex B to DIN EN 1991-4:2010-12 apply. Annex B, Section B.3, paragraph 2 of DIN EN 1991-4:2010-12 does not apply. In addition, the operator shall provide nominal values for operating states and failures as well as requirements exceeding the requirements of EN 1990, EN 1993-1-1 and EN 1993-1-6.

If the wind pressure q_w , which is unevenly distributed on the shell, is replaced by the equivalent constant external pressure for the circumferential buckling safety verification under wind load, the equivalent constant external pressure is determined in accordance with DIN EN 1993-1-6:2010-12, Section D.1.3.2.

Table NA.1 from DIN EN 1993-4-2/NA:2018-12 does not apply. If the maximum filling height and the largest weights to be assumed for the liquids intended for storage cannot be exceeded, the safety coefficient γ_F of variable fluid action may be reduced from 1.50 to 1.35. Design rules which conflict with the Eurocodes shall not apply. If requirements of DIN EN 14015 and DIN EN 14620 conflict with requirements of the Eurocodes, the requirements of the Eurocode series apply. Any temperature-dependent change in the characteristic material parameters must always be checked for containers for the storage of liquefied gases with boiling temperatures below 0°C and taken into account if necessary. For containers for the storage of liquids at ambient temperature and higher temperatures, the characteristic material parameters must be reduced from an operating temperature of $> 50^\circ\text{C}$.

For the manufacture of containers for the storage of cryogenic liquefied gases, suitable materials that can withstand low temperatures must be used.

2. Evidence of earthquakes

When determining the design acceleration for the exceptional impact of an earthquake,

1. the following procedure must be followed for tanks up to damage consequence class 2 in accordance with Section A 1.2.9 of the MVV TB. Unless more accurate evidence is provided, the design spectrum $S_d(T)$ shall be determined for horizontal and vertical action according to DIN EN 1998-1/2010-12, Section 3.2.2.5
2. for tanks of the damage consequence class 3 in the ultimate limit state of the load capacity, the impact of an earthquake must be determined by means of a seismological site assessment.

The behaviour coefficient of a tank structure shall not be higher than $q = 1.0$. In the case of elevated tanks, a higher behaviour coefficient may be applied to the substructure in the seismic load case, depending on its dissipative properties.

To determine the hydrodynamic pressures, the load model according to DIN EN 1998-4:2007-01, Annex A, must be used.

The design of the cylindrical walls in the ultimate limit state of the load capacity shall be carried out in accordance with DIN EN 1993-4-2:2017-09, taking into account the provision in Clause 1 of this Annex.

3. Tests

In addition to DIN EN 1090-2:2024-09, at least the following tests shall be carried out on welded flat floor tank structures.

1. For tanks for the storage of liquids at ambient temperature and higher temperatures: Tests according to DIN EN 14015:2005-02, Section 19,
2. For tanks for the storage of cryogenic liquefied gases:
 - a) Water sample and gas pressure tests in accordance with DIN EN 14620-5:2006-12, with the water sample to be carried out at a reduced height,
 - b) Weld tests in accordance with DIN EN 14620-2:2006-12, Table 14; in which the scope of radiation/ultrasonic tests of weld seams on the shell of the liquid-bearing inner and outer tank shall be as set out in Table 15.

4. Correction

The equation (7.15) of DIN EN 1993-4-2:2017-09 is replaced by the equation

$$M_{r,ED} = \frac{r k \beta N_{2,ED}}{2(3 + \beta_2)}$$

.

The equation (7.20) of DIN EN 1993-4-2:2017-09 is replaced by the equation

$$M_{F,Ed} = \frac{p_{v,Ed} r^3}{2 \tan \alpha} + \frac{\beta}{\sin \beta} - 1$$

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Annex A 1.2.4/9

((unchanged))

Annex A 1.2.4/10

((unchanged))

Annex A 1.2.4/11

((unchanged))

Annex A 1.2.4.1/1

((unchanged))

Annex A 1.2.5/1

1 In addition to DIN EN 1995-1-1:2010-12, DIN EN 1995-1-1/A2:2014-07 and DIN EN 1995-1-1/NA:2013-08, the following application standards must also be observed in the planning, designing and execution:

DIN 20000-1:2025-04	Application of construction products in structures – Part 1: Wood-based materials in accordance with DIN EN 13986:2015-06
DIN 20000-3:2022-02	Application of construction products in structures – Part 3: Glued laminated timber and glued solid timber according to DIN EN 14080:2013-09 Sections 4.2 and 4.11: the protective agent is specified exclusively in accordance with Regulation (EU) No. 528/2012 (Biocide Products Regulation) in conjunction with the national implementing provisions
DIN 20000-4:2013-08	Application of construction products in structures – Part 4: Prefabricated structural members assembled with punched metal plate fasteners according to DIN EN 14250:2010-05
DIN 20000-5:2024-01	Application of construction products in structures – Part 5: Strength graded structural timber with rectangular cross section
DIN 20000-6:2015-02	Application of construction products in structures – Part 6: Dowel-type fasteners and connectors according to DIN EN 14592 and DIN EN 14545
DIN 20000-7:2022-02	Application of construction products in structures – Part 7: Structural finger jointed solid timber according to DIN EN 15497:2014-07 Sections 4.2 and 4.5: the protective agent is specified exclusively in accordance with Regulation (EU) No. 528/2012 (Biocide Products Regulation) in conjunction with the national implementing provisions.

1a In the absence of a technical best practice for the planning, designing and execution using structural elements with laminated veneer lumber in accordance with DIN EN 1995-1-1:2010-12 and DIN EN 1995-1-1/A2:2014-07 with DIN EN 1995-1-1/NA:2013-08, proof according to § 16a MBO¹ is required, especially for joints.

2 Re DIN EN 1995-1-1/NA:2013-08, Section 3.6 'Adhesives':

Wood structural elements with glued load-bearing joints may only be used if these joints have been manufactured with adhesives that are classified as type I according to DIN EN 301:2023-05 or DIN EN 15425:2023-05 in conjunction with DIN EN 16254:2023-05. This does not apply to joints of elements in wood-based materials.

Sentence 1 applies correspondingly to the manufacture of glued, load-bearing joints of timber materials on site. In the absence of technical best practice for the planning, designing and execution, proof as per § 16a MBO¹ is required when using timber construction products and bonded joints on timber structural elements that have been manufactured using adhesives for general usage in structural adhesive bonds according to EN 15274:2015² or repaired with these adhesives.

3 Regarding ETAs for 'Beams made of one to four finger-jointed timbers that are tested for tensile strength':

When designing beams, the test load coefficient must be set to a value of $k_{pl} = 1.0$.

4 In the absence of generally recognised technical best practice for the planning, designing and execution using kits for wood-concrete composite systems according to ETA, proof pursuant to § 16a MBO¹ is required.

5 Re. EAD 130022-00-03.04:

Solid wood and glued laminated timber with finger joints may be used in service class 1 and 2. Only 'beam log' type beams may be used.

6 Where load-bearing features of building structural elements or kits are specified in the form of calculated load-bearing values, mechanical strength or complete static calculations in the declaration of performance, these count as structural engineering verifications.

7 Re DIN EN 1995-2/NA:2021-06:

NCI NA.4.4.2, paragraph (NA.1) first indent, first sub-indent is replaced by the following: '- if suitable stainless steels in accordance with DIN EN 1993-1-4, Annex A in conjunction with DIN EN 1993-1-4/NA are used'

NCI NA.C.1, paragraph (NA.1) is replaced by the following: 'Components which cannot be replaced or can only be replaced with considerable effort, such as main beams, must be designed as protected components. This does not apply to timbers of durability class 1 in accordance with DIN EN 350.'

NCI NA.C.1, paragraph (NA.3) is replaced by the following: 'The upper surfaces of unprotected load-bearing components and end grain surfaces should be covered. This does not apply to plank coverings and timbers of durability of class 1 according to DIN EN 350.'

8 Re DIN 1052-10: 2024-12:

Sections 7.3.1 (3) and 7.7.1 (2) do not apply.

9 Re DIN EN 1995-1-1/NA:2013-08, Section NCI concerning 8.4 "Connections with metal fasteners"

Section NCI concerning 8.4 (NA.10) is replaced by the following:

For plasterboard-to-timber connections, only metal fasteners complying with DIN EN 14592 in conjunction with DIN 20000-6, or metal fasteners with an ETA in accordance with EAD 130019-00-0603, are permitted.

Section NCI Re 8.4 (NA.13) is replaced by the following:

Metal fasteners with an ETA in accordance with EAD 130019-00-0603 may, when subjected to load in the shaft direction, be regarded as equivalent to two profiled nails of load-bearing class 2 of the same diameter, as specified in Table NA.16, provided that the angle between the back of the fastener and the grain direction of the timber is at least 30°. This presupposes that at least the following services are declared for the metal fasteners: Dimensions, pull-out capacity at short and medium load-bearing time, pull-out capacity at long and continuous load-bearing time (depending on the application), characteristic value of the head pull-through parameter, minimum tensile strength of the wire, minimum and maximum thickness of the components to be joined, corrosion resistance, durability of the resin and fire behaviour. If the conditions are not met, they are to be regarded as smooth-shafted nails.

¹ under federal state law

² Implemented in Germany by DIN EN 15274:2015-06.

Annex A 1.2.6/1

1 Re DIN EN 1996-1-1:2013-02, Section 2.5:

The design of masonry structures on the basis of tests shall not apply.

2 On DIN EN 1996-1-1:2013-02, section 6.1.2.2:

To determine the design value for load-bearing capacity, calculate the reduction factor Φ_m in order to take account of thickness and eccentricity, in accordance with DIN EN 1996-1-1/NA:2019-12, NCI Annex NA.G.

3 In addition to DIN EN 1996-1-1:2013-02 and DIN EN 1996-1-1/NA:2019-12, the following standards must be observed:

DIN 20000-401:2017-01

Application of building products in structures, Part 401: Rules on the use of masonry bricks according to DIN EN 771-1:2015-11

DIN 20000-402:2017-01

Application of construction products in structures – Part 402: Rules on the use of sand-lime bricks according to DIN EN 771-2:2015-11

DIN 20000-403:2019-11

Application of construction products in structures – Part 403: Rules on the use of concrete masonry bricks as per DIN EN 7713:2015-11

DIN 20000-404:2018-04

Application of construction products in structures – Part 404: Rules on the use of masonry bricks according to DIN EN 771-4:2015-11

DIN 20000-412:2019-06

Application of construction products in structures – Part 412: Rules on the use of masonry mortar as per DIN EN 998-2:2017-02

DIN 18580:2019-06

Construction site mortar

4 In the absence of technical best practice for the planning, design and execution of ancillary components according to EN 845-1:2013+A1:2016¹, EN 845-2:2013+A1:2016² and EN 845-3:2013+A1:2016³, proof as per § 16a MBO⁴ is required.

5 When using sand-lime bricks with chamfered edges (chamfered bricks) in accordance with DIN EN 771-2:2015-11 in load-bearing masonry, their contact width must be ≥ 115 mm, and when used in facing shells of double-leaf masonry, it must be ≥ 90 mm. The contact width is the stone width minus the chamfer width(s).

6 Re DIN 20000-412, Table 3:

The values of the characteristic compressive strength of masonry according to DIN EN 1996-1-1/NA may only be applied for thin-bed masonry if the thin bed mortar according to EN 998-2 also has the following performances:

Dry raw density $\geq 1,300$ kg/m³

Maximum grain size ≤ 1.0 mm

Correctability time ≥ 7 min

Processability time ≥ 4 h

¹ Implemented in Germany by DIN EN 845-1:2016-12.

² Implemented in Germany by DIN EN 845-2:2016-12.

³ Implemented in Germany by DIN EN 845-3:2016-12.

⁴ under federal state law

Annex A 1.2.6/2

to DIN EN 1996-1-2 in conjunction with DIN EN 1996-1-2/NA and DIN EN 1996-1-2/NA/A1

For special formations (e.g. connections, joints, etc.), the rules of application according to DIN 4102-4:2016-05 must be observed, provided that the Eurocodes do not contain any information on this.

Vertical joints in fire walls necessitated by wall panels that do not span the full width of the room must be constructed in accordance with DIN 1053-4:2025-10, Section 7.1.5.

Annex A 1.2.6/3

- - deleted from MVV TB 2026/1 -

Annex A 1.2.6.4/1

Re DIN 18940:2023-06

If the conditions set out in Section 7.4 for potentially waiving the requirement for calculated verification are not met, verification of the sufficient lateral force-carrying capacity of bracing walls must be provided in accordance with DIN EN 1996-1-1/NA:2019-12, Equation NA.18. The design value of the shear load-bearing capacity shall be determined in accordance with DIN EN 1996-1-1/NA:2019-12, equation NA.19. In equation NA.4, unless otherwise specified by the manufacturer for the relevant stone-mortar combination, the characteristic adhesive shear strength $f_{vk0} = 0.02 \text{ N/mm}^2$ and in equation NA.5 for the calculated brick strength $f_{bt,cal}$ the value for high-hole bricks shall be used.

Instead of Section 7.5, the following applies: For buildings in significance categories I and II in accordance with DIN EN 1998-1/NA:2023-11, it is permissible to dispense with structural analysis to verify resistance to seismic loads in cases of very low seismicity. This can generally be assumed to be the case in areas with a spectral response acceleration of $S_{aP,R} \leq 0.5 \text{ m/s}^2$.

Annex A 1.2.7/1

Re DIN 18008-1

- 1 In the absence of technical best practice for the planning, design and execution of glued glass constructions using construction products with an ETA according to EAD 090035-00-0404, proof as per § 16a MBO¹ is required.
- 2 The requirements of DIN 18008-1:2020-05, DIN 18008-2:2020-05 and/or DIN 18008-4:2024-12 are to be observed when planning, designing and designing glass structures in windows and exterior doors.
- 3 Section 1, subsection 1 and 2, shall be amended as follows: 'This Part 1 of the DIN 18008 series of standards lays down the basic principles applicable to all parts of the series of standards.'

¹ under federal state law

Annex A 1.2.7/2

((unchanged))

Annex A 1.2.7/3

Re DIN 18008-2

1 The specifications of DIN 18008-2 for the use of VSG do not need to be applied for:

- ☐ glazed roof exits in roof rooms with a light glass surface (frame interior) of up to 0.4 m²,
- ☐ Glazing in cultivation greenhouses/commercial production greenhouses.

2 The text relating to B.2 'Vertical glazing' is replaced by:

Vertical glazing, which complies with the conditions set out in section 4.3, shall be deemed to be sufficiently rest-bearing on at least two opposite edges. The sufficient residual load capacity of the glazing structure shall not be unduly affected by drilling and cut-outs. In case of doubt, a test according to Annex B.1 of DIN 18008-1 shall be carried out. For glass balustrades type B according to DIN 18008-4 and for glazing made of laminated safety glass with the properties according to DIN 18008-1:2020-05, B.2, residual load capacity tests according to Annex B.1 of DIN 18008-1 are not required.

3 The minimum value of the reliability index of hot-bearing ESG in accordance with Section 4.3 can be achieved by a repeated biennial calibration according to E DIN EN 14179-1:2002-03 for each hot storage furnace combined with an annual review of the factory's production control by a third-party body with sufficient experience in testing production monitoring and testing of the calibration of the hot storage furnaces. The third party may, in the presence of appropriate measuring instruments and controls by the manufacturer, set a frequency for calibration which is different from the two years.

4 Section 6.1.4 is replaced by the following:

In the case of the following glazing units comprising multi-pane insulating glass (MIG) mounted on linear supports on all sides, as well as in the case of MIG glazing units mounted on linear supports on all sides resulting in comparable damage, evidence may alternatively be provided in accordance with 1) to 4):

a) MIG up to 0.4m²

b) MIG up to 2.0 m² with the following minimum glass pane thickness:

- ☐ 4 mm for monolithic single-pane glazing,
- ☐ 3 mm for monolithic single-pane glazing made from TVG or ESG,
- ☐ Laminated safety glass made from 2 mm single panes,
- ☐ 2 mm for monolithic single glass made of TVG or ESG in the space between the panes of three-pane insulating glass.

1) in accordance with DIN 18008-2:2020-05, Section 6.1.4, No. 1)

2) in accordance with DIN 18008-2:2020-05, Section 6.1.4, No. 2)

3) in accordance with DIN 18008-2:2020-05, Section 6.1.4, No. 3)

4) in accordance with DIN 18008-2:2020-05, Section 6.1.4, No. 4)

Annex A 1.2.7/4

- - deleted from MVV TB 2026/1 -

Annex A 1.2.8/7

The following applies to the use of stationary cylindrical steel tanks in accordance with EN 12285-2:2005¹:

- ☐ In flood plains, the tanks must be positioned in such manner that they cannot be reached by flood water.
- ☐ They must not be installed in earthquake-prone areas with seismic activity higher than 'very low' as defined in DIN EN 1998-1/NA:2023-11.

¹ Implemented in Germany by DIN EN 12285-2:2005-05.

Annex A 1.2.8/8

The following applies to the use of stationary thermoplastic tanks in accordance with EN 13341:2005+A1:2011¹:

- In flood plains, the containers must be positioned in such a way that they cannot be reached by flood water.
- They must not be installed in earthquake-prone areas with seismic activity higher than 'very low' as defined in DIN EN 1998-1/NA:2023-11.
- Fire protection requirements (fire duration) cannot be met by these tanks.

¹ Implemented in Germany by DIN EN 13341:2011-04.

Annex A 1.2.9/1

- - deleted from MVV TB 2026/1 -

A 2 Fire protection

A 2.1 General health protection requirements for structural works for reasons of fire protection

A 2.1.5 Exterior walls

Depending on the building class, the relevant requirements arise from § 28 MBO¹.

Non-load-bearing exterior walls are structural elements that do not transfer any vertical loads, other than their own weight, and are only designed to absorb dead weight and wind loads.

Openings in external walls of usage units to open corridors according to § 36(5) MBO¹ must have sealing doors. Openings of necessary stairwells or necessary landings adjacent to the open corridor must have smoke-tight and self-closing closures. Openings of exterior emergency stairwells on high-rise buildings towards open corridors must have smoke-tight and self-closing closures, openings in exterior walls of open corridors in high-rise buildings to utility units must have fire-retardant, smoke-tight and self-closing closures. In addition to the requirements of A 2.1.6, the requirements concerning the outdoor climate apply. The Technical Rule included in Seq. No A 2.2.1.2 must be observed in order to meet these requirements.

In derogation of the specifications in Section A 2.1.3.3.4 (re § 26 MBO¹), failure after no less than 30 minutes pursuant to DIN 4102-3:1977-09, Section 5.3.2 (reduced standard temperature curve) may occur for fire from the outside in.

If surfaces of exterior walls and exterior wall cladding, except for substructures in accordance with § 28(3) sentence 1 Clause 2, MBO¹, must be flame-resistant overall, then the same applies to the individual structural elements thereof. Where flame-retardant external wall cladding is installed over horizontally staggered sections of the façade, it must be ensured that the cladding remains secure under fire exposure to prevent large-scale detachment.

For flame-resistant exterior wall cladding, the criteria for the fire exposure case as defined in DIN 4102-20:2017-10, Section 4.2, shall be observed.

Exterior wall cladding in the form of an external thermal insulation composite system (ETICS) with EPS insulation materials meets the flame-retardant requirements if stable and dimensionally stable, non-combustible constructions are arranged at existing openings in the exterior wall in the area of the lintels above the opening, even in the event of a fire. This can be dispensed with if horizontally arranged, stable and dimensionally stable, non-combustible constructions are arranged even in the event of fire exposure.

For exterior wall cladding designed as a thermal insulation composite system with EPS insulating materials, fire exposure from outdoors directly affecting the lower area of the façade must also be taken into account. For this purpose, suitable non-combustible constructions must be provided so that the protection objective pursuant to § 26(1) (1) MBO¹ is fulfilled, or the criteria according to DIN 4102-24:2022-12 must be complied with.

¹ under federal state law

If cladding with normal flammability building materials is permitted for exterior building walls, easily flammable building materials may only be used if they are permanently connected in conjunction with other building materials pursuant to § 26(1) MBO¹. § 26(1)(2)(2) MBO¹ is not applicable to exterior wall cladding if accessibility is ensured or there is risk of damage.

In the case of exterior walls with rear-ventilated cladding which have cross-storey cavities or which pass over firewalls, other than those referred to in Section 7 of the Technical Rule referred to in Seq. No. A 2.2.1.4, supplementary precautions shall be taken to limit the spread of fire even if they consist of non-combustible building materials and the Technical Rule referred to in Seq. No. A 2.2.1.6 shall be complied with.

For external wall cladding of wood or wood-based materials for buildings of building classes 4 or 5, Section 7 of the Technical Rule referred to in Seq. No. A 2.2.1.4 shall be observed.

A 2.1.15 Installations and construction products of technical building equipment

A 2.1.15.3 Fire control system for lifts

The fire control system must ensure that lifts immediately go to a storey with exits to the outside, or the next higher or lower storey that is not affected by the fire and shut down there with the doors open.

Fire control systems shall consist at least of automatic fire detectors for fire detection on each storey, equipment for transmitting the fire alarm and the evaluation and control system for the lift. It is also permissible for the fire control system to be triggered by an automatic fire alarm system.

A 2.1.15.5 Firefighter lifts

Firefighter lifts are used in particular in exceedingly high buildings to support effective firefighting operations. Firefighter lifts must remain usable by the fire brigade in case of fire.

Therefore, no other lifts may be arranged in the driving shafts of firefighter lifts. Firefighter lift shafts together with landing doors must remain safely operable for a sufficient length of time in case of fire, in accordance with A 2.1.13. Only the necessary technical equipment and systems required to operate the firefighter lift may be located in lift shafts. Firefighter lifts may only be accessible via a vestibule. The walls and ceilings of the vestibule must remain enclosed and non-combustible for a sufficient length of time in case of fire. The barriers to necessary openings in vestibules must remain enclosed and smoke-proof for a sufficient length of time. The vestibules may only be accessible via necessary corridors. To avoid the lift shafts being affected by smoke, the vestibules and lift shafts must be kept free of smoke in case of fire using pressure ventilation systems. Firefighter lifts must have automatic fire detection devices which can be used to shut down lifts outside the fire area in case of fire (fire-mode control system) and can only be started up again by the fire service (fire service circuit). The fire control system is triggered by an automatic fire alarm system.

Lifts may only be used to transport people and goods if there is no fire.

Firefighter lifts must have a power supply and remain operationally reliable for a sufficient length of time if the general power supply fails (emergency power supply).

Electrical circuit systems needed to operate firefighter lifts must be designed or separated by structural elements so that the safety systems remain operational for a sufficient length of time in the event of fire.

All necessary information for planning, design, and execution must be presented in the building documentation, and if necessary, in the fire protection certificate.

¹ under federal state law

A 2.1.15.6 Radio communication systems for the fire brigade

Indoor radio systems for the fire brigade are used to support effective firefighting operations. The systems are intended to support radio communications between fire service crews in the building structure and with fire service crews present immediately outside the building structure during operations, if this is not sufficiently possible due to the spatial configuration, dimensions of the building or because the properties of the building structure inhibit radio communication with the radio communication devices carried by the fire brigade.

Whether there is a requirement for internal radio communication system in a specific individual case can only be determined and documented on the largely completed property by carrying out radio field measurements in coordination with the fire protection service. Radio field measurement – and hence proof of sufficient radio coverage – shall be limited to the following cases:

N o.	Structural facility	Proof of radio provision
1	Hospitals and nursing homes	• more than 4 m below ground surface* or • more than 22 m above ground surface* or • more than 10,000 m² gross floor area
2	Prisons, including forensics	• more than 4 m below ground surface* or • more than 13 m above ground surface* or • more than 10,000 m² of gross floor area
3	Meeting places pursuant to § 2(4)(7) of the MBO ¹	• more than 7 m below ground surface* or • more than 5,000 visitor seats
4	Accommodation establishments pursuant to § 2(4)(8) of the MBO ¹	• more than 7 m below ground surface* or • more than 10,000 m² of gross floor area (excluding ground-floor areas)
5	Retail outlets pursuant to § 2(4)(4) of the MBO ¹	• more than 7 m below ground surface* or • more than 10,000 m² of gross floor area (excluding ground-floor areas)
6	High-rise building as defined in § 2(4)(1) of the MBO ¹	• more than 7 m below ground surface* • more than 30 m above ground surface* or • more than 22 m above ground surface* with an internal safety stairwell
7	Large car parks	see § 18(4) of A 2.2.2.1 • more than 4 m below ground surface* or • more than 22 m above ground surface*
8	Special buildings, unless already listed	• more than 2 basements or • more than 7 m below ground surface*
* ground surface = Height in the sense of column 3 is the measurement of the top edge of the floor of the highest or lowest storey relative to the average ground level (ground surface).		

These shall consist at least of transmission, reception and transmission devices.

The building radio system must ensure that the essential parts of a building are covered by the radio signal. Individual ancillary rooms may be excluded, in consultation with the fire safety authority, if radio coverage is inadequate.

Building radio systems must be supplied with electricity for a sufficiently long time even in the event of a failure of the general power supply and remain functional.

Electrical circuit systems necessary for the operation of indoor radio systems for power supply must be provided or separated by structural elements in such a way that the systems remain operational in the event of fire for a sufficient period of time. The Technical Rule referred to under Seq. No. A 2.2.1.8 must be observed.

¹ under federal state law

Note:

For buildings not covered by the thresholds set out in the table, building regulations generally do not require proof of adequate radio coverage. Adequate mobile phone coverage for fire service personnel can usually be ensured in these types of buildings through the use of mobile repeaters or the actions of the safety team. Coordination with the fire protection service is recommended.

A 2.2 Technical requirements concerning planning, designing and executing and technical requirements of structural elements pursuant to § 85a(2) MBO [in accordance with federal state law]

Seq. No.	Planning, designing and execution requirements pursuant to § 85a(2) MBO [in accordance with federal state law]	Technical rules/version	Further measures pursuant to § 85a(2) MBO [in accordance with federal state law]
1	2	3	4
A 2.2.1	Technical requirements concerning planning, designing and executing and technical requirements of structural elements pursuant to § 85a(2) MBO		
A 2.2.1.2	Construction products and designs	Building approval requirements, classification, use of construction products, use of designs: 2026-04 ³ (see Annex 4)	
A 2.2.1.4	Highly fire-retardant components in accordance with § 26(2), second sentence, point 3 of the MBO ¹ constructed from timber; exceptionally highly fire-retardant and exceptionally fire-resistant components within the meaning of § 26(2), fourth sentence of the MBO ¹ constructed using timber panel construction and solid timber construction, External wall cladding made of timber and timber-based materials in accordance with § 28(5), second sentence, of the MBO ¹	Model Guideline on fire protection requirements for structural elements and exterior wall coverings in wood construction – (September 2024) ^{1,3}	Annex A 2.2.1.4/ ¹
A 2.2.1.6	Rear-ventilated, external-wall cladding	Rear-ventilated external wall cladding: 2026-04 (See Annex 6)	
A 2.2.1.14	Storage of used tyres and plastic waste	model fire protection guidelines for the storage of used tyres and plastic waste in waste disposal facilities (Model plastic waste storage guidelines – MKLR), (March 2023) ^{1,3}	
A 2.2.1.17	Normal flammability glazing	Use of normally flammable glazing in external walls, with the exception of external wall structures with inter-storey cavities or air spaces: 2025-03 ³ (see Annex 18)	
A 2.2.2	Garages and special buildings		
A 2.2.2.1	Garages ⁴	Model Regulation on the Construction and Operation of Garages and Parking Spaces (Model Garage and Parking Space Regulation M-GarVO) (Edition of 14 July 2022, last amended by a resolution of the Building Control Committee dated 10 December 2024) ^{1,3}	Annex A 2.2.2.1/1
A 2.2.2.5	Schools ⁴	Model Guideline on building authority requirements for schools (Muster-Schulbau-	

		Richtlinie - MSchulbauR) (September 2025) ^{1,3}	
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Annex A 2.2.1.4/1

Note: The scope of application of the Technical Rule according to A 2.2.1.4 (MHolzBauRL) also includes components with reduced and without fire protection cladding according to Section 4.3 of the Technical Rule according to A 2.2.1.4.

Classification reports in accordance with Sections A 1.2 and A 1.5 of the Technical Rule according to A 2.2.1.4 shall be issued by a body notified in accordance with Article 39 in conjunction with Annex V.3 to Regulation (EU) 305/2011 for the European test standard referred to in that Technical Rule. Until 31.12.2025, classification reports based on tests in accordance with DIN EN 1365-1:2013-08 may also be issued by a testing body recognised under § 24 MBO¹ for designs in accordance with C 4.1 or C 4.1.1 of the Technical Building Regulations.

Classification reports based on previous standards shall continue to apply, provided that the assessment bases and classification criteria in those standards have not changed significantly.

DIN EN 1995-1-2:2010-12, Table 3.1 shall be used to determine the combustion rate. Combustion shall be determined in accordance with FprEN 1995-1-2:2024-08.

The protective effect of fire-resistant cladding in accordance with Section 3.4, sentence 4, of the Technical Regulation under A 2.2.1.4 may be demonstrated as follows:

1. Proof based on Annex A 1.5 to the technical rule in accordance with A 2.2.1.4:

³ For building inspection requirements in this Technical Building Regulation, deviations pursuant to § 85a(1)(3) MBO are not permitted; deviations from building inspection requirements are permitted only in accordance with § 67 MBO.

§ 16a(2) and § 17(1) MBO are not affected.

¹ under federal state law

⁴ Regulations for the fulfilment of other basic requirements for structural works must be observed.

Where verification is provided by a classification report in accordance with DIN EN 13501-2, based on a test carried out in accordance with DIN EN 13381-7, the minimum thickness of the overall structure specified in the classification report in accordance with DIN EN 13381-7 shall not be taken into account. This classification report serves solely to certify that the cladding is effective in terms of fire protection, with a rating of $t_{ch, frame-test-specimen}$. The minimum thickness of the overall structure in accordance with Section A 1.2 of the Technical Regulation shall be decisive for the assessment of the fire resistance duration.

2. Alternatively, demonstration by large-scale fire testing:

The protective performance may be demonstrated by means of large-scale fire tests in accordance with DIN EN 1365-1:2013-08 or DIN EN 1365-2:2015-02, in each case in conjunction with DIN EN 1363-1:2020-05, provided that all of the following requirements are met:

- a) The arrangement of the thermocouples inside the test specimen at measurement points A and B must comply with the requirements of the relevant test standard, as set out in sections 9.3.3 and 9.3.4 respectively, and Figure 9 of DIN EN 13381-7:2019-09.
- b) The classification report according to DIN EN 13501-2 must be drawn up on the basis of the respective large-scale test; the load applied in the event of fire must be specified.
- c) The evaluation of the measuring points with the determination of the value $t_{ch, frame-test-specimen}$ in accordance with Section 13.2.2 of DIN EN 13381-7 shall be included as an additional indication in the classification report.

Subject to the evidence provided under point 2, the fire resistance of the structure and the effectiveness of the fire protection cladding shall be deemed to have been demonstrated, provided that the requirements set out in subparagraphs (a) to (c), as well as the relevant requirements of the Technical Rule in accordance with A 2.2.1.4 regarding fire resistance duration and protection against ignition of the combustible parts of the structural element, are met accordingly.

¹ under federal state law

Annex A 2.2.2.1/1

When applying § 7(3), first sentence, point 2 of the model regulation on the construction and operation of garages and parking spaces (Model Garage and Parking Space Regulation, M-GarVO) referred to under serial number A 2.2.2.1, the following should be noted:

- Garage storey ceilings shall also be designed in such a way that the spread of fire caused by liquid fires is effectively prevented. The requirement shall be deemed to be fulfilled if:
 - Ceiling edges, ceiling and connection joints, and remaining cavities of penetrations are sealed in a non-combustible and liquid-tight manner, e.g. with cement mortar or concrete, or with circumferential and opening-free flashings made of non-combustible materials with a height of at least 30 mm,
 - Gutters and floor drains in ceilings, with the exception of seals and sealants, are made of non-combustible building materials, and
 - Pipes passing through the garage storey ceilings must be made of non-combustible materials; sealants, jointing materials and pipe coatings up to 2 mm thick may be made of combustible materials.
 - For parking spaces less than 2.50 m wide, at least 0.20 m wide separating strips shall be installed to prevent the spread of the fire.
 - By way of derogation from § 9(2) M-GarVO, spatial partitions are not permitted in order to reduce fire loads and to support effective firefighting operations. This does not apply to parking spaces for bicycles, trailers and small electric vehicles under the M-GarVO and areas for parking necessary equipment (e.g. sweeping machines); partitions must consist of non-combustible grid walls only.
 - By way of derogation from § 21(2)(2) M-GarVO, no combustible substances may be placed outside motor vehicles.
- The requirements for a robust load-bearing structure shall be deemed to be satisfied for composite structures of non-combustible construction materials which are statically constructed in such a way that, in the event of the failure of structural elements in the event of local fires, there is no need to assume a sudden collapse of the main structure outside the affected fire zone. This shall normally be deemed to be fulfilled, provided that:
 - columns must be at least fire-retardant and, where the building has a sufficient number of storeys, must extend continuously over at least three storeys; columns on open external walls and external ramps (external columns) are exempt from the fire-retardant requirement,
 - mechanical connections between beams and supports have the fire resistance duration of the supports, and
 - ceilings and beams are connected to each other by a mechanical connection (e.g. continuous ceilings, additive ceilings or composite ceilings).

A 3 Hygiene, health and the environment

A 3.2 Technical requirements for the planning, designing and execution of buildings and parts thereof pursuant to § 85a(2) MBO [in accordance with federal state law]

Seq. No.	Planning, designing and execution requirements pursuant to § 85a(2) MBO [in accordance with federal state law]	Technical rules/version	Further measures pursuant to § 85a(2) MBO [in accordance with federal state law]
1	2	3	4
A 3.2.1	Health protection requirements for structural works	ABG - Health protection requirements for structural works: 2026-02 (see Annex 8)	
A 3.2.4	Appraisal and restoration of building materials and components in structures contaminated with PCB	Requirements relating to polychlorinated biphenyls (PCBs) from contaminated building materials and from contaminated building components in buildings: 2026-04 (See Annex 19)	

Annex A 3.2/1

- - deleted from MVV TB 2026/1 -

A 5 Sound insulation

A 5.2 Technical requirements for the planning, designing and execution of buildings and parts thereof pursuant to § 85a(2) MBO [in accordance with federal state law]

Seq. No.	Planning, designing and execution requirements pursuant to § 85a(2) MBO [in accordance with federal state law]	Technical rules/version	Further measures pursuant to § 85a(2) MBO [in accordance with federal state law]
1	2	3	4
A 5.2.1	Sound insulation in buildings	DIN 4109-1:2018-01	Annex A 5.2/1 Annex A 5.2/2 Annex A 5.2/3

Annex A 5.2/1

Re DIN 4109-1

1 Re Section 7.1:

Where the total rated sound insulation value $R'_{w,ges}$ must be > 50 dB, or with a reference external noise level $L_a > 80$ dB, the requirements shall be determined for each individual case by the building supervisory authority.

2 Re Section 8, Table 8:

The requirements in Table 8, lines 3.3, 3.4, 5.1 and 5.2 need to be satisfied only if the rooms requiring protection are living rooms or bedrooms in accordance with DIN 4109-1:2018-01, Section 3.16.

3 Re Sections 7, 8 and 9:

For buildings classified as per Table 9, lines 3 and 4, compliance with the required sound pressure level must be demonstrated by submitting measurement results. The same applies to compliance with the required sound insulation value for structural elements pursuant to Table 8 and for exterior structural elements that are subject to the requirements of Table 7.1, provided that the total evaluated sound insulation value $R'_{w,ges}$ must be ≥ 50 dB, or alternatively with a reference external noise level $L_a > 80$ dB. These measurements are to be carried out in accordance with DIN 4109-4:2016-07 by building acoustics testing centres, which are listed in a register of 'recognised sound insulation testing centres' at the Association of Material Testing institutes (VMPA)¹.

4 The informative Annexes A and B do not apply.

5 Re Section 7:

Proof of airborne sound insulation of external components is required if

a) the development plan stipulates that precautions must be taken to protect the building from outside noise (§ 9(1) (24) of the Building Code, BauGB) or

b) even after the intended noise reduction measures have been taken, the 'relevant external noise level' (Section 4.4.5 of DIN 4109-2:2018-01) is equal to or greater than

- ☐ 61 dB(A) in living spaces in apartments, bedrooms, classrooms and the like, and in bedrooms in hospitals and sanatoriums
- ☐ 66 dB(A) in offices 6.

6 Re Section 5.1, Table 2:

By way of derogation from Table 2, the following impact sound insulation requirements shall apply:

Table 2, row 7	Ceilings beneath patios and loggias above living areas	$L'_{n,w} \leq 53$ dB
Table 2, row 8.1	Balconies	no requirement
Table 2, row 11	Ceilings under house corridors	$L'_{n,w} \leq 53$ dB ²
Table 2, row 12	Stairways and landings	$L'_{n,w} \leq 56$ dB ³

7 Regarding Section 4, Table 1, Section 9, Table 9 and Section 10, Table 10:

Notwithstanding Section 4, Table 1, Row 5, the standard sound pressure level $L_{AF,max,nT}$ shall be used as the characteristic parameter for noise from building services equipment. The maximum permissible A-weighted sound pressure levels specified in Section 9, Table 9, rows 1 and 2, and in Section 10, Table 10, row 1, are regarded as the maximum permissible standard sound pressure levels $L_{AF,max,nT}$. For rooms with a volume $< 31.25 \text{ m}^3$, values for $L_{AF,max,nT}$ are permitted, each of which is 1 dB higher.

¹ Association of Material Testing Institutes (VMPA) e.V., Littenstraße 10, 10179 Berlin (www.vmpa.de)

² There are no requirements for hallways in the basement if there are no rooms requiring protection adjacent to or below them.

³ No requirements for stairwells in buildings with no more than two dwellings

Annex A 5.2/2

Evidence of sound insulation must be documented in accordance with DIN 4109-2:2018-01 in conjunction with DIN 4109-31:2016-07, DIN 4109-32:2016-07, DIN 4109-33:2016-07, DIN 4109-34:2016-07, DIN 4109-34/A1:2019-12, DIN 4109-35:2016-07, DIN 4109-35/A1:2019-12 and DIN 4109-36:2016-07.

For structural elements in solid construction, Supplement 1 to DIN 4109:1989-11 may be used. Where masonry made of perforated bricks is used, this only applies to masonry that complies with the requirements of DIN 4109-32:2016-07, Section 4.1.4.2.1. Supplement 1 to DIN 4109:1989-11, however, may not be used as proof for solid stairs.

Re DIN 4109-2

The informative Annexes B, C and D do not apply.

Re DIN 4109-36

The informative Annex A does not apply.

Annex A 5.2/3

1 In the absence of technical best practice for the planning, designing and execution of structural elements for which the input data for computational proof of sound protection in accordance with DIN 4109-2:2018-01, Section 5.1, are to be determined by building acoustics tests, as there are no characteristic values under DIN 4109-32:2016-07 to DIN 4109-35:2016-07, proof in accordance with § 16a MBO¹ is required. This excludes types of construction using construction products with an ETA as defined in numbers 2 and 3.

2 In the case of structural elements with granulated polystyrene insulating materials and binder mixture with an ETA based on EAD 040635-00-1201 or EAD 040635-01-1201 the following applies:

The construction product may be used for impact sound insulation under unheated floating screeds either if a maximum difference in relative compression of 5 % is observed for pressure and temperature deformation or the declared value of the compressive stress at 10 % compression is at least 30 kPa. In the latter case, dimensional stability at defined temperature and moisture conditions must be shown.

The sound protection shall be demonstrated in accordance with DIN 4109-2:2018-01 with the nominal value of the impact noise reduction ΔL_w specified for the design structure.

With regard to design and execution, DIN 4109-34:2016-07, Section 4.5.3 is to be observed.

3 For the execution of structural elements with rubber fibre mats and/or polyurethane (PU) foam mats for impact sound insulation with an ETA based on EAD 040048-00-0502 or EAD 040048-01-0502 or an ETA based on EAD 040049-00-0502 or EAD 040049-01-0502, respectively:

The construction products may be used for impact sound insulation on solid ceilings under floating screeds if the maximum difference in relative compression for pressure and temperature deformation is 5 %. The sound protection shall be demonstrated in accordance with DIN 4109-2:2018-01 with the nominal value of the impact noise reduction ΔL_w specified for the design structure.

With regard to design and execution, DIN 4109-34:2016-07, Section 4.5.3 is to be observed.

¹ under federal state law

Annex A 5.2/4

((unchanged))

B 2 Technical regulations for special constructions and components pursuant to § 85a(2) of the MBO [in accordance with federal state law]

Seq. No.	Planning, designing and execution requirements pursuant to § 85a(2) MBO [in accordance with federal state law]	Measures/specifications pursuant to § 85a(2) MBO [in accordance with federal state law]
1	2	3
B 2.2 Building elements		
B 2.2.1 Structural elements for walls, roofs, ceilings and façade constructions		
B 2.2.1.5	External thermal insulation composite systems	External Thermal Insulation Composite Systems (ETICS) with plaster layer with ETA: 2026-04 (See Annex 11)
B 2.2.1.6	In-situ concrete walls made of formwork components	Application rules for non-load-bearing permanent formwork kits/systems and formwork components for the construction of in-situ concrete walls: 2026-04 (see Annex 12)
B 2.2.5 Structural elements for sealing structural works		
B 2.2.5.1	Roof waterproofing made of reinforced bitumen sheets	DIN/TS 20000-201:2025-02 Section 5.1
B 2.2.5.2	Roof seals made of plastic and elastomer sheets	DIN/TS 20000-201:2025-02 Section 5.3
B 2.2.5.8	Surface waterproofing for containers and wet rooms consisting of liquid-applied waterproof products in conjunction with ceramic tiles and slab surfaces	Annex B 2.2.5.8/1
B 2.2.5.10	Roof waterproofing systems made of substances to be applied in liquid form	Annex B 2.2.5.10/1
B 2.2.5.11	Roof sealing systems made of mechanically secured roof sealing membrane	Roof waterproofing sheet as per DIN TS 20000-201:2025-02 Section 5.1 or 5.3
B 2.2.5.12	Waterproofing walls and floors in wet rooms	Annex B 2.2.5.12/1
B 2.2.5.13	Bridge and parking deck waterproofing made of substances to be applied in liquid form	Annex B 2.2.5.13/1
B 2.2.5.14	Roof waterproofing made of liquid and strip-type substances in conjunction	Annex B 2.2.5.14/1
B 2.2.5.16	'Waterproofing of vertical walls in bitumen wall waterproofing with single-component bitumen-polyurethane mixture' is deleted from MVV TB 2026/1	
B 2.2.5.17	Joint seals with coated joint plates in waterproof concrete structures	Annex B 2.2.5.17/1
B 2.2.5.19	Building waterproofing consisting of flexible mineral polymer-modified thick coatings	Annex B 2.2.5.19/1
B 2.2.5.20	Joint seals with swellable joint tapes in waterproof concrete structures	Annex B 2.2.5.20/1

Annex B 2.2.5/1

((unchanged))

Annex B 2.2.5/3

((unchanged))

Annex B 2.2.5/4

((unchanged))

Annex B 2.2.5/5

((unchanged))

Annex B 2.2.5/6

((unchanged))

Annex B 2.2.5/7

((unchanged))

Annex B 2.2.5/9

((unchanged))

Annex B 2.2.5/10

((unchanged))

Annex B 2.2.5.8/1**Products within the scope of EN 14891**

The products may be used for waterproofing wall and floor surfaces and swimming pools that are located outdoors and not connected to buildings.

Annex B 2.2.5.10/1

Roof waterproofing systems comprising a combination of liquid and membrane-based materials, with a declaration of performance based on an ETA

Seq. No.	Properties	Minimum required performance					
		Unused roof areas according to stress				Used roof areas	
		High mechanical and high thermal stress	High mechanical stress and moderate thermal stress	Moderate mechanical stress and high thermal stress	Moderate mechanical and moderate thermal stress	Directly utilised	Indirectly utilised
1	Climate zone	M	M	M	M	S	M
2	Durability	W2	W2	W2	W2	W3	W3
3	Loading capacity P	P4	P4	P3	P3	P4	P4
4	Minimum surface temperature	TL 3	TL 2	TL 3	TL 2	TL 3	TL 2
5	Maximum surface temperature	TH 3	TH 2	TH 3	TH 2	TH 3	TH 2
6	Minimum film thickness	With inclination $\geq 2\%$: 1.5 mm with inclination $< 2\%$: 2.0 mm				2.0 mm	2.0 mm
7	Content and release of hazardous substances	No negative effects on soil and groundwater according to Annex 10 to MVV TB					

For extensively and intensively green areas, the waterproofing must be root-resistant, or protection against root penetration must be ensured by other means.

The average layer thickness applied may not be below the required minimum layer thickness and no individual value must be more than 20 % below the minimum layer thickness.

Annex B 2.2.5.12/1

Kits for waterproofing walls and floors (and, where applicable, swimming pools, with a declaration of performance based on an ETA)

For wet room waterproofing in application areas W2-I and W3-I according to DIN 18534, kits with an ETA must specify at least the performances listed in the table.

No	Properties	Minimum required performance		
		Liquid to be processed	Sheet-form sealing materials	Panel-form sealing materials
1	Fire behaviour	Grade E	Grade E	Grade E
2	Content and release of hazardous substances	The content may not reach or exceed the values stated in Section 2 of Annex 8 to MVV TB.	The content may not reach or exceed the values stated in Section 2 of Annex 8 to MVV TB.	The content may not reach or exceed the values stated in Section 2 of Annex 8 to MVV TB.
3	Water vapour permeability	Value declaration	Value declaration	Value declaration
4	Watertightness	Watertight	Watertight	Watertight
5	Crack-bridging ability	Proof only for crack-prone underlay: ≥ 0.4 mm	Proof for walkways bonded to the underlay and only for crack-prone underlay: ≥ 0.4 mm	Proof for thin and brittle plates bonded to the underlay and only for crack-prone underlay: ≥ 0.4 mm
6	Adhesive pull strength	≥ 0.5 MPa	≥ 0.3 MPa	≥ 0.3 MPa
7	Scratch resistance	Proof only for systems without use layer: scratch-resistant	Proof only for systems without use layer: scratch-resistant	Proof only for systems without use layer: scratch-resistant
8	Joint bridging ability	Certificate only for underlay with seam: Test passed/joint bridging	Certificate only for underlay with seam: No testing required or test passed / joint bridging	Certificate only for underlay with seam: No testing required or test passed / joint bridging
9	Impermeability at joints	Proof not provided for	Proof not provided for	Watertight
10	Watertightness at penetrations	Test passed / watertight	Test passed / watertight	Test passed / watertight
11	Temperature resistance	Rating category 2: Adhesive pull strength ≥ 0.5 MPa	Change in tensile strength and elongation: $\leq 20\%$	Change in flexural strength: $\leq 20\%$ when the test temperature is entered
		Additional proof for crack-prone underlay:		
		Crack bridging ≥ 0.4 mm or for underlay with seam: Proof of joint bridging ability		
12	Water resistance	Adhesive pull strength: ≥ 0.5 MPa	Adhesive pull strength: ≥ 0.3 MPa	Proof not provided for
13	Alkali resistance	Adhesive pull strength: ≥ 0.5 MPa	Change in tensile strength and elongation: $\leq 20\%$ after storage at 50°C for 16 weeks	Adhesive pull strength: ≥ 0.3 MPa
14	Thickness of waterproofing layer	≥ 2.0 mm for mineral waterproofing slurries	≥ 0.20 mm with wearing surface	≥ 5 mm
		≥ 1.0 mm for reactive resin systems	≥ 0.70 mm without wearing surface	
		≥ 0.5 mm for dispersions		

Polymer dispersions may only be installed on wall surfaces.

Coating systems used as waterproofing in accordance with the ETA for liquid-applied waterproofing for walls and floors (coating systems for walls without a wear layer) may only be used in water exposure classes W1-I.

Waterproofing systems in accordance with the ETA for kits comprising a polymer waterproofing membrane, intended for waterproofing walls and floors in wet rooms and swimming pools, both indoors and outdoors, for which Scope B is specified in the ETA, may also be used as tank waterproofing within the meaning of DIN 18535 up to a water depth of 10 m.

Waterproofing systems comprising liquid-applied materials for bridge and car park deck waterproofing, with a declaration of performance based on an ETA

Extended fields of use compared with EAD:

(I) Traffic areas for vehicular traffic with very high load such as bridges, court cellar ceilings and access ramps for all types of vehicles.

Products in usage category (A: A.1-A.4) may be used.

(II) Traffic areas for vehicular traffic with low and high load such as bridges for pedestrians and cyclists and courtyard cellar ceilings, parking levels and access ramps thereto with vehicular traffic up to 160 kN.

Products in usage category (A) or (B) may be used.

Products in usage category (B) may only be used in conjunction with a surface layer.

Seq. No.	Properties	Proof provided for test categories (P,S,T)	Minimum required performance
1	Adhesive pull strength to the base	P1, S0, T5	> 1.3 MPa (initial value)
	Exposure to heat and thermal ageing	P1, MA/LMA/CBM, T5	> 1.3 MPa (for A.1, A.2, A.3)
	Freeze-thaw cycle	P1, FT, T5	> 1.3 MPa and <30 % drop from initial value
	Processing climate	P2 _{min} , S0, T5	> 1.3 MPa and <30 % drop from initial value
	Damp concrete	P3, S0, T5	> 1.3 MPa and <30 % drop from initial value
	Construction joint	P4, S0, T5	> 1.3 MPa and <30 % drop from initial value
	Section joint	P4, S0, T5	> 1.3 MPa and <30 % drop from initial value
2	Crack bridging ability	P1, MA/LMA _{max} /CBM, HA, T2/T1	Pass (for A)
		P1, UV, T2/T1	Pass (for B)
3	Resistance to compaction of rolled asphalt	P1, CBM, T5	Pass (for A.1)
4	Resistance to heat exposure		
	Pull strength/elongation behaviour	P1, S0, T5	≥ 3.0 MPa/≥ 350 % (initial value)
	Change in pull strength, change in elongation behaviour	P1, MA/LMA _{max} /CBM, T5	< 30 % deviation from initial value (for A.1, A.2, A.3)
5	Resistance to perforation	P1, S0, T5	Pass with I ₄ (for B)
6	Assembled system shear strength	P1, LMA _{min} , T5	> 0.45 MPa (for A.1, A.2, A.3) (initial value)
		P1, LMA _{min} , FT, T5	> 0.45 MPa and < 20 % drop from initial value (for A.1, A.2, A.3)
7	Watertightness	P1, S0, T5	Watertight (for A and B)
		P1, UV, T5	Watertight (for B)
8	Adhesive pull strength to the protective layer	P1, MA/LMA _{min} /CBM, T5	> 0.4 MPa (for A.1, A.2, A.3) (initial value)
		P1, MA/LMA _{min} /CBM, FT, T5	> 0.4 MPa (for A.1, A.2, A.3) < 30% drop from initial value
9	Slip resistance	Declared value	> 55 (for B)
10	Compatibility of materials with active substances:	P1, T5	
	Water	Change in micro-hardness	> -15 IHRD
	Alkali	Change in mass	< 2.5%*
		Amendment to the	Value > -7 IHRD + Value after
		Microhardness	Water content < 0.5%*

		Change in mass	
	Oil, petrol, diesel, de-icing salt, bitumen	–	pass
		Change in micro-hardness	-16 IHRD < value < 6 IHRD
11	Durability aspects:		
	Pull strength/deformation behaviour	P1, S0, T5	≥ 3.0 MPa/≥ 350 % (initial value)
	Resistance to thermal ageing	P1, HA, T5	< 30% deviation from the initial value (for A)
	Change in pull strength, change in elongation behaviour		
	Resistance to UV radiation	P1, UV, T5	< 30% deviation from the initial value (for B)
	Change in pull strength, change in elongation behaviour		
	Resistance to wear and tear	Declared value	Pass (for B)
12	Usability aspects:		
	Resistance to sagging	Declared value for change in mass declared values	Pass (≤ 10.0 %) 2.0 mm/6.0 mm
	Minimum layer thickness/maximum layer thickness		
* The combined impact of water, temperature and alkali should be taken into account when determining change in mass.			

Annex B 2.2.5.14/1

Roof waterproofing systems comprising liquid and membrane-based materials, accompanied by a declaration of performance based on an ETA

Se q. No.	Properties	Minimum required performance
1	Fire behaviour	Grade E
2	Watertightness	pass
3	Resistance to mechanical damage	Resistant to mechanical damage (P4)
4	Fatigue-resistance	Resistant to fatigue
5	Resistance to low and high surface temperatures	Resistant to low (-20°C) and high (+60°C)
6	*useful life	25 years
7	Resistance to thermal ageing	Resistant to thermal ageing
8	Resistance to water ageing	Resistant to water ageing
9	Resistance to root penetration	Resistant to rooting (for green roofs only)
10	Effects from manufacturing conditions	no effects

Annex B 2.2.5.17/1

Coated joint sheets for joint sealing in waterproof concrete constructions with a declaration of performance based on an ETA

The field of application demonstrated by the ETA and the permitted water pressure are to be observed.

Se q. No.	Properties	Minimum required performance
1	Fire behaviour	At least Class E
2	Watertightness when installed	Field of application a), b) or c) and permitted water pressure ¹
3	Adhesive pull strength as delivered	Value
4	Adhesive pull strength after thermal ageing	Deviation from 3 < 20 %

5	Durability	If required < 3 %
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¹ For sheets with a height of ≤ 100 mm, the permissible water pressure is limited to a maximum of 1 bar

Flexible, polymer-modified mineral-based thick coatings for building waterproofing, with a declaration of performance based on an ETA

The products may be used to waterproof components in the following water exposure classes or fields of application:

- W1-E, W2.1-E (up to 3 m immersion depth) in accordance with DIN 18533-1:2017-07
- W4-E according to DIN 18533-1:2017-07
- at junctions to water-impermeable (waterproof) concrete components (up to 3 m immersion depth)
- for waterproofing joints in waterproof concrete components up to a maximum immersion depth of 3 m
- for waterproofing tanks and pools in water impact class W1-B (for 5 m filling height) according to DIN 18535.

The crack-bridging classes (RÜx-E) according to DIN 18533-1:2017-07 and the crack classes (Rx-B) according to DIN 18535 must be observed.

No	Properties	Minimum required performance		
		W1-E, W3-E with a minimum dry layer thickness of 3.0 mm	W2.1-E, W1-B with a minimum dry layer thickness of 4.0 mm	W4-E with a minimum dry layer thickness of 2.0 mm
1	Fire behaviour	Grade E	Grade E	Grade E
2	Crack bridging ability	Method A:	Method A:	–
		For RÜ1-E / RÜ2-E: CB1 ¹	For RÜ1-E / RÜ2-E: CB1	
		For RÜ3: CB2 ¹	For RÜ3: CB2	
			For R0-B2: -	
			For R1-B/R2-B: CB1	
			For R3-B2: CB2	
3	Rain fastness	No water discolouration and no change in surface; test time stated	No water discolouration and no change in surface; test time stated	No water discolouration and no change in surface; test time stated
4	Resistance to water	No water discolouration and no change in surface	No water discolouration and no change in surface	No water discolouration and no change in surface
5	Durability of the adhesive bond after water storage	No decrease in adhesive pull strength that could indicate a time-dependent failure; mean adhesive pull strength after 56 days:	No decrease in adhesive pull strength that could indicate a time-dependent failure; mean adhesive pull strength after 56 days:	No decrease in adhesive pull strength that could indicate a time-dependent failure; mean adhesive pull strength after 56 days:
		≥ 0.5 N/mm ²	≥ 0.5 N/mm ²	≥ 0.5 N/mm ²
		≥ 0.2 N/mm ² (for cohesion fractures)	≥ 0.2 N/mm ² (for cohesion fractures)	≥ 0.2 N/mm ² (for cohesion fractures)
6	Water vapour permeability	Value must be stated	Value must be stated	–
7	Watertightness	Watertight for >24 h with a slot width of 5 mm and water pressure of 2 bar	Watertight for >24 h with a slot width of 5 mm and water pressure of 2 bar	Watertight for >24 h with a slot width of 5 mm and water pressure of 2 bar
8	Compressive strength	C11	C2A1	C1
9	Watertightness when installed (junction to waterproof concrete components)	–	Only for junctions to waterproof concrete components: No water penetration, no detachment at a test pressure of 0.75 bar	–
10	Dry layer thickness ²	The average, standard deviation and consumption per mm of dry layer thickness must be specified.	The average, standard deviation and consumption per mm of dry layer thickness must be specified.	The average, standard deviation and consumption per mm of dry layer thickness must be specified.
11	Flexibility at low temperatures	No cracking	No cracking	No cracking
12	Watertightness when installed	only when additional components are used:	For W2.1-E: no water penetration at test	–

	('pool test')	no water leakage at test pressure of 2 kPa	pressure 75 kPa For W-1B: no water penetration at test pressure 125 kPa	
1. CB classes according to DIN EN 15814 2. The waterproofing layer must always be applied at least twice. A reinforcement insert must be provided for minimum dry layer thicknesses of ≥ 3 mm.				

For use on inclined or vertical surfaces, the installation instructions must provide information on stability.

Annex B 2.2.5.20/1

Swellable joint tapes for joint sealing in waterproof concrete constructions with a declaration of performance based on an ETA

Seq. No.	Properties	Minimum required performance
1	Fire behaviour	At least Class E
2	Watertightness when installed	Permitted water pressure
3	Swelling behaviour in different liquids at the time of delivery	Mass absorption for a limited time (time specification); no decomposition of the material or detachment
4	Reproducibility of the swelling process	Time specification for the swelling process
5	Swelling pressure	$> 0.5 \text{ N/mm}^2$

B 3 Technical building equipment and parts of systems for the storage, filling and handling of water-polluting substances that do not have the CE mark under the Construction Products Regulation

B 3.2 Regulations pursuant to § 85a(2) No. 3 MBO [in accordance with federal state law]

Seq. No.	Construction product	Relevant harmonisation provisions	a: Specific purpose b: Basic requirement pursuant to MBO [in accordance with federal state law], with clarification where applicable c: Missing essential feature d: Procedure for documentation of the missing essential feature
1	2	3	4
B 3.2.1 Technical Building Equipment subject to requirements under other legislation			
B 3.2.1.11	"Open solid-fuel furnaces with motorised parts" deleted from MVV Technical Note 2026/1		
B 3.2.1.12	"Open solid-fuel furnaces for liquid fuels with motorised parts" deleted from MVV TB 2026/1		
B 3.2.2 Parts of installations for storage, filling and handling of water-endangering substances subject to requirements under other legislation			
B 3.2.2.6	'Independently closing nozzles' deleted from MVV TB 2026/1		

B 4 Construction products and designs subject to the requirements of other legislation for which a regulation has been enacted pursuant to § 85(4a) MBO [in accordance with federal state law]

Seq. No.	Designation	Measures/specifications pursuant to § 85a(2) MBO [in accordance with federal state law]
1	2	3
B 4.1 General		
B 4.1.1	- catch basins and collecting equipment as well as pre-fabricated parts for collecting basins and surfaces, - Sealants for receptacles, collection tanks, collecting chambers and for surfaces, - Tanks, - internal coatings and linings for containers and pipes, - pipes, fittings, sealants, mountings and - Safety devices	Annex B 4.1/1

Annex B 4.1/1

For the proof of stability, at least the following impacts must be considered: Temperature, test and operating pressures or filling heights, internal and filling loads, traffic loads, impact, wind, snow, earthquakes (extraordinary load), flooding, chemical stress due to environmental influences and the storage or filling medium (water hazardous substances).

At least damage class CC2 and reliability class RC2 shall apply in accordance with Annex B of EN 1990.

Crack width control for concrete components in storage, filling and handling plants:

- ☐ uncoated components: $w_{cal} \leq 0.1 \text{ mm}$
- ☐ lined or coated components: Crack width w matched with sealant performance.

For steel parts welds with sealing function, the EXC 2 execution class according to DIN EN 1090-2:2024-09 applies with additional requirements for welding and the traceability of materials.

**C 2 Requirements for submitting a declaration of conformity for construction products pursuant to § 22 MBO
[in accordance with federal state law]**

Seq. No.	Construction product	Technical rules/version	Confirmation of Conformity
1	2	3	4
C 2.1 Construction products for concrete, reinforced concrete and prestressed concrete construction			
C 2.1.1 Binders			
C 2.1.1.1	Early setting cement (ES cement) and quick setting Portland and Portland composite cement (QS cement)	DIN 1164-2:2023-02 DIN 1164-11:2024-04 Also applicable: Annex C 2.1/1 Annex C 2.1/9	MC
C 2.1.1.4	Portland cement with recycled fly ash (CEM II/A, B-F) and Portland composite cement (CEM II/A-M, CEM II/B-M), CEM II/C-M and composite cement CEM VI with recycled concrete powder (F) content of up to 20 M.-%	DIN EN 197-6:2023-12 Also applicable: Annex C 2.1.1.4/1	MC
C 2.1.2 Concrete additives			
C 2.1.2.2	Shrinkage reducer	DIN EN 934-7:2025-02	MDT
C 2.1.3 Rebars			
C 2.1.3.1	Reinforcing steel bars	DIN 488-2:2009-08 DIN 488-6:2024-09 Also applicable: DIN 488-1:2009-08	MC
C 2.1.3.2	Steel fabric for the reinforcement of concrete	DIN 488-4:2009-08 DIN 488-6:2024-09 Also applicable: DIN 488-1:2009-08	MC
C 2.1.3.3	Reinforcing steel in rings/reinforcing wire	DIN 488-3:2009-08 DIN 488-6:2024-09 Also applicable: DIN 488-1:2009-08	MC
C 2.1.3.4	Lattice girders	DIN 488-5:2009-08 DIN 488-6:2024-09 Also applicable: DIN 488-1:2009-08	MC
C 2.1.4 Concrete			
C 2.1.4.2	'Standard concrete' deleted from MVV TB 2026/1		
C 2.1.4.3	Concrete by properties, concrete by composition	DIN 1045-2:2023-08 Also applicable: DIN 1045-3:2023-08 Annex C 2.1/2 Annex C 2.1/3 Also applicable, depending on construction product: DAfStb Alkali Guideline (October 2013 edition) DAfStb Guideline for the Production and Use of Dry Concrete and Dry Mortar (Dry Concrete Guideline) (June 2005 edition), DAfStb Massive Concrete Components (April 2010 edition) DAfStb Steel-Fibre-Reinforced Concrete, Part 2 (June 2021 edition)	MC
C 2.2 Construction products for masonry construction			

C 2.2.2	'District and local heat transfer stations' deleted from MVV TB 2026/1		
C 2.2.4	Clay stones for load-bearing clay stone masonry	DIN 18945:2024-03 In conjunction with DIN 18942-100:2024-03	MC
C 2.2.5	Clay masonry mortar for load-bearing clay brick masonry	DIN 18946:2024-03 In conjunction with DIN 18942-100:2024-03	MC
C 2.3 Construction products for timber construction			
C 2.3.1 Precast structural elements			
C 2.3.1.1	Glued load-bearing wooden components according to DIN 1052-10:2024-12, Sections 7.2.1, 7.3.1 and 7.4.1	DIN 1052-10:2024-12 Also applicable: Annex C 2.3/1	MDC
C 2.3.1.3	Glued composite structural elements made of laminated timber, unless covered by DIN EN 14080, and glued rib or box elements according to DIN 1052-10:2024-12, Section 7.5	DIN 1052-10:2024-12	MC
C 2.3.1.5	Wooden panel elements closed on one or both sides, with at least one layer of glued-on planking or cladding, DIN 1052-11, Type K	DIN 1052-11:2022-12	MC, also applies to non-serial production
C 2.3.2 Fasteners			
C 2.3.2.1	Rebars, threaded bars and steel bars with wood screw thread for timber construction	DIN 1052-10:2024-12 Also applicable: Annex C 2.3/2	MDC
C 2.3.2.2	'Metal fasteners, unless covered by DIN EN 14592' deleted from MVV TB 2026/1		
C 2.4 Construction products for metal construction			
C 2.4.5 Fasteners (rivets, screws, bolts, nuts and discs), welding additives, welding consumables			
C 2.4.5.21	Hot-dip galvanised sets of high-strength hexagon head bolts with large width across flats in sizes M 39 to M 72	DAST Guideline 021 (September 2013 edition) Also applicable: Annex C 2.4/11, DIN EN 1090-2:2024-09 and DIN EN ISO 10684:2011-09	MC
C 2.4.7 Prefabricated metal building components			
C 2.4.7.1	Prefabricated load-bearing steel components not covered by DIN EN 1090-1	DIN EN 1090-2:2024-09 Also applicable: Annex C 2.4/14	MDC
C 2.6 Doors and gates			
C 2.6.8	Spring hinge and construction hinge for fire doors	DIN 18272-1:2025-05 DIN 18272-101:2025-05	MC
C 2.10 Construction products for building waterproofing and roof sealing			

C 2.10.2	Normally flammable elastomer joint tape for sealing joints in concrete	DIN 7865-1:2022-08 DIN 7865-2:2022-08 Also applicable: DIN 7865-5:2022-08, Table 1 DIN 4102-1:1998-05 DIN EN ISO 11925-2:2020-07 in conjunction with Annex C 3/7	MDC
C 2.11 Glass construction products			
C 2.11.1	Prefabricated safety barrier glazing	DIN 18008-4:2024-12 Annex B	MDC
C 2.11.2	Prefabricated glazing designed to sustain human loads	DIN 18008-5:2024-12 with the exception of Annex A	MDC
C 2.12 Construction products for site drainage			
C 2.12.1 Pipes, pipe fittings and jointing materials for lines and ducts			
C 2.12.1.2	Plastic piping systems made of plasticiser-free polyvinyl chloride (PVC-U) for draining waste water inside buildings	DIN EN 1329-1:2023-06 in conjunction with DIN CEN/TS 1329-2:2024-03 Also applicable: DIN 4102-1:1998-05 DIN EN ISO 11925-2:2020-07 in conjunction with Annex C 3/7	MC
C 2.12.1.3	Pipes, fittings and piping of plasticiser-free polyvinyl chloride (PVC-U) for non-pressurised underground sewers and pipelines	DIN EN 1401-1:2023-11 in conjunction with DIN CEN/TS 1401-2:2020-09 Also applicable: Annex C 2.12/2	MC
C 2.12.1.6	Shafts and accessories of plasticiser-free polyvinylchloride (PVC-U), polypropylene (PP) and polyethylene (PE) for non-pressurised underground sewers and pipelines	DIN EN 13598-1:2020-12 in conjunction with DIN CEN/TS 13598-3:2024-03	MC
C 2.12.1.7	Manholes and inspection shafts made of plasticiser-free polyvinyl chloride (PVC-U), polypropylene (PP) and polyethylene (PE) for non-pressurised underground sewers and pipelines	DIN EN 13598-2:2020-12 in conjunction with DIN CEN/TS 13598-3:2024-03	MC
C 2.12.1.8	Chlorinated polyvinyl chloride plastics piping systems for discharging waste within buildings	DIN EN 1566-1:2023-11 in conjunction with DIN CEN/TS 1566-2:2025-02 Also applicable: Annex C 2.12/1 and DIN 4102-1:1998-05 DIN EN ISO 11925-2:2020-07 in conjunction with Annex C 3/7	MC
C 2.12.1.15	Acrylonitrile-butadiene-styrene plastics piping systems for discharging waste within buildings	DIN EN 1455-1:2023-11 in conjunction with DIN CEN/TS 1455-2:2025-02 Also applicable: Annex C 2.12/1 and DIN 4102-1:1998-05 DIN EN ISO 11925-2:2020-07 in conjunction with Annex C 3/7	MC

C 2.12.1.19	Plastics piping systems made from polypropylene with mineral modifiers for discharging waste outside buildings	DIN EN 14758-1:2023-11 in conjunction with DIN CEN/TS 14758-2 (DIN SPEC 19647):2016-11 Also applicable: Annex C 2.12/4	MC
C 2.14 Furnaces			
C 2.14.1 Furnaces and combustion appliances			
C 2.14.1.5	'Open solid-fuel furnaces' deleted from MVV TB 2026/1		
C 2.15 Construction products for stationary installations that are used for the containment, drawing off and handling of water-polluting materials			
C 2.15.4	Vertical steel containers (tanks), single-walled, with volume less than 1000 litres for the overground storage of water-polluting liquids	DIN 6623-1:2017-06 Also applicable: Annex C 2.15/3	MC
C 2.15.12	Steel collecting trays and collection tanks with up to 1 000 l capacity	Directive on the requirements for steel receptacles with capacity of up to 1000 litres – StawaR – (April 2025) (see Annex 17)	MDT
C 2.15.31	Horizontal cylindrical single-wall and double-wall steel containers (tanks) for the above-ground storage of water-polluting liquids, except for liquid fuels for the energy supply of heating and cooling systems for buildings	Annex C 2.15/17 In addition, the following applies: Annex C 2.15/3	MC
C 2.15.32	Horizontal cylindrical single-wall and double-wall steel containers (tanks) for the underground storage of water-polluting liquids	DIN EN 12285-1:2018-12 Also applicable: Annex C 2.15/3 and Annex C 2.15/18	MC

Annex C 2.1/1

((unchanged))

Annex C 2.1/2

((unchanged))

Annex C 2.1/3

1 Re DIN 1045-2:2023-08

1.1 Contents, Tables, Table F.3

'DIN 1164-11:2023-02' is replaced by 'DIN 1164-11:2024-04'.

1.2 Unit 2

'DIN 1164-11:2023-02' is replaced by 'DIN 1164-11:2024-04'.

1.3 Section 5.1.2

Paragraph (4) is replaced by the following paragraph:

'(4) Requirements for cements are specified in Annex O (normative).'

1.4 Section 5.1.5

Paragraph (1) is replaced by the following paragraph:

'Concrete admixtures according to DIN EN 934-2 and DIN EN 934-7:2025-02 are considered generally suitable. Where concrete additives are used in accordance with DIN EN 934-7:2025-02, paragraphs (2) and (3) shall not apply.'

Paragraph (3) is replaced by the following paragraph:

'(3) Requirements for admixtures are specified in Annex O (normative).'

1.5 Section 5.1.6

Paragraph (1), 2. The indent is supplemented as follows:

'Pigments containing organic components do not fall within the scope of DIN EN 12878.'

Paragraph (9) is replaced by the following paragraph:

'(9) Requirements for additives are specified in Annex O (normative).'

1.6 Section 5.1.7

Paragraph (2) is replaced by the following paragraph:

'(2) Requirements for fibres are specified in Annex O (normative).'

1.7 Section 5.2.3.4

Paragraph (4) is supplemented by the following sentence:

'... The use of recycled rock granules in exposure classes XA2, XA3 and XM, as well as for prestressed concrete and light concrete shall not be permitted.'

1.8 Annex F, Table F.3

'DIN 1164-11:2023-02' is replaced by 'DIN 1164-11:2024-04'.

1.9 Section 5.2.5.1

Paragraph (8) is replaced by the following paragraph:

'(8) Requirements for additives are specified in Annex O (normative).'

1.10 Section 5.5.4

Paragraph (1) is replaced by the following paragraph:

'(1) Concrete with a composition of rock granules in accordance with 5.1.3, cement in accordance with 5.1.2, admixtures in accordance with 5.1.5, additives in accordance with 5.1.6, fibres in accordance with 5.1.7 or other inorganic materials in accordance with 5.1.1 with a maximum of 1 % by mass or by volume of organic constituents (whichever is the greater) may be classified as class A1⁶ for fire behaviour in accordance with Decision 96/603/EC (as amended by Decisions 2000/605/EC and 2003/424/EC) without the need for a test.'

For class A1, the following footnote 6 is to be taken into account:

'6 'no contribution to fire' in accordance with Delegated Regulation (EU) 2016/364.'

1.11 Annex O, Table O.1

In Table O.1, the reference to 'Cement with low effective alkali content in accordance with DIN 1164-10:2013-03' is replaced by the following:

'Cement with low effective alkali content in accordance with DIN 1164-10:2023-02'

2 About the Alkali Guideline – AlkR – (2013-10)

Section 7.1.1:

To be added: 'The manufacturer must declare compliance with DIN 1164-10:2023-02 for cement with low effective alkali content.'

3 Standard concrete

Concrete which, for the purposes of verifying load-bearing capacity, is used only with a compressive strength class of $\leq$ C16/20 and only for exposure classes X0, XC1 and XC2, is exempt from item C 2.1.4.3.

Annex C 2.1/9

If DIN 1164-2:2023-02 is applied:

Section 4.2, paragraph 3: The last part of the sentence: '... and strength in accordance with DIN EN 196-1 to be tested with a test specimen age of $6h \pm 15 \text{ min}$ ' deviating from DIN EN 196-1' should not be applied. The strength shall be checked on samples manufactured in accordance with DIN 1164-11:2024-04, Annex A.3, in accordance with DIN EN 196-1.

Section 5.2, paragraph 2: The last part of the sentence: '... and strength in accordance with DIN EN 196-1 to be tested with a test specimen age of $6h \pm 15 \text{ min}$ ' deviating from DIN EN 196-1' should not be applied. The strength shall be checked on samples manufactured in accordance with DIN 1164-11:2024-04, Annex A.3, in accordance with DIN EN 196-1.

Annex C 2.1/10

((unchanged))

Annex C 2.1.1.4/1

The raw material for the concrete recycling meal shall be a recycled aggregate that complies with the material composition of type 1 according to DIN 1045-2:2023-08, Table E.2, and meets the requirements of DIN 1045-2:2023-08, Table E.3 and Section E.3.1.4.

Portland recycled powder cement CEM II/A, B-F and Portland composite cement CEM II/A-M, CEM II/B-M, CEM II/C-M as well as composite cement CEM VI with a content of recycled concrete powder (F) up to 20% by weight according to DIN EN 197-6:2023-12 may be used in accordance with DIN 1045-2:2023-08 for concrete and reinforced concrete structures for exposure classes X0 and XC2.

Annex C 2.3/1

Re DIN 1052-10

Section 7.3.1 (3) shall not apply.

Where construction products are delivered to users via retail and the delivered construction products are divided by the retailer, the parts must be distinctively marked by means of a package insert, paint application, lanyard tags, etc. All divisions must be documented.

Annex C 2.3/2

((unchanged))

Annex C 2.4/14

Re DIN EN 1090-2

The Technical Rule shall be applied as follows:

- 1 Confirmation of conformity of steel components not covered by EN 1090-1:2009+A1:2011¹ but which have to remove payloads shall be carried out with a manufacturer's declaration of conformity on the basis of an initial test in accordance with Section 6.2 of EN 1090-1:2009+A1:2011¹ and a factory-owned production control according to Section 6.3 of EN 1090-1:2009+A1:2011¹.
- 2 The manufacturer shall provide the declaration of conformity by marking the construction products with the 'Ü-Zeichen' conformity mark, with reference to their designated use.
- 3 The manufacture of welded steel structural elements not covered by EN 1090-1:2009+A1:2011¹ but which need to bear payloads may be carried out only by companies with proof of suitability for the execution of welding work in the relevant execution class (EXC).

Alternatively, the following shall be considered as proof of suitability:

- a welding certificate in line with EN 1090-1:2009+A1:2011¹ issued or certified by a notified body, if the firm's in-house production control is certified by this body in line with EN 1090-1:2009+A1:2011;¹
- a welding certificate issued on the basis of DIN EN 1090-2:2018-09 and/or DIN EN 1090-2:2024-09 in conjunction with EN 1090-1:2009+A1:2011¹, Table B.1, by a certification body recognised by the building inspection authorities.

For the assignment of components into the execution classes (EXC), DIN EN 1993-1-1/NA:2018-12 applies.

¹ Implemented in Germany by DIN EN 1090-1:2012-02.

Annex C 2.10/1

- - deleted from MVV TB 2026/1 -

Annex C 2.12/1

((unchanged))

Annex C 2.12/2

((unchanged))

Annex C 2.12/4

((unchanged))

Annex C 2.14/5

- - deleted from MVV TB 2026/1 -

Annex C 2.15/3

If necessary, the sheet thicknesses (net wall thicknesses) shall be increased by corrosion allowances to account for the expected material degradation due to corrosion as a function of design lifespan, type of stored liquid and removal rate. In doing so, the above-mentioned corrosion allowances may only be disregarded if no erosion due to corrosion is expected for the specific liquid/material combination, accounting for the design lifespan and intended operating conditions. This must be proven for each specific use case by an expert report from an independent material testing body.

For steel sheets of statically relevant components that are touched by the stored liquid or its vapours or condensate, compliance with the nominal sheet thicknesses must be checked at regular distances by sheet thickness measurements. Once the nominal sheet thickness has been reached, the construction products shall be taken out of service.

Special properties such as increased corrosive impact during storage of hygroscopic media and simultaneous ventilation in the 'vapour zone' immediately above the liquid surface, accumulation of water on the ground with media of densities <1.0 kg/l that do not mix with water, shall be considered individually.

External corrosion of construction products and their support structures due to the corrosive impact of ambient conditions at the site must be prevented through appropriate measures (such as a coating system with a duration of protection adapted to the design lifespan).

The manufacturer must be demonstrably proficient at the required procedures to ensure the construction product is properly manufactured. Proof shall be provided by means of a welding certificate for execution class EXC 2 or higher as per DIN EN 1090-2:2024-09 for steel construction products and as per DIN EN 1090-3:2019-07 for aluminium construction products. Contrary to DIN EN 1090-2:2024-09, Table 14, and DIN EN 1090-3:2019-07, Table 7, respectively, the welding supervision staff responsible for coordinating the construction product manufacturing processes must have at least the special technical skills under DIN EN ISO 14731:2006-12.

Full traceability must be ensured for the building materials used to manufacture the construction product.

The welding processes are to be qualified according to DIN EN ISO 15614-1:2017-12. Welders shall be examined in accordance with DIN EN ISO 9606-1:2017-12.

Annex C 2.15/17

1 Requirement for the construction product

The containers shall be executed in accordance with EN 12285-2:2005¹ as tank class B or C. The height n_1 of the saddle may not exceed 500 mm.

2 Specifications for in-house production control and initial testing

The in-house quality control shall be carried out in accordance with DIN EN 1090-2:2024-09 on the basis of the requirements of execution class EXC 2. Notwithstanding EN 12285-2:2005¹, Section 5, the leakage test of the interior container shall be carried out as a routine test, as follows:

After completion of all welding, the pressure or leak test of the container shall be carried out. The test shall be done with water. The test pressure to be used is the sum of the maximum permitted operating overpressure and the expected operational hydrostatic pressure of the stored fluid with the maximum permitted density at the deepest point in the container, plus a safety allowance of 1.3, with a minimum of 2 bar. After the settling phase, the pressure shall be maintained for at least half an hour. The container shall be able to withstand this test pressure without measurable changes in shape and without leaking (no pressure loss from the settling phase onwards).

For multi-chamber containers, each chamber shall also be able to withstand the test overpressure associated with the relevant permitted operating pressure (the sum, increased by a safety allowance of 1.3, of the maximum permitted operating pressure and the expected operational hydrostatic pressure of the stored liquid for the maximum permitted density at the lowest point in the container).

3 Marking specifications

The designation of construction products shall include at least the type designation, the year of manufacture, the serial number, the materials used for manufacture, the nominal capacity of the container at the maximum permitted filling level, the filling percentage or filling level (based on the permitted maximum filling percentage) and the performance of the product (maximum permitted media density, nominal sheet thicknesses, corrosion allowances where required, pressure and temperature ranges).

4 Installation specifications

In flood plains, the tanks must be positioned in such manner that they cannot be reached by flood water.

They must not be installed in earthquake-prone areas with seismic activity higher than 'very low' as defined in DIN EN 1998-1/NA:2023-11.

¹ Implemented in Germany by DIN EN 12285-2:2005-05.

Annex C 2.15/18

1 The standard DIN EN 12285-1 is also applicable to containers for storing water-polluting liquids that are intended for heating and cooling buildings. In flood plains, the tanks must be positioned in such manner that they cannot be reached by flood water. They must not be installed in earthquake-prone areas with seismic activity higher than 'very low' as defined in DIN EN 1998-1/NA:2023-11.

2 Requirements for the construction product

The containers are to be designed according to DIN EN 12285-1:2018-12 in tank class B or tank class C.

The weld seams must be welded continuously on both sides. At least steel profiles T 80 according to DIN EN 10055 or flat bars with a product width of at least 100 mm x 30 mm according to DIN EN 10058 are to be used as reinforcing rings.

Reinforcing rings by applying formula (3) from Section 4.5.3 of the standard must be used. The option of doing calculations according to Section 1, Clause 3 to prove stability under the impact of traffic loads and/or heights above ground of > 1.5 m does not apply.

3 Specifications for in-house production control and initial testing

The in-house quality control shall be carried out in accordance with DIN EN 1090-2:2024-09 on the basis of the requirements of execution class EXC 2. The inner container leak test is to be carried out as a routine test, as follows:

After completion of all welding, the pressure or leak test of the container shall be carried out. The test shall be done with water. The test pressure to be used is the sum of the maximum permitted operating overpressure and the expected operational hydrostatic pressure of the stored fluid with the maximum permitted density at the deepest point in the container, plus a safety allowance of 1.3, with a minimum of 2 bar. After the settling phase, the pressure shall be maintained for at least half an hour. The container shall be able to withstand this test pressure without measurable changes in shape and without leaking (no pressure loss from the settling phase onwards).

For multi-chamber containers, each chamber shall also be able to withstand the test overpressure associated with the relevant permitted operating pressure (the sum, increased by a safety allowance of 1.3, of the maximum permitted operating pressure and the expected operational hydrostatic pressure of the stored liquid for the maximum permitted density at the lowest point in the container).

The tightness of the interstitial space between double-walled containers must be checked at an atmospheric pressure of 0.6 bar.

4 Marking specifications

The designation of construction products shall include at least the type designation, the year of manufacture, the serial number, the materials used for manufacture, the nominal capacity of the container at the maximum permitted filling level, the filling percentage or filling level (based on the permitted maximum filling percentage) and the performance of the product (maximum permitted media density, nominal sheet thicknesses, corrosion allowances where required, pressure and temperature ranges).

C 3 Construction products that require only a general building supervisory inspection certificate pursuant to § 19(1)(2) MBO [in accordance with federal state law]

Seq. No.	Construction product	approved test procedure according to	Confirmation of Conformity
1	2	3	4
C 3.17	'Independently closing nozzles' deleted from MVV TB 2026/1		
C 3.18	Prefabricated safety barrier glazing with load-bearing capacity determined by testing	DIN 18008-4:2024-12, Annex A, Annex D and Annex E; Also applicable: Annex C 3/5	MDC
C 3.19	Point holder without ball joint with load-bearing capacity determined via testing	DIN 18008-3:2024-12, Annex D	MDC
C 3.20	Prefabricated passable glazing with experimentally determined load-bearing capacity	DIN 18008-5:2024-12, Annex A	MDC

For test proof of load-bearing capacity of punctiform storage structures (point holders), item number C 3.19 applies.

C 4 Designs that require only a general building inspection test certificate pursuant to § 16a(3) MBO [in accordance with federal state law]

Seq. No.	Construction type	approved test procedure according to
1	2	3
C 4.1	Designs other than those referred to in Section A 2, No. A 2.2.1.4, for the construction of ceilings, roofs, suspended ceilings, raised floors, hollow floors, columns, beams, joists, stairs, and load-bearing walls, which are subject to fire resistance and/or sound insulation requirements. This also applies where these types of construction do not deviate significantly from the Technical Building Regulations in respect of other requirements, or where there are generally accepted rules of good engineering practice.¹	Also applicable, depending on design: <i>As regards the fire resistance time:</i> DIN 4102-2:1977-09 with the exception of Sections 6.2/7, 6.2/9 and 6.2/10 or DIN EN 1363-1:2020-05, DIN EN 1363-2:1999-10, DIN EN 1364-2:2018-03, DIN EN 1365-1:2013-08, DIN EN 1365-2:2015-02, DIN EN 1365-3:2000-02, DIN EN 1365-4:1999-10, DIN EN 1366-6:2005-02 in conjunction with Annex C 4/6 <i>As regards sound insulation:</i> DIN EN ISO 10140-1:2021-09, DIN EN ISO 10140-2:2021-09, DIN EN ISO 10140-3:2021-09, DIN EN ISO 10140-4:2021-09, DIN EN ISO 10140-5:2021-09, DIN EN ISO 717-1:2021-05, DIN EN ISO 717-2:2021-05 as well as DIN EN ISO 10848-1:2018-02, DIN EN ISO 10848-2:2018-02, DIN EN ISO 10848-3:2018-02
C 4.3	Designs for the construction of non-load-bearing exterior walls subject to fire resistance and sound insulation requirements. The second sentence of Seq. No. C 4.1 applies accordingly.	Also applicable, depending on design: <i>As regards the fire resistance time:</i> DIN 4102-3:1977-09 or DIN EN 1363-1:2020-05, DIN EN 1363-2:1999-10 DIN EN 1364-1:2015-09 in conjunction with Annex C 4/6 <i>As regards sound insulation:</i> DIN EN ISO 10140-1:2021-09, DIN EN ISO 10140-2:2021-09, DIN EN ISO 10140-4:2021-09, DIN EN ISO 10140-5:2021-09, DIN EN ISO 717-1:2021-05 and DIN EN ISO 10848-1:2018-02, DIN EN ISO 10848-2:2018-02, DIN EN ISO 10848-3:2018-02 <i>As regards protection against falling:</i> ETB Guideline – Components that protect against falls (June 1985 edition)
C 4.12	Types of safety barrier glazing with experimentally determined load capacity	DIN 18008-4:2024-12 Annex A, Annex D and Annex E Also applicable: Annex C 3/5 of Section C 3
C 4.13	Designs for walk-on glazing with load-bearing capacity determined by testing	DIN 18008-5:2024-12 Annex A

¹ under federal state law

Annex C 4/6

1 Non-load-bearing room-closing dividing walls

A non-load-bearing room-closing dividing wall may be classified as F... under DIN 4102-2:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-2:1977-09

or

- ☐ has been tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-1:2015-09 and, for a duration of ... minutes, has met the requirements of DIN EN 1363-1:2020-05, Section 11.2, Room closure, and Section 11.3, Thermal insulation.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-1:2015-09, a fire test is required for symmetrical structural elements.

2 Load-bearing space-enclosing walls

A load-bearing room-closing wall may be classified as F... pursuant to DIN 4102-2:1977-09 if it

- ☐ complies with the conditions under DIN 4102-2:1977-09

or

- ☐ was tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-1:2013-08, and, over a test duration of ... minutes, met the requirements of DIN EN 1363-1:2020-05, Section 11.1, Load-bearing capacity, clause II and Section 11.2, Room closure, and Section 11.3, Thermal insulation.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-1:2013-08, a test is required for symmetrical structural elements.

3 Suspended ceiling (as an independent structural element)

A suspended ceiling as an independent structural element may be classified as F... under DIN 4102-2:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-2:1977-09

or

- ☐ was tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-2:2018-03, and, over a test duration of ... minutes, has met the requirements of DIN EN 1364-2:2018-03, Section 11.2, Room closure, and Section 11.3, Thermal insulation.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-2:2018-03, a stress test is required on the underside and on the topside. If classification is only to be done on one side, a stress test on this side is required.

4 columns

A support may be classified as F... under DIN 4102-2:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-2:1977-09

or

- ☐ was tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-4:1999-10 and, for the test duration of ... minutes, has met the requirements of DIN EN 1363-1:2020-05, Section 11.1, Load-bearing capacity, Section b).

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-4:1999-10, a test is required.

5 Beams/joists

A beam/joist may be classified as F... under DIN 4102-2:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-2:1977-09

or

- ☐ was tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-3:2000-02, and, over a test duration of ... minutes, has met the requirements of DIN EN 1363-1:2020-05, Section 11.1, Load-bearing capacity, Section a).

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-3:2000-02, a test is required.

6 Firewalls

6.1 Firewalls as load-bearing walls

A firewall may be classified as such under DIN 4102-3:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-3:1977-09

or

- ☐ was tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-1:2013-08 and DIN EN 1363-2:1999-10, Section 7, and during a test period of 90 minutes, met the requirements of DIN EN 1363-1:2020-05, Section 11.1(b), Load-bearing capacity, and Section 11.2, Room closure and Section 11.3, Thermal insulation.

The walls must meet these requirements without cladding. They must also be made exclusively of non-combustible materials.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-1:2013-08 and DIN EN 1363-2:1999-10, Section 7, a test is required for symmetrical structural elements.

In the case of walls with mechanical stress, the relevant requirements apply as for firewalls, but with the proviso that the fire resistance period must be at least 60 minutes in accordance with the relevant requirements under building regulations.

6.2 Firewalls as non-load-bearing walls

A firewall may be classified as such under DIN 4102-3:1977-09 if it either

- ☐ complied with the conditions under DIN 4102-3:1977-09 (concerning the load, see paragraph A 2.1.7)

or

- ☐ was tested according to DIN EN 1364-1: 2015-02 and DIN EN 1363-2:1999-10, Section 7, and, during a test period of 90 minutes, met the requirements of DIN EN 1363-1:2020-05, Section 11.2, Room closure and Section 11.3, Thermal insulation.

The walls must meet these requirements without cladding. They must also be made exclusively of non-combustible materials.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-1:2015-09 and DIN EN 1363-2:1999-10, Section 7, a test is required for symmetrical structural elements.

However, in the case of walls with mechanical stress, the relevant requirements apply to walls, as for firewalls, provided that the duration of fire resistance must be at least 60 minutes in accordance with the relevant requirements under building regulations.

The impact load in accordance with DIN EN 1363-2:1999-10, taking into account the requirements of DIN 4102-3:1977-09, Section 4.3.3, must also be carried out in anchorage and fixing areas.

7 Non-load-bearing exterior walls

A non-load-bearing room-closing exterior wall may be classified as W ... according to DIN 4102-3:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-3:1977-09

or

- ☐ was tested from inside in accordance with DIN EN 1363-1:2020-05 (for unit temperature-time curve testing) and from outside in accordance with DIN EN 1363-2:1999-10 (for external fire curve testing) in conjunction with DIN EN 1364-1:2015-09, and for... minutes, has met the requirements of DIN EN 1363-1:2020-05, Section 11.2, Room closure, and Section 11.3, Thermal insulation.

8 Ceilings/roofs

A ceiling/roof may be classified as F... under DIN 4102-2:1977-09 if it either

- ☐ complies with the conditions under DIN 4102-2:1977-09

or

- ☐ was tested in accordance with DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-2:2015-02, and, over a test duration of ... minutes, met the requirements of DIN EN 1363-1:2020-05, Section 11.1, Load-bearing capacity, Section a) and Section 11.2, Room closure, and Section 11.3, Thermal insulation.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1365-2:2015-02, a test is required.

9 Service shafts and ducts

A service shaft/duct may be classified as I... under DIN 4102-11:1985-12 if it either

- ☐ complies with the conditions under DIN 4102-11:1985-12

or

- ☐ being a service shaft, consists of walls that have been tested pursuant to DIN 4102-2:1977-09

or

- ☐ being a service shaft, consists of walls that have been tested pursuant to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-1:2015-09 and, for ... minutes, has met the requirements of DIN EN 1363-1:2020-05, Section 11.2, Room closure, and Section 11.3, Thermal insulation.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1364-1:2015-09, a fire test is required for symmetrical structural elements.

10 Raised floors/hollow floors

A raised floor/hollow floor may be classified as F ... under DIN 4102-2:1977-09 if it either

- ☐ meets the conditions for a horizontal room-closing component according to DIN 4102-2:1977-09 (with a minimum load of 1.5 kN/m² in the event of a fire)

or

- ☐ was tested according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1366-6:2005-02 for fire loads according to the standard temperature-time curve and, over a test period of ... minutes, met the requirements under DIN EN 1363-1:2020-05, Section 11.1, Load-bearing capacity, and Section 11.2, Room closure, and Section 11.3, Thermal insulation.

For testing according to DIN EN 1363-1:2020-05 in conjunction with DIN EN 1366-6:2005-02, at least one test is required. The fire test must be carried out with a minimum load of 1.5 kN/m².

For a doubledeck floor application according to Section 4.1 of the model System Floor Guideline, the assessment is based only on the supporting structure (supporting plates and stand) for the component test under DIN 4102-2:1977-09 or DIN EN 1363-1:2020-05 in conjunction with DIN EN 1366-6:2005-02, in each case with a minimum load of 1.5 kN/m² in the event of a fire. If their load-bearing capacity is maintained for at least 30 minutes, the classification 'raised floor with fire-retardant supporting structure under fire exposure from below' may be applied; this must be stated both on the cover page and within the scope of the general building inspection certificate. No classification is carried out.

‘Annex 4

Building authority requirements, classification, use of construction products, use of designs

As at: April 2026

1 Parts of buildings that are subject to the requirements for fire characteristics and smouldering

((unchanged))

1.1 Building approval requirements and assignment of building material classes according to DIN 4102-1:1998-05 and other features

Table 1.1: Building approval requirements and classification of building material classes according to DIN 4102-1:1998-05 including floor coverings and linear pipe insulation materials and other features

	Building approval requirements ^b	Minimum required building material classes pursuant to DIN 4102-1:1998-05	Other characteristics for use
	1	2	3
1	non-combustible ^{1,2}	A 2	--
2	flame-resistant ²	B 1	Building materials, excluding floor coverings: limited smoke development ($I^a \leq 400 \% \times \text{min.}$ when tested pursuant to DIN 4102-15:1990-05) - passed
3	Flame-resistant ² and no burning droplets or particles	B 1	No burning droplets or particles falling limited smoke development ($I^a \leq 400 \% \times \text{min.}$ when tested pursuant to DIN 4102-15:1990-05) - passed
4	flame-resistant ² and low smoke development	B1	low smoke development ($I^a \leq 100 \% \times \text{min.}$ when tested pursuant to DIN 4102-15:1990-05) - passed
5	flame-resistant ² and no burning droplets or particles, and low smoke development	B1	No burning droplets or particles falling limited smoke development ($I^a \leq 100 \% \times \text{min.}$ when tested pursuant to DIN 4102-15:1990-05) - passed
6	normal flammability, no burning droplets or particles	B 2	No burning droplets or particles falling
7	normal flammability	B 2	--
	1 if necessary, additionally melting point > 1000 °C 2 if required, additionally raw density	-- --	Specification: Melting point at least 1000 °C pursuant to DIN 4102-17:2017-12 Specification: Bulk density
	a The integral value I of smoke development shall be determined by determining the area content by means of rectangle method under the light attenuation curve over the time recorded during the test according to DIN 4102-15:1990-05 during the flammation period by means of the light measuring distance according to DIN 50055:1989-03 with a sampling rate of at least one measured value per 3 seconds. If a component is to be used for the building that does not meet at least the requirement of 'normal flammability' (easily flammable), § 26(1)(2) MBO¹ must be complied with.		

For construction products – except flooring – the tests shall include results on burning droplets or falling burning particles of the sample pursuant to DIN 4102-1:1998-05, Sections 6.1 and 6.2, and/or values for smoke development pursuant to DIN 4102-1:1998-05, Sections 6.1. These results and the values must be provided by the manufacturer with the exception of floor coverings.

1.2 Minimum required fire performance according to harmonised technical specifications

Construction products for use in buildings, including their structural elements, may be used in accordance with the harmonised technical specifications. The minimum required performance shall be taken from Table 1.2. For the use of these construction products for horizontal installation, additional 1.4 must be considered.

Table 1.2: Building authority requirements and required minimum performance regarding fire behaviour and other features

	Building approval requirement	Minimum required performance ¹			other features (excluding floor coverings)
		Construction products, excluding linear products Pipe insulation and flooring	Linear pipe insulation materials	Floor coverings	
	1	2	3	4	5
1	non-combustible	A2-s1, d0 ⁺	A2 _L -s1, d0	A2 _{fl} -s1	Specification: Smouldering behaviour according to 1.3 and if necessary raw density
2	non-combustible and additionally melting point > 1000 °C	A2-s1, d0 ⁺	A2 _L -s1, d0	A2 _{fl} -s1	Specification: Melting point of at least 1000 °C and smouldering behaviour according to 1.3 and if necessary raw density

¹ under federal state law

	Building approval requirement	Minimum required performance ¹			other features (excluding floor coverings)
		Construction products, excluding linear products Pipe insulation and flooring	Linear pipe insulation materials	Floor coverings	
	1	2	3	4	5
3	flame-resistant and no burning droplets or particles and low smoke development	C–s1, d0**	CL–s1, d0	-	Specification: Smouldering behaviour according to 1.3 and if necessary raw density
4	flame-resistant and no burning droplets or particles	C–s2, d0	CL–s2, d0	-	
5	flame-resistant and low smoke development	C–s1, d2**	CL–s1, d2	Cfl – s1	
6	flame-resistant	C–s2, d2	CL–s2, d2	Cfl – s1	
7	normal flammability and no burning droplets or particles	E	EL	-	
8	normal flammability	E–d2	EL–d2	Efl	
¹ Classes according to Delegated Regulation 2016/364 (EU) – implemented by classification according to DIN EN 13501-1:2019-05 or Commission decisions for classifications without further testing. * In testing as per EN 13823:2023 $TSP_{600\ s} \leq 35\ m^2$; this information is not required for construction products whose fire behaviour is classified as Class A2–s1, d0 without testing in accordance with CWFT Decisions 2003/43/EC of 17 January 2003 (OJ L13/35), 2003/593/EC of 7 August 2003 (OJ L201/35), 2006/673/EC of 5 October 2006 (OJ L276/77) and 2010/83/EU of 9 February 2010 (OJ L38/13) and Delegated Regulation (EU) 2017/1228 of 20 March 2017 (OJ L177/4) of the European Commission. ** In testing as per EN 13823:2023 $TSP_{600\ s} \leq 35\ m^2$; this information is not required for construction products whose fire behaviour is classified in Class B–s1, d0 without testing according to CWFT Decisions 2003/43/EC of 17.1.2003 (Fig. L13/35) and 2007/348/EC of 15.5.2007 (OJ L131/21).					

Explanatory notes to Table 1.2:

Derivation of the abbreviation	Criterion	Scope of application
s (Smoke)	Smoke development	Requirements for smoke development s1; low smoke development s2: limited smoke development
d (droplets)	burning droplets/particles	Requirements for burning droplets/particles □ d0: no burning dripping/particles □ d1, d2; burning droplets/particles
....fl (floorings)		Fire performance class for floorings
...L (linear pipe thermal insulation products)		Fire performance class for linear products for thermal insulation of pipes

1.3 Minimum required smouldering performances

((unchanged))

1.4 Use of building materials in case of horizontal installation below ceilings

((unchanged))

2 Electrical wiring and electrical lines

((unchanged))

2.1 Electrical wiring

((unchanged))

2.1.1 Building approval requirements and assignment of building material classes according to DIN 4102-1:1998-05 and other features

((unchanged))

2.1.2 Minimum required fire performance

((unchanged))

2.2 Electrical cable systems

((unchanged))

3 Roofing

((unchanged))

3.1 Roofing with external fire stress due to flying fire and radiant heat and classification of classes according to DIN 4102-7:2018-11

In order to fulfil the building requirements in A 2.1.9, the property of a roofing as part of the building structure under fire impact from outside against flying sparks and radiating heat (hard roofing) shall be demonstrated based on the minimum required class for a roofing deemed resistant to flying sparks and radiating heat pursuant to DIN 4102-7:2018-11 in conjunction with DIN SPEC 4102-23:2018-07, as given in Table 3.1.

Table 3.1: Building supervision requirement and classification of classes according to DIN 4102-7:2018-11

Building approval requirement	Classes as per DIN 4102-7:2018-11
1	2
External fire exposure due to sparks and radiant heat (hard roofing)	Resistant to sparks and radiant heat

3.2 Roofing with external fire exposure due to sparks and radiant heat when using construction products according to European harmonised specifications and minimum required performance

In order to fulfil the structural requirements in A 2.1.9, proof for hard roofing using construction products (EN 492:2012+A2:2018¹⁶, EN 494:2012+A1:2015¹⁷, EN 534:2006+A1:2010¹⁸, EN 1873:2005¹⁹, EN 13707:2004+A2:2009²⁰, EN 13956:2012²¹, EN 14351-1:2006+A2:2016²², EN 14783:2013²³ and EN 14963:2006²⁴) with CE marking pursuant to Regulation (EU) No 305/2011, shall be based on the minimum required performance as given in Table 3.2.

If the CE marking specifies class B_{ROOF}(t1), stress by fire from the outside according to DIN EN 13501-5:2016-12, this applies to roofing according to A 2.1.9 only if the execution of the roof corresponds to the versions in the associated classification document.

Roofing products complying with the above-mentioned product standards referred to in Commission Decision 2000/553/EC and meeting the characteristics set out in the column 'Specific conditions for the presumption of conformity' of the 'TABLE' in 2000/553/EC may be presumed to satisfy the requirement 'B_{ROOF}(t1)' without further testing, if the execution of the roof covering with these products complies with generally accepted technical best practices.

Table 3.2: Building approval requirement and minimum required performance

Building approval requirement	Minimum required performance
1	2
External fire exposure due to sparks and radiant heat (hard roofing)	B _{ROOF} (t1)

4 Building elements

((unchanged))

¹⁶ Implemented in Germany by DIN EN 492:2018-07.

¹⁷ Implemented in Germany by DIN EN 494:2015-12.

¹⁸ Implemented in Germany by DIN EN 534:2010-07.

¹⁹ Implemented in Germany by DIN EN 1873:2006-03.

²⁰ Implemented in Germany by DIN EN 13707:2009-10.

²¹ Implemented in Germany by DIN EN 13956:2013-03.

²² Implemented in Germany by DIN EN 14351-1:2016-12.

²³ Implemented in Germany by DIN EN 14783:2013-07.

²⁴ Implemented in Germany by DIN EN 14963:2006-12.

4.1

4.1 Load-bearing structural elements

In order to meet the structural requirements in A 2.1.3 for the planning, designing and execution of load-bearing structural elements of buildings, Tables 4.1.1 and 4.1.2 shall be complied with when determining the stability in the event of fire in accordance with Eurocode.

The requirements in the tables are deemed fulfilled only if the structural elements have been designed in accordance with the Technical Building Regulations of Part A, Chapter A 1, Seq. No. A 1.2.

For structural elements in accordance with national Technical Rules, the following tables list only the minimum building regulations requirements.

Table 4.1.1^A: Building approval requirements for load-bearing structural elements, design according to Eurocode and additional application rules

	Building approval requirement	Determined duration of stability in the event of fire in min. Eurocode ^{1,**} under action ETK in accordance with DIN EN 1991 ^{1,**}	Application rule to be observed in addition to the Eurocode for types of construction using certain building materials ^{***}
	1	2	3
1	made of non-combustible* building materials	Not required	DIN 4102-4:2016-05
2	made of normal-flammability* building materials	Not required	DIN 4102-4:2016-05
3	fire-retardant	≥ 30	DIN 4102-4:2016-05
4	Fire-retardant and made of non-combustible* materials	≥ 30 ²	DIN 4102-4:2016-05
5	Highly fire-retardant (combustible load-bearing parts, non-combustible* with insulation materials and cladding with fire resistance of 60 min. made of non-combustible* building materials) according to the Technical Rule under Seq. No A 2.2.1.4	≥ 60 ³	A 2.2.1.4
6	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 minutes pursuant to the Technical Rule under Seq. No A 2.2.1.4	≥ 60 _{3,**}	A 2.2.1.4
7	Structural elements in accordance with A 2.1.3.1(e), with fire resistance of 60 minutes pursuant to the Technical Rule under Seq. No A 2.2.1.4	≥ 60 _{3,**}	A 2.2.1.4
8	Highly fire-retardant and essential parts made of non-combustible* materials	≥ 60 ²	DIN 4102-4:2016-05
9	Highly fire-retardant and made of non-combustible* materials	≥ 60 ²	DIN 4102-4:2016-05
10	Fire-resistant (non-combustible* load-bearing and reinforced parts)	≥ 90 ²	DIN 4102-4:2016-05
11	Fire-resistant and made of non-combustible* building materials	≥ 90 ²	DIN 4102-4:2016-05
12	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 minutes pursuant to the Technical Rule under Seq. No A 2.2.1.4	≥ 90 _{3,4,**}	A 2.2.1.4
13	Structural elements in accordance with A 2.1.3.1(e), with fire resistance of 90 minutes pursuant to the Technical Rule under Seq. No A 2.2.1.4	≥ 90 _{3,4,**}	A 2.2.1.4
14	Fire resistance of 120 minutes and made of non-combustible* building materials	≥ 120 ²	-
	A. Table contains only building supervisory requirements for structural elements which are also represented by the Eurocodes.		

	¹ DIN EN 1992-1-2:2010-12, DIN EN 1993-1-2:2010-12, DIN EN 1994-1-2:2010-12, DIN EN 1995-1-2:2010-12, DIN EN 1999-1-2:2010-12, DIN EN 1996-1-2:2022-10, DIN EN 1991-1-2:2010-12, Section 3.2.1 ² Not applicable to DIN EN 1995, as requirements for the fire behaviour of load-bearing parts are not fulfilled. ³ Not applicable to DIN EN 1992-1-2:2010-12, DIN EN 1993-1-2:2010-12, DIN EN 1994-1-2:2010-12, DIN EN 1999-1-2:2010-12, DIN EN 1996-1-2:2022-10 ⁴ In connection with DIN EN 1995-1-2:2010-12 Section 6, reference is made to the possibility of DIN EN 1995-1-1/NA:2010-12, NCI NA.12 ('carpenter-style connections'). * Table 1.1 applies to the requirements. Dimensioning according to Eurocode does not account for the fire characteristics of building materials. *** Table 1.1 or Table 1.2 applies to the requirements.
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The requirement of Table 4.1.1, column 1, is met only if reinforcing structural elements with their connections have at least the same determined duration of stability in the event of fire.

Table 4.1.2^A: Building authority requirements for non-load-bearing room-enclosing walls and assignment of classes (table value) according to Eurocode DIN EN 1992-1-2:2010-12, DIN EN 1994-1-2:2010-12, DIN EN 1996-1-2/NA/A1:2024-09 and additional application rules

	Building approval requirement	Classes according to Eurocode** DIN EN 1992-1-2:2010-12, Section 5 DIN EN 1994-1-2:2010-12, Section 4.2 DIN EN 1996-1-2/NA/A1:2024-09, to Annex B	Application rule to be observed in addition to Eurocode for designs using certain building materials***
	1	2	3
1	made of non-combustible* building materials	Not required	DIN 4102-4:2016-05
2	fire-retardant	R 30	DIN 4102-4:2016-05
3	Fire-retardant and made of non-combustible* materials	R 30	DIN 4102-4:2016-05
4	Highly fire-retardant and essential parts made of non-combustible* materials	R 60	DIN 4102-4:2016-05
5	Highly fire-retardant and made of non-combustible* materials	R 60	DIN 4102-4:2016-05
6	Fire-resistant (non-combustible* load-bearing and reinforced parts)	R 90	DIN 4102-4:2016-05
7	Fire-resistant and made of non-combustible* building materials	R 90	DIN 4102-4:2016-05
8	Fire resistance of 120 minutes and made of non-combustible* building materials	R 120	DIN 4102-4:2016-05
	A Table contains only building supervisory requirements for structural elements, which are also represented by the Eurocodes. * Table 1.1 applies to the requirements. ** The Eurocode class does not account for the fire characteristics of building materials. Table 1.1 or 1.2 applies. *** Table 1.1 or Table 1.2 applies to the requirements.		

The requirements of Tables 4.1.1, column 1 and 4.1.2, column 1 are met only if the parts bearing or reinforcing the structural elements these parts have at least the same fire resistance.

4.2 Space-enclosing structural elements

((unchanged))

4.2.1 Non-supporting space-enclosing walls

Table 4.2.1^A: Building authority requirements for non-load-bearing room-enclosing walls and assignment of classes (table value) according to Eurocode DIN EN 1992-1-2:2010-12 and DIN EN 1996-1-2/NA/A1:2024-09 and additional application rules

	Building approval requirement	Classes according to Eurocode** DIN EN 1992-1-2:2010-12, Section 5 DIN EN 1996-1-2/NA/A1:2024-09, to Annex B	Application rule to be observed in addition to Eurocode for designs using certain building materials***
	1	2	3
1	fire-retardant	EI 30	DIN 4102-4:2016-05
2	Fire-retardant and made of non-combustible* materials	EI 30	DIN 4102-4:2016-05
3	Highly fire-retardant and essential parts made of non-combustible* materials	EI 60	DIN 4102-4:2016-05
4	Highly fire-retardant and made of non-combustible* materials	EI 60	DIN 4102-4:2016-05
5	Fire-resistant (non-combustible* load-bearing and reinforced parts)	EI 90	DIN 4102-4:2016-05
6	Fire-resistant and made of non-combustible* building materials	EI 90	DIN 4102-4:2016-05
7	Firewall (fire-resistant and made of non-combustible* construction materials, stable also under additional mechanical stress)	EI 90-M	DIN 4102-4:2016-05
8	Wall instead of a firewall (highly fire-retardant and made of non-combustible* building materials and stable even under additional mechanical stress)	EI 60-M	DIN 4102-4:2016-05
9	Fire resistance of 120 minutes and made of non-combustible* building materials	EI 120	DIN 4102-4:2016-05
	A Table contains only building supervisory requirements for structural elements, which are also represented by the Eurocodes. * Table 1.1 applies to the requirements. ** The Eurocode class does not account for the fire characteristics of building materials. Table 1.1 or 1.2 applies. *** Table 1.1 or Table 1.2 applies to the requirements.		

The requirement of Table 4.2.1, column 1, is only met if adjacent structural elements have at least the same fire resistance, unless Part A 2.1.3.3.1 allows a different connection for adjacent structural elements. The transitions to such structural elements must not affect the space barrier as per Seq. No A 2.1.3.3.

4.2.2 Load-bearing space-enclosing walls

Table 4.2.2^A: Building approval requirements for loadbearing partitions and classification of classes (table values) according to Eurocode DIN EN 1992-1-2:2010-12 and DIN EN 1996-1-2/NA/A1:2024-09 and additional application rules

	Building approval requirement	Classes according to Eurocode** DIN EN 1992-1-2:2010-12, Section 5 DIN EN 1996-1-2/NA/A1:2024-09, to Annex B under unilateral fire stress	Application rule to be observed in addition to Eurocode for designs using certain building materials***
	1	2	3
1	fire-retardant	REI 30	DIN 4102-4:2016-05
2	Fire-retardant and made of non-combustible* materials	REI 30	DIN 4102-4:2016-05
3	Highly fire-retardant and essential parts made of non-combustible* materials	REI 60	DIN 4102-4:2016-05
4	Highly fire-retardant and made of non-combustible* materials	REI 60	DIN 4102-4:2016-05
5	Fire-resistant (non-combustible* load-bearing and reinforced parts)	REI 90	DIN 4102-4:2016-05
6	Fire-resistant and made of non-combustible* building materials	REI 90	DIN 4102-4:2016-05
7	Firewall (fire-resistant and made of non-combustible materials)	REI 90 and Criterion M	DIN 4102-4:2016-05
		REI-M 90	DIN 4102-4:2016-05
8	Wall instead of a firewall (highly fire-retardant and made of non-combustible* building materials and stable even under additional mechanical stress)	REI 60 and Criterion M	DIN 4102-4:2016-05
		REI-M 60	DIN 4102-4:2016-05
9	Fire resistance of 120 minutes and made of non-combustible* building materials	REI 120	DIN 4102-4:2016-05
10	Fire resistance of 120 min and made of non-combustible* building materials (stable even under additional mechanical stress)	REI 120 and Criterion M	DIN 4102-4:2016-05
		REI-M 120	DIN 4102-4:2016-05
	A Table contains only building supervisory requirements for structural elements, which are also represented by the Eurocodes. * Table 1.1 applies to the requirements. ** The Eurocode class does not account for the fire characteristics of building materials. Table 1.1 or 1.2 applies. *** Table 1.1 or Table 1.2 applies to the requirements.		

The requirement of Table 4.2.2, column 1, is only met if subsequent structural elements have at least the same fire resistance, unless Part A 2.1.3.3.1 allows a different connection for subsequent structural elements. The transitions to such structural elements must not affect the space barrier as per Seq. No A 2.1.3.3.

4.2.3 Load-bearing space-enclosing ceilings

((unchanged))

4.2.4 Load-bearing structural elements, space-enclosing ceilings, firewalls and walls instead of firewalls, partitions, walls of necessary stairwells and corridors, walls of open corridors, exterior walls, independent subceilings, roofs, stairs, system floors

In order to fulfil the building requirements in A 2.1.3, space-enclosing and/or load-bearing parts of structural installations according to the Technical Building Regulations or according to a proof of fitness for purpose in accordance with § 17 MBO¹ or proof of the suitability of designs according to § 16a MBO¹ shall be subject to the minimum required classes as given in Section 4.2, Table 4.2.4.

Table 4.2.4: Building approval requirements and classification of classes according to DIN 4102-2:1977-09

	Building approval requirement	Minimum required classes according to DIN 4102-2:1977-09	Abbreviation pursuant to DIN 4102-2:1977-09
	1	2	3
1	made of non-combustible* building materials	No specification of the class required. Table 1.1 applies.	
2	made of flame-retardant* building materials		
3	made of flame-retardant building materials not falling off burning or dripping off		
4	made of normal-flammability* building materials		
5	fire-retardant	Fire resistance class F 30	F 30-B ¹
6	Fire-retardant and made of non-combustible* materials	Fire resistance class F 30 and made of non-combustible building materials	F 30-A ¹
7	Highly fire-retardant and made of non-combustible* materials	Fire resistance class F 60 and made of non-combustible building materials	F 60-A ^{2,3}
8	Highly fire-retardant and of incombustible materials in the main parts	Fire resistance class F 60 and essential parts made of non-combustible building materials	F 60-AB ^{2,3}
9	Wall instead of a firewall, highly fire-retardant and made of non-combustible* building materials and stable even under additional mechanical stress	Wall instead of a firewall highly fire-retardant and made of non-combustible building materials and stable even under additional mechanical stress	-
10	Wall instead of a firewall, highly fire-retardant and in the essential parts made of non-combustible** building materials and stable even under additional mechanical stress	Wall instead of a firewall highly fire-retardant with essential parts made of non-combustible building materials and stable even under additional mechanical stress	-
11	Highly fire-retardant (combustible load-bearing parts, non-combustible* with insulation materials and cladding with fire resistance of 60 min. made of non-combustible* building materials) according to the Technical Rule under Seq. No A 2.2.1.4	Highly fire-retardant (combustible load-bearing parts, non-combustible* with insulation materials and cladding with fire resistance of 60 min. made of non-combustible building materials) according to the Technical Rule under Seq. No A 2.2.1.4	-
12	Wall instead of a fire wall, highly fire-retardant in accordance with A 2.1.3.1(b), with fire resistance of 60 minutes (load-bearing parts combustible, insulation materials non-combustible* and fire-resistant cladding providing 60 minutes' protection made of non-combustible* building materials) in accordance with Section 4.2 of the technical regulation under Seq. No A 2.2.1.4	Wall instead of a fire wall, highly fire-retardant in accordance with A 2.1.3.1(b), with fire resistance of 60 minutes (load-bearing parts combustible, insulation materials non-combustible* and fire-resistant cladding providing 60 minutes' protection made of non-combustible building materials) in accordance with Section 4.2 of the technical regulation under Seq. No A 2.2.1.4	-
13	Structural elements in accordance with A 2.1.3.1(e) with fire resistance of 60 minutes (load-bearing parts combustible, insulation materials non-combustible* with reduced fire protection cladding of 30 minutes made from non-combustible* building materials) in accordance with Section 4.3(a) or 4.3(e) of the technical regulation under Seq. no. A 2.2.1.4	Structural elements in accordance with A 2.1.3.1. Category e with fire resistance of 60 minutes (load-bearing elements combustible, insulation materials non-combustible* with reduced fire protection cladding of 30 minutes made from non-combustible* building materials) in accordance with Section 4.3(a) or 4.3(e) of the technical regulation under Seq. no. A 2.2.1.4	-
14	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 minutes (combustible load-bearing parts, with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 minutes (combustible load-bearing parts, with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	

¹ under federal state law

	Building approval requirement	Minimum required classes according to DIN 4102-2:1977-09	Abbreviation pursuant to DIN 4102-2:1977-09
	1	2	3
1 5	Wall instead of a firewall Structural elements in accordance with A 2.1.3.1(d), stable even under additional mechanical stress, with fire resistance of 60 minutes (made of combustible building materials with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	Wall instead of a firewall Structural elements in accordance with A 2.1.3.1(d), stable even under additional mechanical stress, with fire resistance of 60 minutes (made of combustible building materials with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	-
1 6	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 min (load-bearing parts combustible, with reduced fire-resistant cladding of 30 min. made of non-combustible* building materials) in accordance with Section 4.3(b) or 4.3(e) of the Technical Rule in accordance with Seq. No. A 2.2.1.4	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 min (load-bearing parts combustible, with reduced fire-resistant cladding of 30 min. made of non-combustible* building materials) in accordance with Section 4.3(b) or 4.3(e) of the Technical Rule in accordance with Seq. No. A 2.2.1.4	-
1 7	Structural elements in accordance with A 2.1.3.1 letter (d) with fire resistance of 60 min or 90 min (combustible load-bearing parts and with cladding with reduced fire resistance) in accordance with Section 4.3(c) of the Technical Rule under Seq. No A 2.2.1.4	Structural elements in accordance with A 2.1.3.1 letter (d) with fire resistance of 60 min or 90 min (combustible load-bearing parts and with cladding with reduced fire resistance) in accordance with Section 4.3(c) of the Technical Rule under Seq. No A 2.2.1.4	
1 8	Structural elements according to A 2.1.3.1(d) with fire resistance of 60 min or 90 min (combustible load-bearing parts with reduced, room-side fire-resistant cladding and with one-sided cladding made of non-combustible* building materials according to § 36(6) MBO ¹ in conjunction with A 2.1.12) according to Section 4.3(c) of the Technical Rule in accordance with Seq. No. A 2.2.1.4 (e.g. walls of necessary corridors)	Structural elements according to A 2.1.3.1(d) with fire resistance of 60 min or 90 min (combustible load-bearing parts with reduced, room-side fire-resistant cladding and with one-sided cladding made of non-combustible* building materials according to § 36(6) MBO ¹ in conjunction with A 2.1.12) according to Section 4.3(c) of the Technical Rule in accordance with Seq. No. A 2.2.1.4 (e.g. walls of necessary corridors)	-
1 9	Fire-resistant and made of non-combustible* building materials	Fire resistance class F 90 and made of non-combustible building materials	F 90-A ^{4,5}
2 0	Fire-resistant (non-combustible load-bearing and reinforced parts)	Fire resistance class F 90 and essential parts made of non-combustible building materials	F 90-AB ^{4,5}
2 1	Firewall (including fire-resistant and non-combustible building materials under additional mechanical stress)	Firewall	-
2 2	Wall with the design of a firewall (fire-resistant also under additional mechanical stress and made of non-combustible* building materials)	Wall with the design of a firewall (fire-resistant also under additional mechanical stress and made of non-combustible* building materials)	-
2 3	Building shell walls which, from the inside out, always have the fire resistance of the load-bearing and reinforced parts of the building (however, the building structural elements must be at least fire-retardant), and, from the outside in, have the fire resistivity of the fire-resistant building structural elements	Building shell walls which, from the inside out, always have the fire resistance of the load-bearing and reinforced parts of the building (however, the building structural elements must be at least fire-retardant), and, from the outside in, have the fire resistivity of the fire-resistant building structural elements	F 30-B (from the inside) and F90-B (from the outside)
2 4	Structural elements in accordance with A 2.1.3.1(e) with fire resistance of 90 minutes (made of combustible building materials with cladding with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	Structural elements in accordance with A 2.1.3.1(e) with fire resistance of 90 minutes (made of combustible building materials with cladding with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	-

2 5	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 minutes (load-bearing parts with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 minutes (load-bearing parts with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	-
2 6	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 min. (load-bearing parts combustible, with reduced fire-resistant cladding of 30 min. made of non-combustible* building materials) in accordance with Section 4.3(b) or 4.3(e) of the Technical Rule in accordance with Seq. No. A 2.2.1.4	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 min. (load-bearing parts combustible, with reduced fire-resistant cladding of 30 min. made of non-combustible* building materials) in accordance with Section 4.3(b) or 4.3(e) of the Technical Rule in accordance with Seq. No. A 2.2.1.4	-
2 7	Structural elements according to A 2.1.3.1(d) with fire resistance of 90 min (load-bearing parts combustible, with cladding with reduced room-side fire-resistance of 30 min made of non-combustible* building materials and with one-sided cladding made of non-combustible* building materials according to § 36(6) MBO ¹ in conjunction with A 2.1.12) according to Section 4.3(c) of the Technical Rule in accordance with Seq. No. A 2.2.1.4 (e.g. walls of necessary corridors)	Structural elements according to A 2.1.3.1(d) with fire resistance of 90 min (load-bearing parts combustible, with cladding with reduced room-side fire-resistance of 30 min made of non-combustible* building materials according to § 36(6) MBO ¹ in conjunction with A 2.1.12) according to Section 4.3(c) of the Technical Rule in accordance with Seq. No. A 2.2.1.4 (e.g. walls of necessary corridors)	
2 8	Components in accordance with A 2.1.3.1(e) with fire resistance of 90 minutes (load-bearing parts combustible, insulation materials non-combustible*, with 90-minute fire protection cladding on the interior side made of non-combustible* building materials and 30-minute reduced fire protection cladding on the exterior side made of non-combustible* building materials) in accordance with Section 4.2 in conjunction with 4.3(e) of the technical regulation under Seq. no. A 2.2.1.4	Components in accordance with A 2.1.3.1(e) with fire resistance of 90 minutes (load-bearing parts combustible, insulation materials non-combustible*, with 90-minute fire protection cladding on the interior side made of non-combustible* building materials and 30-minute reduced fire protection cladding on the exterior side made of non-combustible* building materials) in accordance with Section 4.2 in conjunction with 4.3(e) of the technical regulation under Seq. no. A 2.2.1.4	
2 9	Fire resistance of 120 minutes and made of non-combustible* building materials	Fire resistance class F 120 and made of non-combustible building materials	F 120-A
3 0	Fire resistance of 120 minutes and made of non-combustible* building materials, stable even under additional mechanical stress	Firewall with a higher fire resistance duration of 120 min	-
	¹ W 30 is also permitted for non-load-bearing exterior walls. ² Proof and classification as per Table 4.3.1.1 ³ W 60 is also permitted for non-load-bearing exterior walls. ⁴ W 90 is also permitted for non-load-bearing exterior walls. ⁵ Load-bearing structural elements must be tested under an appropriate load in accordance with DIN 4102-2:1977-09, Section 6.2.2.6. * Table 1.1 applies to the requirements. ** Layer of non-combustible building materials continuous in the component level.		

The requirement of Table 4.2.4, column 1, is only met if adjacent structural elements have at least the same fire resistance, unless Part A 2.1.3.3.1 allows a different connection for adjacent structural elements. The transitions to such structural elements must not affect the space barrier, if required, under Seq. No A 2.1.3.3.

4.3 Use of construction products according to harmonised technical specifications for load-bearing and/or space-enclosing structural elements

((unchanged))

4.3.1

((unchanged))

4.3.1.1 Fire resistance requirements including fire behaviour when using construction products in accordance with harmonised technical specifications for load-bearing, load-bearing and room-closing structural elements, and required minimum performances, excluding construction products in accordance with 4.3.1.2

Table 4.3.1.1: Building approval requirements and minimum required performances

	Building approval requirement	Minimum required performances		
		Fire resistance		Fire behaviour
		without space barrier ¹	with space barrier	
	1	2	3	4
1	made of non-combustible* building materials	-	-	A2-s1, d0**
2	made of flame-retardant* building materials	-	-	C-s2, d2**
3	made of normal-flammability* building materials	-	-	E-d2
4	fire-retardant	R 30	REI 30	E-d2
5	fire retardant with one-sided ² cladding made of non-combustible* building materials	-	REI 30	Non-combustible* cladding: A2-s1, d0**; otherwise: E-d2
6	Fire-retardant and made of non-combustible* materials	R 30	REI 30	A2-s1, d0**
7	Highly fire-retardant and made of non-combustible* materials	R 60	REI 60	A2-s1, d0**
8	Wall instead of a highly fire-retardant firewall (made of non-combustible* building materials and stable even under additional mechanical stress)	-	REI 60-M	A2-s1, d0**
9	Highly fire-retardant and made of non-combustible* materials in the main parts (non-combustible load-bearing and reinforced parts) ^{2,4}	R 60	REI 60 ²	Essential parts: A2-s1, d0**; otherwise: E-d2
10	Wall instead of a firewall, highly fire-retardant and in the essential parts made of non-combustible* building materials and stable even under additional mechanical stress	-	REI 60-M	Essential parts: A2-s1, d0**; otherwise: E-d2
11	Highly fire-retardant in accordance with A 2.1.3.1(b) with fire resistance of 60 minutes (supporting parts combustible, insulating materials non-combustible* and fire-resistant cladding providing 60 minutes' protection of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	R 60 and fire-protective cladding: $t_{ch} = 60 \text{ minute}$ S^3	REI 60 and fire-resistant cladding: $t_{ch} = 60 \text{ minute}$ S^3	Insulation materials, fire-protective cladding: A2-s1, d0**; otherwise: E-d2
12	Wall instead of a fire wall, highly fire-retardant in accordance with A 2.1.3.1(b), stable even under additional mechanical stress, with fire resistance of 60 minutes (load-bearing parts combustible, insulation materials non-combustible* and fire-resistant cladding providing 60 minutes' protection made of non-combustible building materials) in accordance with Section 4.2 of the technical regulation under Seq. No A 2.2.1.4	-	REI 60-M and fire-resistant cladding: $t_{ch} = 60 \text{ minute}$ S^3	Insulation materials, fire-protective cladding: A 2-s1, d0** otherwise: E-d2
13	Structural elements in accordance with A 2.1.3.1(e) with fire resistance of 60 minutes (load-bearing parts combustible, insulating materials non-combustible* with reduced fire-resistant cladding of 30 minutes made of non-combustible* building materials) in accordance with Section 4.3(a) or 4.3(e) of the Technical Rule in accordance with seq. No A 2.2.1.4	R 60 and fire-resistant cladding: $t_{ch} = 30 \text{ minute}$ S^3	REI 60 and fire-resistant cladding: $t_{ch} = 30 \text{ minute}$ S^3	Insulation materials, fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
14	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 minutes (combustible load-bearing parts, with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	R 60 and fire-resistant cladding: $t_{ch} = 60 \text{ minute}$ S^3	REI 60 and fire-resistant cladding: $t_{ch} = 60 \text{ minute}$ S^3	Insulation materials, fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
15	Structural elements in accordance with A 2.1.3.1(d), stable even under additional mechanical stress, with fire resistance of 60 minutes (made of combustible building materials with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	-	REI 60-M and fire-resistant cladding: $t_{ch} = 60 \text{ minute}$ S^3	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
16	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 min (load-bearing parts combustible with reduced fire-resistant cladding of 30 min. made of non-combustible* building materials) in accordance with Section 4.3(b) or 4.3(e) of the Technical Rule in accordance with seq. No. A 2.2.1.4	R 60 and fire-resistant cladding: $t_{ch} = 30 \text{ minute}$ S^3	REI 60 and fire-resistant cladding: $t_{ch} = 30 \text{ minute}$ S^3	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
17	Structural elements in accordance with A 2.1.3.1 letter (d) with fire resistance of 60 min or 90 min and made of combustible	R 60	REI 60	E-d2

	building materials, in accordance with Section 4.3 of the Technical Rule under Seq. No A 2.2.1.4	or R 90	or REI 90	
18	Structural elements according to A 2.1.3.1(d) with fire resistance of 60 min or 90 min (load-bearing parts combustible, with reduced, room-side fire-resistant cladding and with one-sided cladding made of non-combustible* building materials according to § 36(6) MBO ¹ in conjunction with A 2.1.12) according to Section 4.3(c) of the Technical Rule in accordance with Seq. No. A 2.2.1.4 (e.g. walls of necessary corridors)	-	REI 60 or REI 90	Non-combustible* cladding: A2-s1, d0**; otherwise: E-d2
19	Fire-resistant and made of non-combustible* building materials	R 90	REI 90	A2-s1, d0**
20	Hire-resistant (non-combustible load-bearing and reinforced parts*) ⁴	R 90	REI 90 ²	A2-s1, d0**; otherwise E-d2
21	Firewall***	-	REI 90-M	A2-s1, d0**
22	Wall with the design of a firewall (fire-resistant also under additional mechanical stress and made of non-combustible* building materials)	-	REI 90-M	A2-s1, d0**
23	Structural elements in accordance with A 2.1.3.1(e), with fire resistance of 90 minutes (made of combustible building materials with cladding with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	R 90 and fire-resistant cladding: t _{ch} = 90 minutes	REI 90 and fire protection cladding: t _{ch} = 90 minutes	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
24	Components in accordance with A 2.1.3.1(e) with fire resistance of 90 minutes (load-bearing parts combustible, insulation materials non-combustible*, with 90-minute fire protection cladding on the interior side and 30-minute reduced fire protection cladding on the exterior side, made of non-combustible* building materials) in accordance with Section 4.2 in conjunction with 4.3(e) of the technical regulation under Seq. no. A 2.2.1.4	-	REI 90 and fire-resistant cladding: t _{ch} = 90 minutes (room side) t _{ch} = 30 minutes ³ (outside)	Insulation materials, fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
25	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 minutes (load-bearing parts with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	R 90 and fire-resistant cladding: t _{ch} = 90 minutes	REI 90 and fire-resistant cladding: t _{ch} = 90 minutes	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
26	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 90 minutes (load-bearing parts combustible, with reduced fire-resistant cladding of 30 minutes made of non-combustible* building materials) in accordance with Section 4.3(b) or 4.3(e) of the Technical Rule in accordance with Seq. No. A 2.2.1.4	R 90 and fire-resistant cladding: t _{ch} = 30 minutes ³	REI 90 and fire-resistant cladding: t _{ch} = 30 minutes ³	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
27	Structural elements according to A 2.1.3.1(d) with fire resistance of 90 minutes (load-bearing parts combustible, room-side cladding with reduced fire resistance of 30 minutes and one-sided cladding made of non-combustible* building materials according to § 36(6) MBO ¹ in conjunction with A 2.1.12) according to Section 4.3(c) of the Technical Rule in accordance with Seq. No. A 2.2.1.4 (e.g. walls of necessary corridors)	-	REI 90 and fire-resistant cladding: t _{ch} = 30 minutes ³	fire-resistant cladding, non-combustible* cladding: A2-s1, d0**; otherwise: E-d2
28	Fire resistance of 120 minutes and made of non-combustible* building materials	R 120	REI 120	A2 -s1, d0**
29	Fire resistance of 120 minutes and made of non-combustible* building materials, stable even under additional mechanical stress	-	REI 120-M4	A2-s1, d0**
¹ For steel structural elements coated with reactive fire protection systems, the IncSlow specification according to DIN EN 13501-2:2023-12 must be mentioned additionally in the declaration of performance. ² pursuant to § 35(5); § 36(6) and § 39(2) MBO in conjunction with A 2.1.12 ³ The protection period t _{ch} shall be deemed to have been complied with if fire-resistant cladding with the classification K ₂ according to DIN EN 13501-2:2023-12 with the same number of minutes is used. ⁴ A non-combustible layer continuous in the component plane: A2-s1, d0** as per Table 1.2 * Table 1.1 applies to the requirements. ** Regarding fire performance requirements, Table 1.2 applies. Section 1.3 shall apply where necessary. *** The fire wall must be made of non-combustible building materials.				

The requirement of Table 4.3.1.1, column 1, is only met if subsequent structural elements have at least the same fire resistance. With regard to the fire behaviour of the construction products, Table 1.2 applies.

If the requirements of technical regulation according to Seq. No. A 2.2.1.4 according to Table 4.3.1.1, footnote 3, are not met, proof as per § 16a MBO¹ is required in the absence of a generally accepted Technical Rule for the planning, designing and execution of the above-mentioned construction products.

¹ under federal state law

4.3.1.2 Fire resistance requirements including fire performance when using construction products in accordance with DIN EN 13964:2014-08 for space-closing structural elements as non-supporting subceilings with fire stress only from bottom or bottom up and from top to bottom and at least required performance

Table 4.3.1.2: Building approval requirements and minimum required performances

	Building approval requirement	Minimum required performances		
		Fire resistance of the subceiling		Fire behaviour of the subceiling
		with a fire stress only from below	with a fire stress from bottom to top and from top to bottom	
	1	2	3	4
1	made of non-combustible* building materials	-	-	A2-s1, d0**
2	made of flame-retardant* building materials not falling off burning or dripping off	-	-	C-S2, d0**
3	fire-retardant	From bottom to top EI 30 (a ← b)	From bottom to top and from top to bottom EI 30 (a ↔ b)	E-d2
4	Fire-retardant and made of non-combustible* materials	From bottom to top EI 30 (a ← b)	From bottom to top and from top to bottom EI 30 (a ↔ b)	A2-s1, d0**
5	Highly fire-retardant and made of non-combustible* materials	From bottom to top EI 60 (a ← b)	From bottom to top and from top to bottom EI 60 (a ↔ b)	A2-s1, d0**
6	Fire-resistant and made of non-combustible* building materials	From bottom to top EI 90 (a ← b)	From bottom to top and from top to bottom EI 90 (a ↔ b)	A2-s1, d0**
	* Table 1.1 applies to the requirements. ** Table 1.2 applies to the requirements			

4.3.1.3 Terms of use and execution of construction products in accordance with Table 4.3.1.2

((unchanged))

4.3.2 Requirements on fire resistance including fire performance when using construction products in accordance with harmonised technical specifications for non-supporting walls, non-supporting partitions or walls of necessary corridors, walls of open corridors and minimum required performance

Table 4.3.2: Building approval requirements and minimum required performances

	Building approval requirement	Minimum required performances	
		Fire resistance	Fire behaviour
	1	2	3
1	made of normal-flammability building materials	-	E–d2
2	fire-retardant	EI 30	E–d2
3	Fire-retardant and made of non-combustible* materials	EI 30	A2–s1, d0**
4	fire retardant with one-sided ¹ cladding made of non-combustible* building materials	EI 30	Non-combustible* cladding: A2–s1, d0**; Otherwise: E–d2
5	Highly fire-retardant and made of non-combustible* materials	EI 60	A2–s1, d0**
6	Highly fire-retardant and made of non-combustible* materials in the main parts (non-combustible load-bearing and reinforced parts) ²⁴	EI 60	Essential parts: A2–s1, d0**; Otherwise: E–d2
7	highly fire-retardant and made of non-combustible* building materials, stable even under additional mechanical stress	EI 60-M	A2–s1, d0**
8	highly fire-retardant in accordance with A 2.1.3.1(b), with fire resistance of 60 minutes (load-bearing parts combustible, insulation materials non-combustible* and fire-resistant cladding providing 60 minutes' protection made of non-combustible building materials) ² in accordance with Section 4.2 of the technical regulation under Seq. No A 2.2.1.4	EI 60 and fire-protective cladding: $t_{ch} = 60 \text{ minutes}^4$	Insulation materials and fire-protective cladding: A2–s1, d0**; otherwise: E–d2
9	Wall instead of a firewall, highly fire-retardant in accordance with A 2.1.3.1(b), stable even under additional mechanical stress, with fire resistance of 60 minutes (combustible building materials with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	EI 60-M and fire-resistant cladding: $t_{ch} = 60 \text{ minutes}^4$	Insulation materials, fire-protective cladding: A2–s1, d0**; otherwise: E–d2
10	Structural elements in accordance with A 2.1.3.1(d), with fire resistance of 60 minutes (made of combustible building materials with cladding with reduced fire resistance of 30 minutes made of non-combustible* building materials) in accordance with Section 4.3(a) of the Technical Rule under Seq. No A 2.2.1.4	EI 60 and fire-resistant cladding: $t_{ch} = 30 \text{ minutes}^4$	Insulation materials, fire-resistant cladding: A2–s1, d0**; otherwise: E–d2
11	Structural elements in accordance with A 2.1.3.1(d), with fire resistance of 60 minutes (made of combustible building materials with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	EI 60 Fire protection cladding: $t_{ch} = 60 \text{ minutes}^4$	Insulation materials, fire-resistant cladding: A2–s1, d0**; otherwise: E–d2
12	Structural elements in accordance with A 2.1.3.1(d), stable even under additional mechanical stress, with fire resistance of 60 minutes (made of combustible building materials with cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	EI 60-M Fire protection cladding: $t_{ch} = 60 \text{ minutes}^4$	Fire-resistant cladding: A2–s1, d0**; otherwise: E–d2
13	Structural elements in accordance with A 2.1.3.1(d), with reduced fire resistance of 30 minutes (made of combustible building materials with smaller in scale cladding with fire resistance of 60 minutes made of non-combustible* building materials) in accordance with Section 4.3(b) of the Technical Rule under Seq. No A 2.2.1.4	EI 60 Fire-resistant cladding: $t_{ch} = 30 \text{ minutes}^4$	fire-resistant cladding A2–s1, d0**; otherwise: E–d2
14	Structural elements in accordance with A 2.1.3.1(d) with fire resistance of 60 min or 90 min (made of combustible building materials with reduced fire-retardant cladding of non-combustible* building materials), in accordance with Section 4.3c of the Technical Rule under Seq. No A 2.2.1.4	EI 60 or EI 90	E–d2
15	Fire-resistant and made of non-combustible* building materials	EI 90	A2–s1, d0**
16	Fire-resistant (non-combustible* load-bearing and reinforced parts) ^{2,3}	EI 90	A2–s1, d0**; otherwise E–d2
17	Firewall (fire-resistant and made of non-combustible* construction materials, stable also under additional mechanical stress)	EI 90-M	A2–s1, d0**

1 8	Structural elements in accordance with A 2.1.3.1(e), with fire resistance of 90 minutes (made of combustible building materials with cladding with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	EI 90 and fire-resistant cladding: $t_{ch} = 90$ minutes ⁴	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
1 9	Structural elements in accordance with A 2.1.3.1(d), with fire resistance of 90 minutes (made of combustible building materials with cladding with fire resistance of 90 minutes made of non-combustible* building materials) in accordance with Section 4.2 of the Technical Rule under Seq. No A 2.2.1.4	EI 90 and fire-resistant cladding: $t_{ch} = 90$ minutes ⁴	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
2 0	Structural elements in accordance with A 2.1.3.1(d), with fire resistance of 90 minutes (made of combustible building materials with cladding with fire resistance of 30 minutes made of non-combustible* building materials) in accordance with Section 4.3(b) of the Technical Rule under Seq. No A 2.2.1.4	EI 90 Fire protection cladding: $t_{ch} = 30$ minutes ⁴	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
2 1	Fire resistance of 120 minutes and made of non-combustible* building materials	EI 120	A2-s1, d0**
	¹ pursuant to § 35(5); § 36(6) and § 39(2) MBO in conjunction with A 2.1.12 and A 2.1.13 ² Parts within the structural element to ensure stability (dead weight) and suitability for use. ³ A non-combustible layer continuous in the component plane: A2-s1, d0** as per Table 1.2. ⁴ The protection period t_{ch} shall be deemed to have been complied with if fire-resistant cladding with the classification K ₂ according to DIN EN 13501-2:2023-12 with the same number of minutes is used. * Table 1.1 applies to the requirements. ** Regarding fire performance requirements, Table 1.2 applies. Section 1.3 shall apply where necessary.		

The requirement of Table 4.3.2, column 1, is deemed fulfilled only if adjacent structural elements have at least the same fire resistance. The transitions to such structural elements must not affect the space barrier as per Seq. No A 2.1.3.3. With regard to the fire behaviour of the construction products, Table 1.2 applies.

4.3.3 Requirements for fire resistance including fire performance when using construction products according to harmonised technical specifications for non-load-bearing exterior walls (with space barrier) and minimum required performance

Table 4.3.3: Building approval requirements and minimum required performances

	Building approval requirement	Minimum required performances	
		Fire resistance	Fire behaviour
1		2	3
1	made of non-combustible* building materials	-	A2-s1, d0**
2	made of flame-retardant* building materials	-	C-s2, d2**
3	made of flame-retardant building materials not falling off burning or dripping off	-	C-s2, d0**
4	made of normal-flammability* building materials	-	E-d2
5	fire-retardant	From the inside to the outside: EI 30 (i → o) and from outside to inside: EI 30-ef (i ← o)	E-d2
6	Fire-retardant and made of non-combustible* materials	From the inside to the outside: EI 30 (i → o) and from outside to inside: EI 30-ef (i ← o)	A2-s1, d0**
7	fire retardant with one-sided cladding made of non-combustible* building materials as per § 36(6) MBO ¹ in conjunction with A 2.1.12	EI 30	Non-combustible cladding: A2-s1, d0**; otherwise: E-d2
8	fire retardant with one-sided cladding made of non-combustible* building materials as per § 35(5) and § 39(2) MBO ¹ in conjunction with A 2.1.12 and A 2.1.13	From the inside to the outside: EI 30 (i → o) and from outside to inside: EI 30-ef (i ← o)	Non-combustible* cladding: A2-s1, d0**; otherwise: E-d2
9	fire retardant on the outside with cladding made of non-combustible* building materials in accordance with Section 7 of the Technical Rule under Seq. No A 2.2.1.4	From the inside to the outside: EI 30 (i → o) and from outside to inside: EI 30-ef (i ← o)	Non-combustible* cladding: A2-s1, d0**; otherwise: E-d2
10	fire retardant on the outside with cladding made of non-combustible* building materials in accordance with Section 7 of the Technical Rule under Seq. No A 2.2.1.4, and with one-sided cladding made of non-combustible* building materials in accordance with § 36(6) MBO ¹ in conjunction with A 2.1.12 (open corridor)	From the inside to the outside: EI 30 (i → o) and from outside to inside: EI 30-ef (i ← o)	Non-combustible* cladding: A2-s1, d0**; otherwise: E-d2
11	Highly fire-retardant components in accordance with A 2.1.3.1(b), with fire resistance of 60 minutes (made of combustible building materials, non-combustible* insulation materials, with a fire-resistant cladding providing 60 minutes' protection made of non-combustible* building materials) in accordance with Section 4.2 of the technical regulation under Seq. no. A 2.2.1.4 (e.g. § 30(6) MBO ¹)	EI 60 and fire-resistant cladding: $t_{ch} = 60 \text{ minutes}^2$	Insulation materials and fire-protective cladding: A2-s1, d0**; otherwise: E-d2
12	Components in accordance with A 2.1.3.1(d) with fire resistance of 60 minutes (made of combustible building materials, with 60-minute fire-resistant cladding made of non-combustible* building materials) in accordance with § 4.2 of the technical regulation under Seq. no. A 2.2.1.4 (e.g. § 30(6) MBO ¹)	EI 60 and fire-resistant cladding: $t_{ch} = 60 \text{ minutes}^2$	Fire-resistant cladding: A2-s1, d0**; otherwise: E-d2
13	Fire resistant (non-combustible carrying and reinforced parts not combustible*) ^{3,4}	From the inside to the outside: EI 90 (i → o) and from outside to inside: EI 90-ef (i ← o)	Essential parts: A2-s1, d0**; otherwise: E-d2
14	Fire-resistant and made of non-combustible* building materials	From the inside to the outside: EI 90 (i → o) and from outside to inside: EI 90-ef (i ← o)	A2-s1, d0**
	¹ to be cladded on both sides if stairwell wall is also the wall of the open corridor ² The protection period t_{ch} shall be deemed to have been complied with if fire-resistant cladding with the classification K ₂ according to DIN EN 13501-2:2023-12 with the same number of minutes is used.		

³	Parts within the structural element to ensure stability (dead weight) and suitability for use.
⁴	A non-combustible layer continuous in the component plane: A2-s1, d0** as per Table 1.2.
*	Table 1.2 applies to the requirements
**	Regarding fire performance requirements, Table 1.2 applies. Section 1.3 shall apply where necessary.

The requirement of Table 4.3.3, column 1, is deemed fulfilled only if adjacent structural elements have at least the same fire resistance. The transitions to such structural elements must not affect the space barrier as per Seq. No A 2.1.3.3. With regard to the fire behaviour of the construction products, Table 1.2 applies.

5 Closures

((unchanged))

5.1 Fire and/or smoke protection barriers as well as tight-sealing and self-closing barriers

((unchanged))

5.1.1 Fire and/or smoke protection barriers inside structural works according to usability certification according to § 17 MBO [in accordance with federal state law], excluding conveyor closures

((unchanged))

5.1.2 Fire and/or smoke protection closures in external walls of structural works, excluding conveyor closures

The requirements set out in Table 5.1.1 shall apply. For external use, the differential climate in accordance with EN 14351-1:2006+A2:2016²² and the deformation class in accordance with EN 12219:1999²⁷ must also be verified. At least classes 2(d) and 2(e) are required to comply with the building authority requirements.

5.1.3 Terms of use and execution for financial statements in accordance with 5.1.1

((unchanged))

5.1.4 Construction products in accordance with EAD No. 020029-00-1102 and EAD No. 020062-00-1102, as well as EN 16034:2014 [Implemented in Germany by DIN EN 16034:2014-12.] in conjunction with EN 13241:2003+A2:2016 [Implemented in Germany by DIN EN 13241:2016-12.] for use within buildings as fire and/or smoke barriers

Table 5.1.4: Building approval requirements and at least required services and other features

	Building approval requirement	Minimum required performances	Other features
		Fire resistance and smoke-resistance for construction products as barriers ^{1,2}	Fire behaviour
	1	2	3
1	Fire-retardant, tight-sealing self-closing	El ₂ 30 S _{a3} C Continuous function test ²	E – d2
2	Highly fire-retardant, tight-sealing self-closing	El ₂ 60 S _{a3} C Continuous function test ²	
3	Fire resistant, tight-sealing self-closing	El ₂ 90 S _{a3} C Continuous function test ²	
4	Fire-retardant, smoke-proof, self-closing	El ₂ 30 S ₂₀₀ C Continuous function test ²	
5	Highly fire-retardant, smoke-proof, self-closing	El ₂ 60 S ₂₀₀ C Continuous function test ²	
6	Fire-resistant, smoke-proof, self-closing	El ₂ 90 S ₂₀₀ C Continuous function test ²	
7	Smoke-proof and self-closing	S ₂₀₀ C Continuous function test ²	
1 The minimum required performance must be verified for both sides of the closure. 2 Permanent function testing: - Class 5 for fire/smoke protection doors (swing leaf closures), wicket doors in gates as well as construction products according to EN 13241:2003 + A2:2016, which are considered as doors in accordance with Chapter A 2.1.6 - min. class 2 for other fire/smoke protection closures (e.g. flaps, gates)			

²² Implemented in Germany by DIN EN 14351-1:2016-12.

²⁷ Implemented in Germany by DIN EN 12219:2000-06.

5.1.5

5.1.6 Construction products in accordance with EN 16034:2014 [Implemented in Germany by DIN EN 16034:2014-12.] in conjunction with EN 14351-1:2006+A2:2016 [Implemented in Germany by DIN EN 14351-1:2016-12.] or EN 13241:2003+A2:2016 [Implemented in Germany by DIN EN 13241:2016-12.] for use as fire and/or smoke protection barriers in external walls of buildings

The requirements set out in Table 5.1.4 shall apply.

For construction products according to EN 16034:2014²⁵ in conjunction with EN 14351-1:2006+A2:2016²² the differential climate according to EN 14351-1:2006+A2:2016²² and the deformation class according to EN 12219:1999²⁷ must be proven in addition. At least classes 2(d) and 2(e) are required to comply with the building authority requirements.

5.1.7 Usage and implementation provisions for barriers according to 5.1.4 and 5.1.5

For the use of construction products as fire and/or smoke protection barriers, DIN 18093:2017-10 and the following conditions of use and execution shall apply:

1. Use is only permitted if the structural elements that need to be described in the manufacturer's installation instructions pursuant to DIN 18093:2017-10, Section 3.2, are in compliance with the fire resistance requirements for the structural installation. These structural elements must be designed so as to withstand the impacts of the use of the construction product as well as the impacts of the construction product in case of fire.
2. The use in escape and rescue routes shall only be permitted if, in the case of sliding, lifting or rolling closures, including those considered doors in accordance with A 2.1.6, and fire and smoke protection curtains which do not open in the direction of escape, a door that can be opened in the direction of escape is located in the immediate vicinity.
3. Side and/or fall flaps in connection with construction products as fire and/or smoke protection barriers are not covered by EN 16034:2014²⁵. For the design, dimensioning and execution there are no technical best practices, and proof pursuant to § 16a MBO¹ is required.
4. The use of construction products as fire and/or smoke protection closures for non-floor level installation (height > 500 mm above upper edge of the finished floor of the room) is only permitted if this is tested and specified in the installation instructions.
5. The lintel/structural element above a construction product as a fire and/or smoke protection closure shall be static and designed in such a way that the construction product does not receive any additional load as a closure (except its own weight).
6. Visible instructions shall be affixed to both sides of sliding, lifting and rolling barriers, reminding that the closing area must be kept free at all times from any objects that could obstruct the closing of the barrier. Sliding, lifting and rolling barriers shall be equipped with an audio-visual warning system that announces the closing. Once initiated, the closing process may only be interrupted for personal safety purposes. The closing process must continue automatically from each opening position after the closing area has been released.
7. A fire and/or smoke protection closure inside a building may be fitted with a suitable locking mechanism for the fire and/or smoke protection closure with applicability demonstrated on this closure by type approval.

²⁵ Implemented in Germany by DIN EN 16034:2014-12.

²² Implemented in Germany by DIN EN 14351-1:2016-12.

²⁷ Implemented in Germany by DIN EN 12219:2000-06.

¹ under federal state law

8. The indication 'released' for the 'ability to release' characteristic in the declaration of performance only means that a locking device is present, not a locking mechanism.

9. The decision to use a fire curtain may be made only on the basis of the following criteria:

- ☐ Expected air flows, e.g. through natural thermals or artificial ventilation systems, which would affect safe closing,
- ☐ the existing shape stability to collapsing or falling debris, structural elements or objects,
- ☐ smoke leakage and
- ☐ the behaviour of pressure ratios that differ from those specified in EN 1634-1:2014+A1:2018²⁸ and,
- ☐ the rolling-down of the curtain in case of pressure differences.

Fire curtains may only be used and installed in the dimensions for which a test has been carried out. A series of two or more fire curtains, including those separated by supporting elements, is not permitted.

10. The decision to use a smoke curtain may be made only on the basis of the following criteria:

- ☐ Expected air flows, e.g. through natural thermals or artificial ventilation systems, which would affect safe closing,
- ☐ existing dimensional stability when faced with falling debris, structural elements or objects,
- ☐ Behaviour at pressure ratios that differ from those specified in EN 1634-3:2005-01.²⁹

Smoke curtains may only be used and installed in the dimensions for which a test has been carried out. A series of two or more smoke curtains, including those separated by supporting elements, is not permitted.

11. Use is only permitted if the installation manual specifies that the barrier fulfils the requirements for fire impact from either side and for smoke development pursuant to A 2.1.6.

Use in escape routes is only permitted if the installation manual states that the requirements with regard to the closing devices and the possibility of manual opening according to A 2.1.6 are met.

5.2 Fire protection barriers in path-bound conveyor systems

((unchanged))

5.2.1 Fire protection barriers in path-bound conveyor systems classified according to DIN 4102-5:1977-05

Table 5.2.1: Building approval requirements and classification of the class according to DIN 4102-5:1977-09

	Building approval requirement	Fire protection barrier in conveyor systems
	1	2
1	fire-retardant, tight-* and self-closing	T 30
2	highly fire-retardant, tight* and self-closing	T 60
3	fire-resistant, tight* and self-closing	T 90
* In accordance with the current state of the art, the requirement of 'tight-closing' shall be deemed to have been met in the event of fire-resistant closures in connection with track-bound conveyors, even without peripheral permanent elastic sealing.		

²⁸ Implemented in Germany by DIN EN 1634-1:2018-04.

²⁹ Implemented in Germany by DIN EN 1634-3:2005-01.

5.2.2 Construction products as fire protection barrier in path-bound conveyor systems according to EAD 350022-01-1107

((unchanged))

5.2.3 Conditions of use and implementation of construction products according to 5.2.2

((unchanged))

5.3 Landing doors for lifts

Landing doors for lifts as per Part C, Chapter C 2, item numbers C 2.6.2 to C 2.6.4, for lifts in shaft walls as per A 2.1.13 of fire resistance class F 90 are deemed to fulfil the requirements of § 39(2)(2) MBO¹ only if the following application rules have been observed:

- a. They are installed in solid enclosed masonry or concrete walls,
- b. The lift cage is predominantly made of non-combustible building materials (this is the case if the load-bearing and reinforced parts of the lift cage are made of non-combustible building materials and the other parts of the lift cage (such as wall and ceiling cladding, flooring, ventilation and lighting covers) do not have more than 2.5 kg of combustible building materials, at least normal flammability building materials per m² of the interior lift cage area),
- c. the doors must be controlled in such a way that they remain open only for as long as it takes to enter or leave the vehicle; two above-one doors each prevent fire transmission from the fire floor to the above floor when closed,
- d. Where several doors are positioned side by side, the doors shall be separated by fire-resistant structural elements and attached to these structural elements, and
- e. the lift shaft shall have an opening to remove smoke as per § 39(3)(1) MBO¹.

Lift shaft doors with the classification 'E 30/60/90' in accordance with EN 81-58:2022-05³⁰ for installation in fire-retardant, highly fire retardant or fire-resistant enclosing shaft walls in accordance with A 2.1.13 meet the requirements of § 39(2)(2) MBO¹ only if the requirements of letters b, c and e are met and, where several lift shaft doors are positioned next to each other, if these are separated by components and attached to said components that exhibit the fire resistance properties of the lift shaft wall. The fire characteristics of the components of the landing door must be demonstrated; they must be at most normally flammable.

5.4 Sealing doors

Doors are sealed or tight-closing if they have stable door leaves and are equipped with three-sided continuous elastic seals, which, due to their shape (lip/hose seal) and the sealing path when closed, are attached to both the door frame and the door leaf after installation. Door leaves are dimensionally stable if they are closed and show deformations ≤ 4 mm relative to the door-leaf plane in the longitudinal direction (in the sense of RAL-GZ 426/1).

For external use, the differential climate in accordance with EN 14351-1:2006+A2:2016²² and the deformation class in accordance with EN 12219:1999²⁷ must also be verified. At least classes 2(d) and 2(e) are required to comply with the building authority requirements.

For external use DIN 18055:2020-09 must be observed.

¹ under federal state law

³⁰ Implemented in Germany by DIN EN 81-58:2022-08.

²² Implemented in Germany by DIN EN 14351-1:2016-12.

²⁷ Implemented in Germany by DIN EN 12219:2000-06.

5.5 Other closures than doors

((unchanged))

5.5.1 Sealing and self-closing degrees

((unchanged))

5.5.2 Construction products in accordance with EN 16034:2014 [Implemented in Germany by DIN EN 16034:2014-12.] in conjunction with EN 14351-1:2016 [Implemented in Germany by DIN EN 14351-1:2016-12.] or EN 13241:2003+A2:2016 [Implemented in Germany by DIN EN 13241:2016-12.] as well as EAD No. 020029-00-1102 and EAD No. 020062-00-1102 for use as tight-sealing, self-closing closures

Table 5.5.2: Building approval requirements and at least required services and other features

	Building approval requirement	Minimum required performances	Other feature
			Fire behaviour
	1	2	3
1	Tightly closing and self-closing	S _{a3} C Continuous function test ¹	E-d2
2	Tight-sealing and self-closing, made of non-combustible* building materials	S _{a3} C Continuous function test ¹	A 2-s1, d0**
¹ Continuous function test: - Class 5 for fire/smoke protection doors (swing leaf closures), wicket doors in gates as well as construction products according to EN 13241:2003 + A2:2016, which are considered as doors in accordance with Chapter A 2.1.6 - At least Class 2 for other sealed and self-closing closures (gates) * Table 1.1 applies to the requirements ** Regarding fire performance requirements, Table 1.2 applies. Section 1.3 shall apply where necessary.			

5.5.3 Terms of use and execution for financial statements in accordance with 5.5.2

((unchanged))

6 Preventive measures for cable and/or pipe passages in fire-resistant structural elements

If, in order to fulfil the building requirements in A 2.1.15 and A 2.2.1.8 for preventive measures for cable and pipe passages, proof of the suitability of designs pursuant to § 16a MBO¹ is required, the minimum required classes shall be as given in Table 6.

¹ under federal state law

Table 6: Building approval requirements and classification of classes according to DIN 4102-9:1990-05 or DIN 4102-11:1985-12

	Building approval requirement	Minimum required classes pursuant to	
		DIN 4102-9:1990-05 for cable insulations	DIN 4102-11:1985-12 for pipe insulations ¹
	1	2	3
1	fire-retardant	S 30	R 30
2	Highly fire-retardant	S 60	R 60
3	Fire-resistant	S 90	R 90
4	Fire resistance of 120 minutes	S 120	R 120
	¹ Classification is permitted only if the fire test of: a) Preventative measures for flammable pipe passages and pipes with a melting point 1000 °C where the pipe ends are open inside and outside of the test furnace. If the preventive measures are intended only for drinking water, heating and cooling pipes with diameters 110 mm, the pipe may optionally be closed outside the test furnace. b) Preventive measures for passages of non-combustible pipes with a melting point 1000 °C (piping designed without connections of combustible pipes), the pipe ends used in the fire test are closed inside the test furnace and open outside (or optionally open on both sides).		

Note:

In the absence of technical best practice for the planning, design and execution of preventative measures for cable and/or pipe passages using construction products in accordance with the harmonised technical specifications, proof according to § 16a MBO¹ is required.

Simplifications under the Technical Rule included in Seq. No. A 2.2.1.8 are not affected.

7 Heat extraction devices according to EN 12101-2:2003 31 [implemented in Germany by DIN EN 12101-2:2003-09] for use in roofs in shopping streets in accordance with the Model Sales Place Ordinance [Muster-Verkaufsstättenverordnung] and provisions on application and execution

((unchanged))

8 Service ducts and shafts, including their opening barriers

((unchanged))

8.1 Service ducts and shafts, including their opening barriers

((unchanged))

8.2 Construction products for service shafts made of prefabricated fittings and accessories according to EAD 350003-01-1109

((unchanged))

8.3 Conditions of use and execution for construction products according to 8.2

((unchanged))

¹ under federal state law

9 Fire-resistant glazing

((unchanged))

9.1 Fire-resistant glazing

((unchanged))

9.2 Construction products for fire protection glazing according to EAD 210005-00-0505

To meet the building requirements in A 2.1.6, A 2.1.7, A 2.1.8, A 2.1.9 and A 2.1.12 when using construction products for fire-resistant glazings that are used as construction products for non-loadbearing interior partitions, the minimum required performances in Section 4.3 and Table 4.3.2 apply. According to A 2.1.6 or A 2.1.12, barriers to necessary openings in such dividing walls must have the same fire resistance as the non-load-bearing interior dividing wall. The minimum required performance of the barriers is set out in Section 5.1.4.

9.3 Provisions on application and execution of construction products pursuant to 9.2

((unchanged))

10 Special fire protection products

((unchanged))

10.1 fire-retardant agent

((unchanged))

10.1.1 General

((unchanged))

10.1.2 Rules for use and implementation of construction products with fire-retardant agents according to harmonised technical specifications

If the construction product is described in the ETA according to EAD 350865-00-1106, the manufacturer shall provide a written installation instruction in German based on the classification document, which shall contain at least the following information:

- ☐ description of the processing of the construction product,
- ☐ description of the minimum applied quantity,
- ☐ description of the installation of building materials finished with the construction product.

fire-retardant agents are not verified for use on floorings and/or substrates subject to continuous moisture and/or UV radiation.

10.2 Reactive fire protection coatings on load-bearing steel components

10.2.1 General

To meet the structural requirements in A 2.1.4 in conjunction with A 2.1.3 when reactive fire protection coatings are used on steel components with proof of usability in accordance with § 17 MBO,¹ the minimum required classes are given in Section 4.2.4.

In order to meet the structural requirements in A 2.1.4 in conjunction with A 2.1.3 when reactive fire protection coatings are used on steel components without space closure in accordance with ETA, the minimum required performances are set out in Section 4.3, Table 4.3.1.1, column 2.

10.2.2 Provisions on application and execution

In the absence of a generally accepted rule of technology for planning, designing and execution, proof in accordance with § 16a MBO¹ is required for the use of reactive fire protection coatings on steel components in accordance with ETA.

¹ under federal state law

10.3 Linear joint seals

((unchanged))

Annex - Explanations of the classification criteria and additional information on classification in Annex 4

((unchanged))

Annex 6

Rear-ventilated, external-wall cladding

As at: April 2026

1 Subject matter and scope

(1) The subject of this technical regulation is rear-ventilated external wall cladding on walls constructed from solid mineral building materials and on timber-frame walls with externally applied cladding that provides effective fire protection, consisting of non-combustible panels with a fire resistance rating t_{ch} of at least 60 minutes,

the

- ☐ has hollow or air spaces across storeys

or

- ☐ extends above firewalls.

(2) This technical regulation applies to rear-ventilated external wall cladding, which must be at least flame-retardant (§ 28(3) in conjunction with § 28(5), first sentence, of the MBO), and for which, in accordance with § 28(4) in conjunction with § 28(5) and § 30(7) of the MBO, special precautions must be taken to prevent the spread of fire. This is considered to be fulfilled if the design of the ventilated outer wall covering is carried out in accordance with this Technical Rule.

(3) Notwithstanding paragraph 1, this technical regulation also applies to rear-ventilated external wall cladding on timber-framed walls with outer cladding of plasterboards (fire-resistant plasterboard, type GKF) in accordance with DIN 18180:2014-09, in conjunction with at least type DF in accordance with DIN EN 520:2009-12, or of gypsum fibre boards (GF, bulk density of at least 1,100 kg/m³) in accordance with DIN EN 15283-2:2009-12 with a thickness of at least 18 mm or equivalent, provided that only non-combustible components as specified in Section 3 are used for the external wall cladding.

2 Definitions

((unchanged))

2.1 Rear-ventilated external wall cladding consisting of:

((unchanged))

2.2

((unchanged))

2.3

((unchanged))

3 Insulating materials, substructures, rear-ventilation gap, cladding elements

3.1 Thermal insulation, substructure

(1) By way of derogation from § 28(3) sentence 1 MBO¹ the thermal insulation must be non-combustible. The insulating materials shall be attached to the substrate either mechanically or with an adhesive mortar that is flame-resistant or does not contain more than 7.5% organic structural elements.

(2) Rod-shaped timber substructures are permitted (§ 28(3)(1)(2) MBO¹).

3.2 rear-ventilation gap

The depth of the rear ventilation gap shall not be greater than

- ☐ 60mm with a timber substructure and
- ☐ 300 mm when using a linear or selective metal substructure.

3.3 Cladding elements

The following products may be used as cladding elements: flame-retardant or non-combustible construction products with a certificate of suitability for use issued by the building authorities in accordance with § 17 of the MBO (¹), as well as the following flame-retardant or non-combustible construction products bearing the CE marking and accompanied by a declaration of performance in accordance with an ETA or European harmonised technical specifications:

- ☐ Fibre cement boards
- ☐ High pressure laminate plates.
- ☐ profiles, plates and cassettes of sheet metal,
- ☐ aluminium composite panels,
- ☐ Claddings made of natural stone, concrete or ceramic.

3.4 Application boundary conditions

- (1) The application boundary conditions to be observed during the execution of the outer wall cladding with regard to
 - ☐ the minimum thickness and minimum bulk density of the non-combustible thermal insulation in accordance with paragraph 3.1,
 - ☐ the type of permissible substructure,
 - ☐ the minimum depth of the rear ventilation gap,
 - ☐ the type of formation of joints between the cladding elements

result from the construction used in the fire performance classification of the cladding elements and can be found in the building authority's certificate of suitability for use or in the technical documentation for the cladding elements, which supplements the declaration of performance.

- (2) The cladding elements must be mechanically fixed to the substructure and anchored to the building using non-combustible brackets and fasteners, unless otherwise provided for by the building regulations and certificates of suitability for use.

4 Fire barriers

¹ under federal state law

4.1 Horizontal fire barriers

- (1) On every second floor, horizontal fire barriers shall be placed in the rear ventilation gap, including at the upper end of the outer wall cladding below components or constructions made of combustible building materials (e.g. below the roof). Fire barriers shall be installed between the wall and the cladding elements. In the case of external thermal insulation, installation between the insulating material of the external thermal insulation and the cladding is sufficient with a ventilation gap depth of up to a maximum of 150 mm if the insulating material is dimensionally stable in the event of fire and has a melting point of ≥ 1000 °C. The fire barrier must be embedded at least 40 mm deep into the insulation material.
- (2) For external wall claddings with a depth of the rear-ventilation gap of > 150 mm up to a maximum of 300 mm, the fire barrier must always be installed between the wall and the cladding.
- (3) The size of the openings in the horizontal fire barriers must be limited to a total of 100 cm² per linear metre of wall. The openings may be positioned as evenly distributed individual openings or as a continuous gap.
- (4) The horizontal fire barriers must be sufficiently dimensionally stable for at least 30 minutes. This requirement is deemed to be met if the fire barriers are made of sheet steel with a thickness of $d \geq 1$ mm. They shall be anchored in the external wall at intervals of ≤ 0.6 m. The steel sheets shall overlap at the joints by at least 30 mm.
- (5) In the case of ventilated outer wall cladding with a depth of the back ventilation gap > 150 mm to a maximum of 300 mm, horizontal fire barriers shall be made of sheet steel (thickness $d \geq 1$ mm) and shall be attached to the supporting profiles of the metal substructure above the fire barriers with steel angles. The need for any necessary measures to prevent contact corrosion when fixing fire barriers to the supporting profiles of the metal substructure is indicated.
- (6) In the case of ventilated exterior wall claddings with a depth of the rear-ventilation gap not exceeding 100 mm, horizontal fire barriers may consist of a non-combustible insulation material with a melting point of ≥ 1000 °C which is dimensionally stable in the event of fire, if the following boundary conditions are met:
- The fire barrier shall be at least 150 mm high.
 - The fixing of the fire barrier shall be carried out as follows:
 - a) mechanically using non-combustible fixings, whereby the anchor sleeve in the substrate may be made of plastic, anchored in the external wall at intervals of ≤ 0.6 m
- or
- b) with non-combustible, mineral adhesive mortar fully bonded to the outer wall
- or
- c) clamped into an external thermal insulation of an insulating material that is stable in the event of fire with a melting point > 1000 °C, wherein the thickness of the thermal insulation shall be at least twice as large as the depth of the back ventilation gap and the clamping depth of the fire barrier shall correspond to the thickness of the thermal insulation.
- (7) Substructures made of combustible construction materials must be completely interrupted in the area of horizontal fire barriers.
- (8) The reveals of external wall openings (doors, windows) may form an integral part of fire barriers, provided that the rear ventilation gap is sealed by cladding the reveals and lintels of the external wall openings; this cladding must comply with the requirements of paragraph (5) in conjunction with paragraph (6); substructures and any thermal insulation present must be made of non-combustible building materials.
- (9) Horizontal fire barriers are not required:
1. in the case of exterior walls with no openings,
 2. if the window arrangement prevents the spreading of fire in the rear-ventilation gap (e.g. horizontally continuous window strips, window elements spanning several storeys), and
 3. in the case of exterior walls with a depth of the rear-ventilation gap not exceeding 150 mm and with rear-ventilated external wall cladding made of non-combustible materials, including sub-structures, thermal insulation and brackets, if the rear-ventilating gap is closed in the vicinity of the adjacent reveals of openings on 3 sides (side and below the lintel) in the event of fire for at least 30 minutes (e.g. sheet steel with a thickness of $d \geq 1$ mm).

4.2 Vertical fire barriers

- (1) The rear ventilation gap must not be passed over fire walls. The rear ventilation gap shall be filled in at least in firewall thickness with a vertical fire barrier from an insulating material that is stable in the event of fire with a melting point of $> 1000\text{ }^{\circ}\text{C}$. The vertical fire barrier shall be anchored with non-combustible mechanical fasteners in the outer wall at intervals of $\leq 0.6\text{ m}$ or shall be fully fixed to the outer wall with a non-combustible adhesive mortar.
- (2) § 30(7) sentence 1 MBO¹ remains unaffected.
- (3) Vertical fire locks are also required
 - on building corners with a transition to outside walls without openings in accordance with Section 4.1(9)(1) and
 - on transitions to other exterior wall coverings.
- (4) The vertical fire barriers referred to in paragraph (3) must be designed as described in paragraph (1). Alternatively, vertical fire barriers may also be made of sheet steel, in compliance with the requirements of Section 4.1(5) and 4.1(6).

¹ under federal state law

4.3

- - deleted from MVV TB 2026/1 -

4.4

- - deleted from MVV TB 2026/1 -

4.5

- - deleted from MVV TB 2026/1 -

4.6

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5

- - deleted from MVV TB 2026/1 -

5.1

- - deleted from MVV TB 2026/1 -

5.2

- - deleted from MV V TB 2026/1-

Annex 8

Health protection requirements for building structures (Anlagen bezüglich des Gesundheitsschutzes, ABG)

As at: February 2026

1 Subject matter and scope

The ABG elaborate the general requirements for structural works with regard to health protection.

Indoor air quality plays an important role in human health and well-being. Numerous scientific studies have shown that the development of respiratory and inflammatory diseases and respiratory and eye irritation, systemic damage, sensitisation/allergies as well as a number of nonspecific symptoms (unwellness, headaches, nausea, central nervous system disorders, dizziness etc.) are directly related to indoor air quality and air pollution. Among the adverse health effects, carcinogenic, mutagenic and reproductively toxic effects require special attention.

The health and hygiene requirements for structural works are derived from the health-relevant properties of the structural elements, kits and building materials used. These can contribute to indoor air pollution through emissions and cause significant health effects. These include potential emissions of volatile inorganic and organic compounds as well as particles.

Structural works, structural elements and building materials with direct or indirect contact to the interior are to be taken into account, i.e. products that are covered or covered with other products but which are not sealed off diffusion-proof. Also, the proportion of substances of zero or low volatility is important for assessments of their health impact since they may be released e.g. from the processing of the products in particulate or dust form, made available to the human body, or absorbed through direct skin contact.

2 Requirements

((unchanged))

2.1 General requirements for construction products

((unchanged))

2.2 Special requirements for building products in lounges and not separate rooms

((unchanged))

2.2.1 Emissions

((unchanged))

2.2.1.1 VOC emissions

The terms used are defined as follows:

- ☐ VVOC (retention area < C6): Volatile organic compound eluted before n-hexane from a gas-chromatographic separation column defined as a 5% phenyl/95% methyl polysiloxane capillary column.
- ☐ VOC (retention range C6 to C16): VOC (retention range C6 to C16): volatile organic compound eluting from a gas chromatographic separation column established as 5 % phenyl/95 % methyl polysiloxane capillary column between n-hexane and including n-hexadecan.
- ☐ SVOC (retention range > C16 to C22): semi-volatile organic compound eluted between n-hexadecane and n-docosane and from a gas-chromatographic separation column defined as a 5% phenyl/95% methyl polysiloxane capillary column.
- ☐ TVOCspec (total volatile organic compounds): The sum of the concentrations of identified and unidentified volatile organic compounds, calculated by adding together the concentrations of all substances (target compounds and non-target compounds, identified and unidentified compounds) in the air of the reference room; these are substances that elute between n-hexane and n-hexadecane inclusive using a specified separation column, each with a concentration of 5 µg/m³ or more. Target compounds shall be quantified substance-specifically, whereas non-target compounds, identified and unidentified compounds shall be quantified as a toluene equivalent.

- TSVOC (total concentrations of semi-volatile organic compounds): The sum of the concentrations of identified and unidentified low-volatility organic compounds, calculated by adding together the concentrations of all substances (target compounds and non-target compounds, identified and unidentified compounds) in the air of the reference room; these are substances which elute after n-hexadecane up to and including n-docosane using a specified separation column, calculated using the TIC response factor for toluene, each with a concentration of 5 µg/m³ or more.
- R value
Total of all R_i values⁵ determined in a particular test.

The following requirements regarding emissions of volatile organic compounds - for the construction products listed in Section 2.2.1 - in accordance with DIN EN 16516:2020-10⁶, apply to the specified parameters:

All compounds whose concentration is at least 1 µg/m³ are identified, listed with their CAS numbers and quantified by category.

- **Carcinogenic substances (categories 1A and 1B)**
No carcinogen of category 1A and 1B under CLP Regulation (EC) No 1272/2008 shall exceed the emission values set out in Table 1. Excluded from this Regulation are defined substances classified as carcinogen 1A or 1B, for which a threshold can be derived from the most sensitive endpoint, since it is no longer possible to assume carcinogenic potential. Substances for which an LCI (Lowest Concentration of Interest) value has been derived on this basis and listed in Annex 2 shall be treated in the same manner as other VOCs with LCI values (see R value).
- **TVOC_{spec}**
The TVOC_{spec} values shall not exceed the values specified in Table 1.
- **Total semi-volatile organic compounds (TSVOC)**
The total SVOCs in the chamber air after 28 days must not exceed the concentration given in Table 1. In individual cases, LCI values are derived for SVOCs.
The SVOCs for which LCI values have been set shall be included in the R-values (see below) and in the TVOC values and are no longer subject to the sum value SVOC of 0.1 mg/m³ after 28 days.

⁵ Ratio C_i/LCi_i , in which C_i is the mass concentration in the air in the reference area and Lci_i is the LCI value of the compound i.

⁶ Target compounds are the substances listed in the LCI list in Annex 2 hereto.

□

- **R value (evaluation of the individual substance)**
The sum of all R_i values must not exceed the value given in Table 1. $R = \text{sum of all } R_i = \text{sum of all quotients } (C_i/LCI_i) \leq 1$
The evaluation shall be based on calculating R_i the ratio R_i for each compound, as defined in the following equation: $R_i = C_i / LCI_i$.
Here C_i is the substance concentration in the chamber air.
For a variety of internally relevant volatile organic compounds (VVOC, VOC and SVOC) LCI values are listed in Annex 2. They are quantified in a substance-specific manner. All individual substances with a concentration of $5 \mu\text{g}/\text{m}^3$ or more shall be taken into account in the evaluation of the individual substance.
- **VOCs without assessment criteria according to LCI**
The total of the VOC that cannot be evaluated, with a concentration of $\geq 5 \mu\text{g}/\text{m}^3$, must not exceed the value given in Table 1.
- **Volatile organic compounds (VVOC)**
The VVOCs for which the LCI values were determined shall be mathematically included in the R value formation but are not taken into account when forming the TVOC value.

Table 1: Requirements for VOC emissions

Type of issue	Value after 3 days	Value after 28 days	ABG section
Carcinogen (category 1A/1B)	≤ 0.01 mg/m³	≤ 0.001 mg/m³	2.2.1.1
TVOC _{spec}	≤ 10 mg/m³*	≤ 1.0 mg/m³*	
TSVOC		≤ 0.1 mg/m³*	
TVOC without LCI		≤ 0.1 mg/m³*	
R value		≤ 1*	
* The requirement does not apply to wood-based materials in the form of oriented strand boards (OSB) and resin-bound particle boards.			

2.2.1.2 Ammonia emissions

In the case of parquets and wooden floors made of smoked wood, the ammonia value shall not exceed the value set out in Table 2 after 28 days.

Ammonia emissions shall be determined in accordance with DIN EN 16516:2020-10, subsection 8.4 'Determination of ammonia in test chamber air'.

2.2.1.3 Requirements for nitrosamine emissions

For products referred to in Section 2.2.1, containing amounts of rubber/gum containing vulcanising agents with nitrosamine splitters and/or recycled structural elements of rubber, the nitrosamine value shall not exceed the value set out in Table 2 after 28 days.

Nitrosamine emissions are determined according to CEN/TS 17985:2023-11 'Construction products: Evaluation of the release of dangerous substances - method for the determination of N-nitrosamines in air samples obtained in accordance with EN 16516.'

Table 2: Requirements for other emissions

Type of issue	Value after 28 days [mg/m^3]	ABG section
Ammonia ⁷	≤ 0.1	2.2.1.2
Nitrosamines ⁸	$\leq 0,0002$	2.2.1.3

2.2.2 Content

((unchanged))

2.2.2.1 PAH

For products that are delivered to the general public (consumer-related uses), the requirements in accordance with the REACH Regulation must be complied with; this also includes floor coverings and impact wall constructions for sports halls and lounges, even if these are only supplied to professional users and installed by them.

For products referred to in Section 2.2.1, even without direct contact with the building user, which contain secondary raw materials made of rubber or raw materials with the use of plasticiser oils containing PAH or soot containing PAH, the content of benzo(a)pyrene (BaP) as a guide substance and the content of 16 PAH (see Annex 3) according to the EPA (US-Environmental Protection Agency) shall not exceed the values specified in Table 3.

Analytical demonstration of PAHs shall be done for 16 PAHs based on the method of AfPS GS 2019:01.⁹

Excluded from this are products which are used according to their installation situation and use, related to a possible release of particulate-bound PAH into the lounge. The long-term protective effect of such constructive measures shall be ensured by:

- Use of diffusion seals as well as
- Use under an effective cover layer made of other materials, e.g. seals such as screed coverings, in combination with foils and covers with edge seals in edge areas or floor coverings used over the entire surface

This regulation does not affect existing levels for pollutants, in particular according to the Closed Substance Cycle Act (Kreislaufwirtschaftsgesetz [KrWGG]) and Landfill Ordinance (Deponieverordnung [DepV]).

2.2.2.2 Nitrosamines

For products pursuant to Section 2.2.1 that contain vulcanised or unvulcanised rubber with nitrosamine release agents and/or recycled rubber, the content of nitrosamines as given in Table 3 shall not be exceeded.

The analytical detection of nitrosamines (pursuant to TRGS 552) is carried out in accordance with the method of the DIK (Deutsches Institut für Kautschuktechnologie e.V. [German Institute of Rubber Technology]), published in 'Kautschuk Gummi Kunststoffe', No. 6/91, pp. 514-521).

⁷ Requirements for parquets and wooden floors with proportions of smoked wood.

⁸ Requirement for products according to Section 2.2.1, with proportions of vulcanised or unvulcanised rubber, containing vulcanisation agents with nitrosamine releasers and/or recycled rubber structural elements.

⁹ A European harmonised test procedure for PAHs is currently being developed. The GC method according to DIN ISO 18287:2006-05 is optionally permitted until this test procedure is published.

Table 3: Salary requirements

Material/material group	Content [mg/kg]	ABG section
B(a)P ¹⁰	≤ 5	2.2.2.1
16 PAH ¹⁰	≤ 50	2.2.2.1
Nitrosamines ⁸	≤ 0.011	2.2.2.2

Annex 1 – References

DIN EN 16516:2020-10

- Construction products - Assessing the release of hazardous substances – Determining emissions in indoor air
German version EN 16516:2017+A1:2020

DIN ISO 18287:2006-05

- Soil quality - Determination of polycyclic aromatic hydrocarbons (PAH) - Gas chromatographic method with mass spectrometric detection (GC-MS)

TRGS 552

- Technical Regulation for Hazardous Substance 'N-Nitrosamines'; GMBI 2018, pp. 913-934

DIK Work Instruction

- DIK (Deutsches Institut für Kautschuktechnologie e.V. [German Institute of Rubber Technology]), 'Methods to determine N-nitrosamines in air, vulcanisates and vulcanisation vapours', Liekefeld et. al., published in Kautschuk Gummi Kunststoffe, point 6/91, pp. 514-521

AfPS GS 2019:01 PAK

- GS specification 'Testing and assessment of polycyclic aromatic hydrocarbons (PAHs) in the awarding of GS marks' (AfPS); Annex Test instructions. Harmonised method for determining polycyclic aromatic hydrocarbons (PAHs) in polymers

CEN/TS 17985-2023:11

- Construction products: Evaluation of the release of dangerous substances - Procedure for the determination of N-nitrosamines in air samples obtained in accordance with EN 16516

Annex 2 – LCI values (target compounds)

The LCI values in force pursuant to building legislation are listed in Table 4.

¹⁰ Requirements for products pursuant to Section 2.2.1, without direct contact with the building user, which contain raw materials with recycling proportions of rubber or raw materials with use of PAH-containing extender oils or PAH-containing soot.

⁸ Requirement for products according to Section 2.2.1, with proportions of vulcanised or unvulcanised rubber, containing vulcanisation agents with nitrosamine releasers and/or recycled rubber structural elements.

Table 4: LCI values list 2026

	Substance	CAS No.	LCI [µg/m³]	Comments
1	Aromatic Hydrocarbons			
1-1	Toluene	108-88-3	2900	Adoption of EU LCI value
1-2	Ethyl benzene	100-41-4	850	Adoption of EU LCI value
1-3	Xylol, mixture of isomers o-, m- and p-xylol	1330-20-7	500	Adoption of EU LCI value
1-4	p-xylene	106-42-3	500	Adoption of EU LCI value
1-5	m-xylene	108-38-3	500	Adoption of EU LCI value
1-6	o-xylene	95-47-6	500	Adoption of EU LCI value
1-7*				¹⁾ Classification as Carc. 1B in the 18th ATP under the CLP Regulation
1-8	n-propylbenzene	103-65-1	950	Adoption of the EU LCI value: read-across from ethylbenzene
1-9	1-propenylbenzene (β-methylstyrene)	637-50-3	1200	Adoption of EU LCI value Read across of 2-phenylpropene
1-10	1,3,5-trimethylbenzene	108-67-8	450	Adoption of EU LCI value
1-11	1,2,4-trimethylbenzene	95-63-6	450	Adoption of EU LCI value
1-12	1,2,3-trimethylbenzene	526-73-8	450	Adoption of EU LCI value
1-13	2-ethyltoluene	611-14-3	550	Adoption of the EU LCI value via 'read-across' from xylene
1-14*	1-isopropyl-2-methylbenzene (o-cymol)	527-84-4	2200	Adoption of EU LCI value
1-15*	1-isopropyl-3-methylbenzene (m-cymol)	535-77-3	2200	Adoption of EU LCI value
1-16*	1-isopropyl-4-methylbenzene (p-cymol)	99-87-6	2200	Adoption of EU LCI value
1-17	1,2,4,5-tetramethylbenzene	95-93-2	250	Adoption of EU LCI value Read across of trimethylbenzene
1-18	N-butylbenzene	104-51-8	1100	Adoption of EU LCI value Read across of ethylbenzene
1-19	1,3-diisopropylbenzene	99-62-7	750	Adoption of EU LCI value Read across of xylene
1-20	1,4-diisopropylbenzene	100-18-5	750	Adoption of EU LCI value Read across of xylene
1-21	Phenyloctane and isomers	2189-60-8	1100	Adoption of EU LCI value Read across of ethylbenzene
1-22	1-phenyldecane and isomers	104-72-3	1100	Read across of ethylbenzene
1-23	1-phenylundecane and isomers	6742-54-7	1100	Read across of ethylbenzene
1-24	4-phenylcyclohexene (4-PCH)	4994-16-5	300	Read across of styrene
1-25	Styrene	100-42-5	250	Adoption of EU LCI value
1-26	Phenylacetylene	536-74-3	200	Read across of styrene
1-27	2-phenylpropene (α-methylstyrene)	98-83-9	1200	Adoption of EU LCI value
1-28	Vinyl toluene (all isomers: o-, m-, p-methylstyrene)	25013-15-4	1200	Adoption of EU LCI value
1-29*	-			¹⁾
1-30*	Naphthalene	91-20-3	15	Adoption of EU LCI value
1-31	Indene	95-13-6	450	Adoption of EU LCI value
2	Aliphatic hydrocarbons (n-, iso- and cyclo-)			
2-1*	-			¹⁾

2-2	N-hexane	110-54-3	4300	Adoption of EU LCI value
2-3	Cyclohexane	110-82-7	6000	Adoption of EU LCI value
2-4	Methylcyclohexane	108-87-2	8100	Adoption of EU LCI value
2-5	-			¹⁾
2-6	-			¹⁾
2-7	-			¹⁾
2-8	n-heptane	142-82-5	15000	Adoption of EU LCI value
2-9	Other saturated aliphatic hydrocarbons C6 to C8		14000	Adoption of EU LCI value Read across of 2-methylpentane
2-10	Other saturated aliphatic hydrocarbons C9 to C16		6000	Adoption of EU LCI value
2-11*	Other saturated aliphatic hydrocarbons C17 to C22		1000	SVOC Individual substances
2-12	1-dodecene	112-41-4	750	Individual substances
3	Terpene			
3-1*	3-carene	498-15-7	2500	Adoption of EU LCI value
3-2	α -pines	80-56-8	2500	Adoption of EU LCI value
3-3*	-			¹⁾
3-4	Limonene	138-86-3	5000	Adoption of EU LCI value
3-5*	-			¹⁾
4	Aliphatic mono alcohols (n-, iso- and cyclo-) and dialcohols			
4-1*	-			¹⁾
4-2*	-			¹⁾
4-3*	-			¹⁾
4-4*	tert-butanol (2-methyl-2-propanol)	75-65-0	2100	Adoption of EU LCI value
4-5	2-methyl-1-propanol	78-83-1	11000	Adoption of EU LCI value
4-6*	1-butanol	71-36-3	11000	Adoption of EU LCI value Read across 2-methoxy-1-propanol
4-7*	Pentanol (all isomers)	71-41-0 30899-19-5 94624-12-1 6032-29-7 584-02-1 137-32-6 123-51-3 598-75-4 75-85-4 75-84-3	900	Adoption of EU LCI value
4-8	1-hexanol	111-27-3	2100	Adoption of EU LCI value
4-9	Cyclohexanol	108-93-0	2000	Adoption of EU LCI value
4-10*	2-ethyl-1-hexanol	104-76-7	800	Adoption of EU LCI value
4-11	1-octanol	111-87-5	1700	Adoption of EU LCI value
4-12	4-hydroxy-4-methylpentan-2-one (diacetone alcohol)	123-42-2	960	Adoption of EU LCI value
4-13*	-			¹⁾
4-14*	-			¹⁾
4-15	1,4-cyclohexandimethanol	105-08-8	8300	Adoption of EU LCI value
4-16*	Other C7-C13 saturated n-alcohols			¹⁾ Revaluation, see 4-18
4-17*	Other C6-C13 saturated iso-			¹⁾ Revaluation, see 4-18

	alcohols			
4-18*	other C6-C13 saturated n- and iso alcohols		800	Adoption of EU LCI value Read across of 2-ethyl-1-hexanol, except for cyclical compounds
5	Aromatic alcohols (phenols)			
5-1	Phenol	108-95-2	70	Adoption of EU LCI value
5-2*	2,6-di-tert-butyl-4-methylphenol (BHT)	128-37-0	900	Adoption of EU LCI value
5-3*	Benzyl alcohol	100-51-6	450	Adoption of EU LCI value
6	Glycols, glycol ethers, glycol esters			
6-1	Propylene glycol (1,2-dihydroxypropane)	57-55-6	2100	Adoption of EU LCI value
6-2	Ethylene glycol (ethanediol)	107-21-1	3400	Adoption of EU LCI value
6-3	Ethylene glycol monobutyl ether	111-76-2	1600	Adoption of EU LCI value
6-4	Diethyleneglycol	111-46-6	5700	Adoption of EU LCI value Read across of ethylene glycol
6-5	Diethylene glycol monobutyl ether	112-34-5	350	Adoption of EU LCI value
6-6	2-phenoxyethanol	122-99-6	60	Adoption of EU LCI value
6-7	Ethylene carbonate	96-49-1	4800	Adoption of EU LCI value Read across of ethylene glycol
6-8	1-methoxy-2-propanol	107-98-2	7900	Adoption of EU LCI value
6-9	2,2,4-Trimethyl-1,3 pentandiol monobutyrate	25265-77-4	850	Adoption of EU LCI value
6-10	Glycolic acid butyl ester (hydroxyacetic acid butyl ester)	7397-62-8	900	Adoption of EU LCI value
6-11	Butyldiglycol acetate (ethanol, 2-(2-butoxyethoxy)acetate, BDGA)	124-17-4	850	Adoption of EU LCI value
6-12*	dipropylene glycol mono-methyl ether	34590-94-8	4400	Adoption of EU LCI value
6-13	2-methoxyethanol	109-86-4	100	Adoption of EU LCI value
6-14*	2-ethoxyethanol	110-80-5	30	Adoption of EU LCI value
6-15	2-propoxyethanol	2807-30-9	860	Adoption of EU LCI value
6-16	2-methylethoxyethanol	109-59-1	220	Adoption of EU LCI value
6-17	2-hexoxyethanol	112-25-4	900	Adoption of EU LCI value
6-18	1,2-dimethoxyethane	110-71-4	100	Adoption of EU LCI value
6-19	1,2-diethoxyethane	629-14-1	150	Adoption of EU LCI value
6-20	2-methoxyethyl acetate	110-49-6	150	Adoption of EU LCI value Read across from 2-methoxyethanol
6-21*	2-ethoxyethyl acetate	111-15-9	50	Adoption of EU LCI value Read across of 2-ethoxyethanol
6-22	2-butoxyethylacetate	112-07-2	2200	Adoption of EU LCI value Read across of ethylene glycol butyl ether
6-23	2-(2-hexoxyethoxy)-ethanol	112-59-4	400	Adoption of EU LCI value Read across of diethylene glycol monobutyl ether
6-24	1-methoxy-2-(2-methoxyethoxy)-ethane	111-96-6	28	Adoption of EU LCI value
6-25	2-methoxy-1-propanol	1589-47-5	19	Adoption of EU LCI value
6-26	2-methoxy-1-propyl acetate	70657-70-4	28	Adoption of EU LCI value
6-27	Propylene glycol diacetate	623-84-7	1600	Adoption of the EU LCI value: read-across from

				acetic acid
6-28*	Dipropylene glycol	110-98-5 25265-71-8	4000	Adoption of EU LCI value
6-29	dipropylene glycol monomethyl ether acetate	88917-22-0	950	Adoption of EU LCI value Read across 2-methoxy-1-methylethyl acetate
6-30	Dipropylene glycol mono-n-propyl ether	29911-27-1	200	Adoption of EU LCI value Read across of dipropylene glycolmono-n-butyl ether
6-31	Dipropylene glycol mono-n-butyl ether	29911-28-2 35884-42-5	250	Adoption of EU LCI value
6-32	Dipropylene glycolmono-t-butyl ether	132739-31-2 (Gemisch)	250	Adoption of EU LCI value
6-33	1,4-butanediol	110-63-4	2000	Adoption of EU LCI value
6-34	tripropylene glycol monomethyl ether	20324-33-8 25498-49-1	1200	Adoption of EU LCI value
6-35	Triethylene glycol dimethyl ether	112-49-2	150	Adoption of EU LCI value
6-36*	1,2-propylene glycol dimethyl ether	7778-85-0	500	Adoption of EU LCI value
6-37	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	1300	Adoption of EU LCI value
6-38	Ethyldiglycol	111-90-0	350	Adoption of EU LCI value
6-39	Di(propylene glycol) methyl ether	63019-84-1 89399-28-0 111109-77-4	1300	Adoption of EU LCI value
6-40	Propylene carbonate*	108-32-7	1800	Adoption of EU LCI value
6-41	Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	3500	Adoption of EU LCI value
6-42	3-methoxy-1-butanol	2517-43-3	1700	Adoption of EU LCI value
6-43	1,2-propylene glycol n-propyl ether	1569-01-3 30136-13-1	5200	Adoption of EU LCI value
6-44	1,2-propylene glycol n-butyl ether	5131-66-8 29387-86-8 15821-83-7 63716-40-5	650	Adoption of EU LCI value
6-45	diethylene glycol phenyl ether	104-68-7	80	Adoption of EU LCI value Read across from 2-phenoxyethanol
6-46	Neopentylglycol (2,2-dimethylpropane-1,3-diol)	126-30-7	8700	Adoption of EU LCI value
6-47*	propylene glycol phenyl ether	770-35-4	2000	Individual substances
7	Aldehyde			
7-1	Butanal	123-72-8	650	VVOC Adoption of EU LCI value
7-2	Pentanal	110-62-3	800	Adoption of EU LCI value Read across by Butanal
7-3	Hexanal	66-25-1	900	Adoption of EU LCI value

				Read across by Butanal
7-4	Heptanal	111-71-7	900	Adoption of EU LCI value Read across by Butanal
7-5	2-Ethylhexanal	123-05-7	900	Adoption of EU LCI value Read across by Butanal
7-6	Octanal	124-13-0	900	Adoption of EU LCI value Read across by Butanal
7-7	Nonanal	124-19-6	900	Adoption of EU LCI value Read across by Butanal
7-8	Decanal	112-31-2	900	Adoption of EU LCI value Read across by Butanal
7-9*	2-butenal (crotonaldehyde, mixture of cis and trans)	4170-30-3 123-73-9 15798-64-8	5	Adoption of EU LCI value
7-10*	2-pentenal	1576-87-0 764-39-6 31424-04-1	7	Adoption of EU LCI value Read across of 2-Butenal
7-11*	2-Hexenal	16635-54-4 6728-26-3 505-57-7 1335-39-3 73543-95-0	7	Adoption of EU LCI value Read across of 2-Butenal
7-12*	2-heptenal	2463-63-0 18829-55-5 29381-66-6 57266-86-1	7	Adoption of EU LCI value Read across of 2-Butenal
7-13*	2-octenal	2363-89-5 25447-69-2 20664-46-4 2548-87-0	7	Adoption of EU LCI value Read across of 2-Butenal
7-14*	2-nonenal	2463-53-8 30551-15-6 18829-56-6 60784-31-8	7	Adoption of EU LCI value Read across of 2-Butenal
7-15*	2-Decenal	3913-71-1 2497-25-8 3913-81-3	7	Adoption of EU LCI value Read across of 2-Butenal
7-16*	2-undecenal	2463-77-6 53448-07-0	7	Adoption of EU LCI value Read across of 2-Butenal
7-17	Furfural	98-01-1	10	Adoption of EU LCI value
7-18	Glutaraldehyde	111-30-8	1**	Adoption of EU LCI value
7-19	Benzaldehyde	100-52-7	90	WEEL (AIHA): 8800 µg/m³
7-20	acetaldehyde	75-07-0	300	VVOC Adoption of EU LCI value
7-21	Propane	123-38-6	650	VVOC Adoption of EU LCI value

7-22	Formaldehyde	50-00-0	100	VVOC Adoption of EU LCI value
7-23	Propenal	107-02-8	14 [†]	VVOC Individual substances
8	Ketons			
8-1	Ethyl methyl ketone	78-93-3	20000	Adoption of EU LCI value
8-2	3-methyl-2-butanone	563-80-4	7000	Adoption of EU LCI value
8-3	Methyl isobutyl ketone	108-10-1	1000	Adoption of EU LCI value
8-4	Cyclopentanone	120-92-3	1200	Adoption of EU LCI value
8-5	Cyclohexanone	108-94-1	1400	Adoption of EU LCI value
8-6	2-methylcyclopentanone	1120-72-5	1400	Adoption of EU LCI value Read across of Cyclopentanone
8-7	2-methylcyclohexanon	583-60-8	2300	Adoption of EU LCI value
8-8	Acetophenone	98-86-2	490	Adoption of EU LCI value
8-9	1-hydroxyacetone (1-hydroxy-2-propanone)	116-09-6	2100	Adoption of EU LCI value Read across of propylene glycol
8-10	Acetone	67-64-1	12000 0	VVOC Adoption of EU LCI value
9	Acids			
9-1	Acetic acid	64-19-7	1200	Adoption of EU LCI value
9-2	Propionic acid	79-09-4	1500	Adoption of EU LCI value
9-3	Isobutyric acid	79-31-2	1800	Adoption of EU LCI value Read across of propionic acid
9-4	Butyric acid	107-92-6	1800	Adoption of EU LCI value Read across of propionic acid
9-5	Pivalic acid	75-98-9	2100	Adoption of EU LCI value Read across of propionic acid
9-6	n-Valeric acid	109-52-4	2100	Adoption of EU LCI value Read across of propionic acid
9-7	n-Capronic acid	142-62-1	2100	Adoption of EU LCI value Read across of propionic acid
9-8	n-Heptanoic acid	111-14-8	2100	Adoption of EU LCI value Read across of propionic acid
9-9	n-Octanic acid	124-07-2	2100	Adoption of EU LCI value Read across of propionic acid
9-10	2-ethylhexanic acid	149-57-5	150	Adoption of EU LCI value
9-11	Neodecanoic acid	26896-20-8	750	Individual substances
10	Ester and lactone			
10-1*	-			1)
10-2*	-			1)
10-3*	-			1)
10-4	Isopropyl acetate	108-21-4	4200	Adoption of EU LCI value
10-5	Propyl acetate	109-60-4	4200	Adoption of EU LCI value
10-6	2-methoxy-1-methylethyl acetate	108-65-6	650	Adoption of EU LCI value
10-7	n-butyl formate	592-84-7	4900	Adoption of EU LCI value Read across from methyl formate
10-8	Methyl methacrylate	80-62-6	750	Adoption of EU LCI value
10-9*	-			1)
10-10	Isobutyl acetate	110-19-0	4800	Adoption of EU LCI value
10-	1-butyl acetate	123-86-4	8500	Adoption of EU LCI value

11*				
10-12	2-ethylhexyl acetate	103-09-3	350	Adoption of EU LCI value Read across of 2-ethyl-1-hexanol
10-13	Methylacrylate	96-33-3	180	Adoption of EU LCI value
10-14	Ethyl acrylate	140-88-5	200	Adoption of EU LCI value
10-15*	n-butyl acrylate	141-32-2	200	Adoption of EU LCI value
10-16*	2-ethylhexyl acrylate	103-11-7	250	Adoption of EU LCI value
10-17	Other acrylates (acrylic acid esters)		110	Adoption of EU LCI value
10-18	Adipic acid diethyl ester	627-93-0	25	Individual substances
10-19	Fumaric acid dibutyl ester	105-75-9	50	Adoption of EU LCI value
10-20	Succinic dimethyl ester	106-65-0	20	Adoption of EU LCI value
10-21	Glutaric acid dimethyl ester	1119-40-0	25	Adoption of EU LCI value
10-22	Hexanediol diacrylate	13048-33-4	10	Adoption of EU LCI value
10-23	Maleic dibutyl ester	105-76-0	50	Adoption of EU LCI value
10-24	Butyrolactone	96-48-0	2800	Adoption of EU LCI value
10-25	Glutaric acid diisobutyl ester	71195-64-7	35	Adoption of EU LCI value Read across from glutaric acid dimethylester
10-26	Succinic acid diisobutyl ester	925-06-4	35	Adoption of EU LCI value Read across from succinic acid dimethylester
10-27	(5-ethyl-1,3-dioxan-5-yl)methylacrylate	66492-51-1	80	Individual substances
10-28*	butyl methacrylate	97-88-1	2200	Adoption of EU LCI value
10-29*	2-ethylhexyl methacrylate	688-84-6	2100	Adoption of EU LCI value
10-30*	1,3-Bis(acetyloxy)propan-2-yl acetate	102-76-1	5800	Individual substances
11	Chlorinated hydrocarbons			
	Not used at present			
12	Other			
12-1	1,4-dioxane	123-91-1	400	Adoption of EU LCI value
12-2	Caprolactam	105-60-2	300	Adoption of EU LCI value
12-3	N-methyl-2-pyrrolidone	872-50-4	1800	Adoption of EU LCI value
12-4	Octamethylcyclotetrasiloxane (D4)	556-67-2	1200	Adoption of EU LCI value
12-5	Methenamine, Hexamethylenetetramine (formaldehyde releaser)	100-97-0	30	Adoption of EU LCI value
12-6	2-butanonoxime	96-29-7	15	Adoption of EU LCI value
12-7	Tributyl phosphate	126-73-8	300	SVOC Adoption of EU LCI value
12-8	Triethyl phosphate	78-40-0	80	Individual substances
12-9	5-chloro-2-methyl-4isothiazolin-3-on (CIT)	26172-55-4	1**	Adoption of EU LCI value
12-10*	2-methyl-4-isothiazolin-3-one (MIT)	2682-20-4	1**	Adoption of EU LCI value
12-11	Triethylamine	121-44-8	60	Adoption of EU LCI value
12-12	Decamethylcyclopentasiloxane (D5)	541-02-6	1500	Read across of octamethylcyclotetrasiloxane
12-13	Dodecamethylcyclohexasiloxane (D6)	540-97-6	1200	Read across of octamethylcyclotetrasiloxane

12-14	Tetrahydrofuran	109-99-9	500	Adoption of EU LCI value
12-15*	Dimethylformamide	68-12-2	50	Adoption of EU LCI value
12-16	Tetradecamethylcycloheptasiloxane (D7)	107-50-6	1200	Read across of octamethylcyclotetrasiloxane
12-17	N-ethyl-2-pyrrolidone	2687-91-4	400	Adoption of EU LCI value
12-18	N-butyl-2-pyrrolidone	3470-98-2	500	Individual substance assessment Read across of N-ethyl-2-pyrrolidone
12-19	5-ethyl-1,3-dioxane-5-methanol	5187-23-5	850	Individual substance assessment

* New inclusions/amendments 2025

** Only from a measured emission of 5 µg/m³ will an assessment be carried out as part of the LCI-value concept.

[†] Propenal is currently not quantifiable using DIN ISO 16000-3. No assessment is carried out under the LCI values framework.

VVOC very volatile organic compounds SVOC semi volatile organic compounds

¹⁾ In order to maintain compatibility in the evaluation, previously documented sequential numbers of the LCI list can no longer be resubmitted in the event of removal or re-sorting of substances or groups of substances.

From 2025, VVOC substances without a LCI value will be removed from the LCI list.

Comments

I) Note on current lists of carcinogenic substances (EU category 1)

The list of substances classified as Category 1A or 1B carcinogens under EU Regulation 1272/2008 and for which testing and control under the scheme are required can be found here: https://www.reach-clp-biozid-help-desk.de/DE/CLP/Rechtstexte/Rechtstexte_node.html (version should be up to date).

II) Analysis of carbonyl compounds

For the following carbonyl compounds, in accordance with DIN EN 16516, the procedure described in DIN ISO 16000-3 shall be used: Formaldehyde (LCI 7-22), acetaldehyde (LCI 7-20), propanal (LCI 7-21), butanal (LCI 7-1), acetone (LCI 8-10).

III) Analysis of substance groups

In the case of LCI entries for groups of substances, each substance that occurs and falls under the definition of this group must be evaluated individually against the LCI value in question. The subdivision of the substance group LCI 2-9 and LCI 2-10 required by the different LCI values is carried out when an 'alkane peak' appears in the gas chromatogram at the retention time of n-nonane, i.e. for aliphatic volatile organic compounds with a shorter retention time than n-nonane, the LCI value of 14000 µg/m³ applies, and for aliphatic volatile organic compounds with the same or a longer retention time than n-nonane, the LCI value of 6000 µg/m³ applies. The retention time of n-nonane should also be used to classify individual peaks of saturated aliphatic hydrocarbons which cannot be identified more accurately.

Quantification of substances from groups of substances is carried out as toluene equivalent, i.e. after calibration with toluene.

IV) Adoption of EU LCI values

Currently, there may be differences between an adopted EU LCI value in the LCI list and the current EU LCI value in the EU LCI list. The LCI list must be used in its entirety; it must not be mixed with other lists. The justification documents for the adopted EU LCI values are published at https://ec.europa.eu/growth/sectors/construction/eu-lci/documents-glossary_en.

Annexes 3-16 PAH as per EPA

((unchanged))

Annex 11

External Thermal Insulation Composite Systems (ETICS) with plaster layer with ETA

As at: April 2026

1 Scope

The scope refers to glued or dowelled and glued external thermal insulation composite systems (ETICS) with a plaster layer with an ETA according to EAD 040083-00-0404 and EAD 040083-01-0404 with insulation materials made of polystyrene (EPS) according to EN 13163:2012+A1:2015¹ or mineral wool (MW) according to EN 13162:2012+A1:2015.²

To execute the ETICS, DIN 55699:2017-08 must be observed unless otherwise specified below.

2 Stability and fitness for purpose

((unchanged))

2.1 General conditions

((unchanged))

2.1.1 Thermal insulation composite systems with glued polystyrene (EPS) panels

((unchanged))

2.1.2 Thermal insulation systems with glued mineral wool (MW) lamellae (fibres perpendicular to substrate)

- ☐ The substrate (wall) has a minimum tear strength of 80 kN/m².
- ☐ The MW lamellae are not thicker than 400 mm and have a shear modulus of at least 1.0 N/mm².
- ☐ The tear strength of the MW lamellae/adhesive mortar and MW lamellae/flush mounting is at least 80 kN/m².
- ☐ The MW lamellae are bonded in such a way that a horizontal surface load of at least 0.03 N/mm² is transferred to the substrate via the bond; for thicknesses greater than 200 mm, a horizontal surface load of at least 0.05 N/mm² is transferred to the substrate via the bond.
- ☐ For insulating materials more than 200 mm thick, the total applied quantity of base coat and final coat is no more than 22 kg/m² and the strength of the MW lamellae is $\geq$ TR 100.
- ☐ The base coat reinforcement is a textile glass scrim.
- ☐ Even if the wall surface has sufficient breaking strength, the MW lamellae must be attached with additional anchors depending on wind pressure we:

¹ Implemented in Germany by DIN EN 13163:2016-08.

² Implemented in Germany by DIN EN 13162:2015-04.

MW lamellae with tensile strength in the direction of fibres ≥ TR 80					
Plastering system				Wind suction load we [kN/m ²]	Minimum number of dowels [dowels/m ²]
Thickness [mm]		Weight per surface [kg/m ²]			
any				≤ -0.8	0
≤ 10	and	≤ 10		-0.8 to -1.1	3
> 10	or		> 10	-0.8 to -1.1	5

- The MW lamellae are fastened with dowels with ETA according to EAD 330196-01-0604 with variants (dowel plate diameter ≥ 60 mm; plate stiffness ≥ 0.3 kN/mm; load-bearing capacity of the anchor plate ≥ 1.0 kN). The anchors are installed flush with the insulating material (anchor plate lies on the insulating material). Anchors with plate diameter < 140 mm are placed through the reinforcement fabric. Dowels with a plate diameter ≥ 140 mm may be placed under the reinforcement fabric.
- MW lamellae with insulation material thickness of > 200 mm are executed as follows:
 - Adequate mounting safety is ensured by appropriate support measures. The insulation panels are laid in a lattice structure. On building corners only full-length insulation panels are placed insofar as the geometrical framework conditions allow this.

In the following areas, the insulation panels are fixed with 3 dowels/insulating panels or 2.5 dowels/m:

- if minimum height is not reached for an area to be insulated of $\min H \leq 2 \times d_{\text{insulating material}}$,
- if minimum width is not reached for an area to be insulated of $\min W \leq 2 \times d_{\text{insulating material}}$,
- the last upper uninterrupted insulating panel position (upper building shell),
- on the side building shell, in a strip of up to 2 m in width, at least one vertical anchoring series must be placed with 2.5 dowels.

A vertical drop of $\min H < d_{\text{insulating material}}$ may not be executed without additional support constructions. The field sizes without expansion joints are

- 9 m x 9 m or 80 m² for thick layer systems (base coat including final coat = total plaster thickness > 10 mm).
- for thin film sections (base coat including final coat = total plaster thickness ≤ 10 mm) 50 m x 25 m.

2.1.3 Thermal insulation systems with polystyrene (EPS) panels or with mineral wool (MW) panels (fibres parallel to substrate) or with mineral wool (MW) lamellae (fibres perpendicular to substrate), mechanically attached with anchors and additionally glued

- The thickness of the insulation material complies with the following values:

	EPS panels	MW lamellae	MW panels
Insulating material thickness [mm]	≤ 400	≤ 200	≤ 340

- For insulating materials more than 200 mm thick, the total applied quantity of base coat and final coat is no more than 22 kg/m².
- The base coat reinforcement is a textile glass scrim.
- The insulating material is fastened with dowels with ETA according to EAD 330196-01-0604 with variants (dowel plate diameter ≥ 60 mm; plate stiffness ≥ 0.3 kN/mm; load-bearing capacity of the anchor plate ≥ 1.0 kN). The anchors are installed flush with the insulating material (anchor plate lies on the insulating material).

The following proofs as per a) to c) are kept:

- a) Proof of anchors being anchored in the substrate (wall):

$$S_d \leq N_{Rd}$$

where

$$S_d = \gamma_F \cdot W_e$$

$$N_{Rd} = \frac{N_{Rk}}{\gamma_{M,U}}$$

with

S_d : Design value of wind suction load

N_{Rd} : Rated value of the load capacity of the dowel W_e : Effects of wind

N_{Rk} : characteristic tensile strength of the dowel (according to annex of the respective dowel ETA)

γ_F : 1.5 (safety factor for wind effects)

$\gamma_{M,U}$: Safety factor of anchor extraction resistance from substrate (see relevant dowel ETA)

b) Proof of the ETICS:

$$S_d \leq R_d, \text{ where}$$

S_d = Design value of wind suction load

$$R_d = \frac{R_{area \cdot n_{area}} + R_{joint \cdot n_{joint}}}{\gamma_{M,EXW}}$$

with

R_d : Design value of thermal insulation system resistance

R_{joint} , R_{area} : The failure load resulting from the thermal insulation system (minimum value) in the area or not in the area of the panel joints (see relevant thermal insulation system ETA)

n_{joint} , n_{area} : Number of dowels (per m²) placed in the area/outside the area of the panel joints.

$$\gamma_{M,S} : 4.0$$

c) Proof of insulating material in case of dowelling under the reinforcement fabric:

$$S_d \leq R_d, \text{ where}$$

S_d = (see preceding section)

$$R_d = N_{Rk} / \gamma_{M,D}$$

with

N_{Rk} : Design value of thermal insulation system resistance (slabs: Tensile strength perpendicular to the panel plane, lamellae: tensile strength in the direction of fibres)

$$\gamma_{M,D} : 5.0$$

The larger dowel number is decisive, with at least 4 dowels/m² installed.

For MW panels > 200 mm thick, at least 6 dowels/m² are present.

3 Fire protection

((unchanged))

3.1

3.1 ETICS with mineral wool (MW) insulation according to EN 13162:2012+A1:2015 [implemented in Germany by DIN EN 13162:2015-04.]

((unchanged))

3.2 ETICS with expanded polystyrene (EPS) insulation according to EN 13163:2012+A1:2015 [Implemented in Germany by DIN EN 13163:2016-08.]

((unchanged))

4 Sound insulation

((unchanged))

5 Thermal insulation

((unchanged))

6 Certificate for installation of thermal insulation composite system

((unchanged))

Annex 12

Application rules for non-load-bearing permanent formwork kits/systems and formwork components for the construction of in-situ concrete walls

As at: April 2026

1 Foreword

This Technical Rule applies to the use or application of construction products or construction kits regulated in the following technical specifications:

- I) non-load-bearing permanent formwork blocks as per ETA built on the basis of EAD 340309-00-0305 with variants [1],
- II) non-load-bearing permanent formwork blocks of normal concrete and lightweight concrete as per EN 15435:2008¹ [2],
- III) non-load-bearing permanent formwork blocks of wood-chip concrete as per EN 15498:2008¹⁴ [3].

The above-mentioned construction products or construction kits must be formed jointly so that they form a non-load-bearing permanent formwork system to enable the construction of in-situ concrete walls. The formwork components or formwork kits/systems as per I), II), and III) – hereinafter referred to as formwork components – remain part of the wall after the concrete core is concreted.

2 A. Definitions

((unchanged))

3 Stability and fitness for purpose

((unchanged))

¹ Implemented in Germany by DIN EN 15435:2008-10.

¹⁴ Implemented in Germany by DIN EN 15498:2008-08.

3.1 Design, construction, and execution

The design, construction, and execution of in-situ concrete walls with permanent formwork systems as per the above-mentioned technical specifications in line with A 1.2.3.1 of MVV TB.

Formwork components must be laid dry.

Exterior walls built with formwork components must be protected against environmental impact by plaster or cladding.

To ensure that the reinforcing steel bars are connected, the formwork components may not be taken into account with the concrete surfacing.

For formwork kits/systems according to ETA based on EAD 340309-00-0305 with variants [1], the statements regarding resistance to formwork pressure and/or the statements regarding the maximum permissible filling height shall be taken from the ETA.

For formwork blocks as per EN 15435:2008¹ [2] and/or EN 15498:2008¹⁴[3], the resistance to formwork pressure (characteristic tensile strength of studs, characteristic bending tensile strength of walls) must be taken from the declaration of performance or the accompanying documents.

Unless a maximum permissible fill height is specified, suitable structural systems must be selected to realistically determine the formwork load comply with the design loads resulting from the pressure of fresh concrete as set out in DIN 18218:2010-01

[4]; Chapter B 2 of this technical rule must be observed. To prove resistance to formwork pressure, the rated values for the resistances (e.g. breaking stress of studs, bending tensile strength of walls, tearing strength of the stud from the wall, where appropriate) should be compared to the rated values for the stresses. The partial safety coefficients shall be determined in accordance with DIN EN 1990:2010-12 [5] and DIN EN 1990/NA:2010-12 [6].

3.1.1 With regard to design and construction according to DIN EN 1992-1-1:2011-01 and DIN EN 1992-1-1/A1:2015-03 [7] in conjunction with DIN EN 1992-1-1/NA:2013-04 and DIN EN 1992-1-1/NA/A1:2015-12 [8] a brick wall of the grid type, column type or 'other type' shall also apply:

((unchanged))

3.1.2 For proof of resistance to horizontal influences in the wall plane for walls of the grid type and column type, the following also applies:

((unchanged))

3.2 In addition to DIN EN 1992-1-1:2011-01 and DIN EN 1992-1-1/A1:2015-03 [7] in conjunction with DIN EN 1992-1-1/NA:2013-04 and DIN EN 1992-1-1/NA/A1:2015-12 [8], the following applies:

((unchanged))

4 Fire protection

((unchanged))

4.1 Fire resistance

((unchanged))

4.2 Fire behaviour

((unchanged))

5 Sound insulation

((unchanged))

¹ Implemented in Germany by DIN EN 15435:2008-10.

¹⁴ Implemented in Germany by DIN EN 15498:2008-08.

6 Thermal insulation

((unchanged))

Literature

[1]	EAD 340309-00-0305	Non-load-bearing permanent formwork kits/systems based on hollow blocks or panels made of insulating materials and, in some cases, concrete (34 pages) As at: January 2019; Decision (EU) 2021/1789; Non-load-bearing formwork systems/kits, consisting of hollow-core elements made of thermal insulation materials and — in some cases — concrete (as a substitute for ETAG 009); EOTA
[2]	DIN EN 15435:2008-10	Precast concrete products - Normal weight and lightweight concrete shuttering blocks - Product properties and performance; German version EN 15435:2008.
[3]	DIN EN 15498:2008-08	Precast concrete products - Wood-chip concrete shuttering blocks - Product properties and performance; German version EN 15498:2008.
[4]	DIN 18218:2010-01	Pressure of fresh concrete on vertical formwork.
[5]	DIN EN 1990:2010-12	Eurocode: Basis of structural design; German version EN 1990:2002+A1:2005+A1:2005/AC:2010.
[6]	DIN EN 1990/NA:2010-12	National Annex – Nationally determined parameters – Eurocode: Basis of structural design.
[7]	DIN EN 1992-1-1:2011-01 DIN EN 1992-1-1/A1:2015-03	Eurocode 2: Design of concrete structures. Part 1-1: General rules and rules for buildings; German version EN 1992 1 1:2004 + AC:2010.
[8]	DIN EN 1992-1-1/NA DIN EN 1992-1-1/NA/A1:2015-12	National annex: 2013-04 - National Annex – Nationally determined parameters – Eurocode 2: Design of concrete structures. Part 1-1: General rules and rules for buildings
[9]	DIN 4103-1:2015-06	Internal non-loadbearing partitions – Part 1: Requirements and verification.
[10]	DIN 1045-2:2023-08	Concrete, reinforced and prestressed concrete structures – Part 2: Concrete
[11]	DBV-Merkblatt	Concreteability of components 11/2023.
[12]	DIN 18202:2013-04	Tolerances in building construction - Buildings.
[13]	DIN EN 13163:2017-02	Thermal insulation products for buildings. Factory made expanded polystyrene (EPS) products. Specification; German version EN 13163:2012+A2:2016.
[14]	DIN 4108-4:2020-11	Thermal insulation and energy economy in buildings – Part 4: Hygrothermal design values.

Annex 1 - Demonstrating resistance to horizontal effects (HEd) at wall plane for lattice-type and column-type walls, excluding the effects of earthquakes

((unchanged))

Annex 15

As at: November 2019

- - deleted from MVV TB 2026/1 -

Annex 17

Guideline on the requirements for steel receptacles with a catch volume of up to 1000 litres (StawaR)

As at: April 2025

1 Subject matter and scope of application

((unchanged))

2 Provisions relating to the catching tray

((unchanged))

2.1 Requirements for the reception tray

((unchanged))

2.1.1 MATERIALS

(1) The steel of the trays must be resistant to water-hazardous liquids. The required resistance shall be deemed to have been proven if:

- a) the liquid-material combination in DIN EN 12285-1 Annex B is positively evaluated and the boundary conditions listed therein are complied with or
- b) the suitability according to DIN EN 12285-1 Annex B Appendix 1 has been demonstrated, whereby wall removal by surface corrosion may not exceed 0,5 mm/year by way of deviation from DIN EN 12285-1 Annex B Section 2.2.1; or
- c) the liquid-material combination in the 'BAM List, Requirements for Tanks for the Transport of Dangerous Goods' (published by the Bundesanstalt für Materialforschung und prüfung (BAM), Unter den Eichen 87, 12205 Berlin) is positively evaluated and the boundary conditions listed therein are respected.

(2) Receptacles made of steels that tend to corrosion under environmental influences (such as structural steels according to DIN EN 10025-2, boiler sheets according to DIN EN 10028-2), are equipped with a surface protection (e.g. coating according to DIN EN ISO 12944-1; -4; -5; galvanizing according to DIN EN ISO 1461) according to the intended service life (protection period). Stainless steels shall be chosen according to the required corrosion resistance classes in accordance with the general approval of the building authorities Z-30.3-6.

(3) Galvanised trays shall not be used when storing the following liquids: organic and inorganic acids, soda and potash as well as other alkali hydroxides, chlorine hydrocarbons, amines, nitro compounds, acid chlorides and other chlorides, phenol, aqueous alkaline solutions, nitriles.

(4) Steel trays according to DIN EN 10025-2 or DIN EN 10028-2 must have wall thicknesses of at least 3 mm, made of stainless steel in accordance with DIN EN 10088-4 of at least 2 mm. Exception: Trays in safety cabinets according to DIN EN 14470-1 must have a wall thickness of at least 1 mm, regardless of the type of steel.

2.1.2 Design

((unchanged))

2.1.3 Stability

((unchanged))

2.2 Manufacture and labelling

((unchanged))

2.2.1 Manufacture

((unchanged))

2.2.2 Labelling

((unchanged))

2.3 Certificate of conformity

((unchanged))

2.3.1 Initial test by a recognised verifier

((unchanged))

2.3.2 Factory production control

((unchanged))

3 Provisions relating to the establishment

(1) The conditions for the installation of the trays are set out in the water, occupational safety and construction regulations.

(2) The trays may only be placed on horizontal, flat and sufficiently fastened surfaces (e.g. asphalt, concrete) or installed on shelves (see section 1(3)). Precipitation water shall not enter the receptacle. The area around the receivers shall be fixed and shall not have a gradient to the catch tanks, so that, for example, precipitation water cannot be collected under the catching tubs.

(3) The steel grids used as floorings shall be designed and constructed for the specified payload in accordance with recognised rules of steel construction, e.g. Eurocode 3 (DIN EN 1993) or RAL-GZ 638 and be proven to be resistant to storage media in accordance with paragraph (1) of Section 2.1.1.

(4) Reception trays must be adequately protected against possible damage from the outside. Protection can, for example, be provided by:

- ☐ protected installation outside internal transport routes,
- ☐ Start-up protection,
- ☐ Installation in a suitable room.

(5) In the case of a surface composition of several catching tubs, an overview shall be affixed to a visible location showing the marking in accordance with Section 2.2.2 for each catching tray.

The joints between the trays shall be covered with liquid impermeability.

(6) The corrosion protection layer must not be damaged when installing steel floor trays in accordance with DIN EN 10025-2 or DIN EN 10028-2 without feet or skids.

4 Provisions for use, maintenance, servicing and testing

((unchanged))

4.1 Use

(1) The terms of use shall be in accordance with the evidence set out in Section 2.1.

(2) The permissible storage volume of the containers stored in or above the tray shall be determined according to the required restraint volume in accordance with § 18, (3) and (4) as well as Chapter 3, Section 3 AwSV.

(3) If catching devices are assembled on a flat surface, the permissible catch volume shall correspond to the respective catch volume of the individual collection device on which the containers are placed. If containers are placed over multiple collection devices, the maximum catch volume of the smallest catching device shall be decisive. In the case of surface composition, the collection volumes of the individual catching devices shall not be added together.

(4) The operator shall be responsible for complying with the maximum permissible storage capacity or container size described in paragraph (2) and also in paragraph (3), taking into account the catch volume marked on the tray. The volume displacement by the set containers must be observed.

(5) The base area of collecting devices shall be such that injection losses, e.g. from mechanical damage to container walls, from filling and emptying operations and drip losses are safely absorbed. Where appropriate, a safe discharge of leaks into the collection device shall be ensured by means of spray protection measures.

(6) The maximum payload of the tray and the grating must not be exceeded.

(7) Large containers and barrels may only be placed in or on their grids with suitable equipment (e.g. drum grippers) and removed from or from it.

(8) Small containers and barrels may only be stacked in accordance with traffic regulations and safety regulations, whereby a maximum stacking height of 1.5 m must not be exceeded. They must be secured against falling.

(9) In earthquake-prone areas with seismic activity higher than 'very low' as defined in DIN EN 1998-1/NA:2023-11, the tanks must be adequately secured in place so that, in the event of an earthquake, no concentrated point loads act on them.

(10) The aggregation of different substances must provide a material compatibility. Different liquids that can react to each other must be stored in such a way that they cannot enter the same tub in the event of leakage. The material of another container shall not be attacked by the storage medium.

(11) In cases where contact corrosion is to be expected, it shall be ensured that the containers and containers have a sufficient distance from the wall of the tray.

(12) The leaking of water-hazardous substances from the container must be quickly and reliably detectable. The substances harmful to water shall be visible or indicated by a leakage probe. The installation and arrangement of the tanks in or on the receptacle shall be governed by water and labour protection regulations.

(13) Bottling vessels (e.g. cans) and storage containers must not protrude beyond the edge of the tank.

4.2 Maintenance, servicing

((unchanged))

4.3 Tests

((unchanged))

5 Catching tubs – Materials and material certificates

((unchanged))

6 Cited standards and regulations

DIN EN 1998-1/NA:2023-11

National Annex – Nationally determined parameters – Eurocode 8: Design of structures for earthquake resistance – Part 1: General rules, seismic actions and rules for buildings

DIN EN 1090-2:2024-09

Execution of steel structures and aluminium structures. Part 2: Technical requirements for the execution of steel structures

DIN EN 1593:1999-11

Non-destructive test – leakage test – bladder test method

DIN EN 10025-1:2005-02

Hot rolled products of structural steels - Part 1: General technical delivery conditions

DIN EN 10025-2:2019-10

Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels

DIN EN 10027-2:2015-07

Designation systems for steels - Part 2: Numerical system

DIN EN 10028-2:2017-10

Flat products of pressure vessel steel – Part 2: Unalloyed and alloyed steels with defined properties at elevated temperatures

DIN EN 10088-4:2010-01

Stainless steels – Part 4: Technical delivery conditions for sheet metal and strip made of corrosion-resistant steels for construction

DIN EN 10204:2005-01

Metallic products – Types of inspection documents

DIN EN 12285-1:2018-12

Factory-made steel tanks – Part 1: Lying, cylindrical, single and double-walled tanks for the underground storage of combustible and non-flammable water-hazardous liquids not intended for heating and cooling buildings (positive liquid list)

DIN EN 14470-1:2004-07

Fire Resistant Storage Cabinets – Part 1: Safety cabinets for flammable liquids

DIN EN ISO 1461:2009-10

Hot dip galvanised coatings on fabricated iron and steel articles - Specifications and test methods

DIN EN ISO 3452-1:2014-09

Non-destructive intrusion test – Part 1: General principles

DIN EN ISO 9606-1:2017-12

Testing of welders – melt welding – Part 1: Steels (ISO 9606-1:2012, including Cor 1:2012 and Cor 2:2013)

DIN EN ISO 12944-1:2019-01

Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 1: General Introduction

DIN EN ISO 12944-4:2018-04

Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 4: Types of surface and surface preparation

DIN EN ISO 12944-5:2018-06

Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 5: Coating systems

DIN EN ISO 15609-1/-2/-3/-4/-5/-6:2005-01, 2001-12, 2004-10, 2009-10, 2012-03, 2013-06

Specification and qualification of welding procedures for metallic materials

AwSV

Ordinance on Installations for the Handling of Substances Hazardous to Water (AwSV)

The current version applies. (at the time this StawaR was drawn up, the version of 18 April 2017 (Federal Law Gazette I No. 22, p. 905))

RAL-GZ 638:2008-09

Gratings – quality assurance

Z-30.3-6:05.03.2018

Products, fasteners and components of stainless steel

With regard to the standards cited in this Guideline, other documents and technical requirements that refer to products or test procedures, it is hereby stated that products or test procedures that comply with the standards or other such provisions and/or technical regulations in other EU Member States and other Contracting States to the Agreement on the European Economic Area (EEA) as well as Switzerland and Turkey may also be used as long as the required level of protection is consistently provided in terms of safety, health and usability.

Annex 18

Use of normal flammability glazing in external walls, excluding exterior wall structures with inter-storey cavities or airspaces and façades

As at: March 2025

1 Use of normal flammability glazing in external walls, excluding exterior wall structures with inter-storey cavities or airspaces and façades

Instead of non-combustible glazing in external walls, normal flammability glazing may be used if the glazing with multi-pane insulating glass with laminated safety glass consists of single non-flammable glass (e.g. float glass, single pane safety glass) and intermediate films and the multi-pane insulating glass with laminated safety glass is at least normal flame resistant and the glazing does not contribute to a permanent flame propagation in the event of fire.

This is considered to be met by laminated safety glass with a maximum of two 0.38 mm thick polyvinyl butyral (PVB) films per liner. These composite safety glasses may also be arranged in several disk planes (e.g. as outer, middle and inner panes). The disc edges must be protected from flame by a glass holder made of non-combustible materials. If this is to be deviated from this, a proof of applicability according to § 16a MBO is required.¹

Annex 19

Requirements relating to polychlorinated biphenyls (PCBs) from contaminated building materials and from contaminated components in buildings

As at: April 2026

1 Scope of application and other applicable provisions

The following provisions are intended to ensure that the protection objectives set out in building regulations are met for buildings containing building materials containing PCBs (primary sources) or PCB-contaminated components (secondary sources). Existing provisions under labour law, environmental protection law, chemicals legislation and waste management legislation remain unaffected.

2 Assessment of PCB load and remediation requirement

Assessment of a potential health hazard due to PCBs is based on measured PCB concentrations in the indoor air. Total PCB load is determined by multiplying the sum of the six indicator congeners PCB 28, 52, 101, 138, 153 and 180 by a factor of 5 ($\sum \text{PCB}_6 \times 5 = \text{PCB}_{\text{ges}}$).

The measurement strategy is carried out in accordance with the guidelines of the German Committee on Indoor Air Guide Values (AIR; Bundesgesundheitsblatt 2025, 68:190–200). Sampling and analysis are carried out by a test laboratory accredited according to DIN EN ISO/IEC 17025:2018-03, whose scope of accreditation includes the sampling and analytical determination of PCBs in indoor air. Alternatively, these activities may be performed by laboratories that have at least a documented quality-assurance system and have successfully participated in external ring tests and/or interlaboratory comparisons.

The risk-related intervention value, referred to as intervention value II (RW II), is 800 ng/m³ (Federal Health Gazette 2025, 68:201–218). If this level is exceeded, all sources shall be identified and remediation to reduce exposure shall be carried out without delay.

¹ under federal state law

3 Reviewing the success of remediation

The aim of remediation is a sustainable reduction of PCB concentration in the indoor air. This is primarily achieved by identifying and removing PCB-containing building materials or PCB-contaminated components.

4 Measuring success

The success of the remediation must be documented by an indoor air measurement following completion of the measures. The measurements are carried out under typical conditions of use (e.g. with windows closed, heating on and room temperature of 19–24 °C) before the premises are put back into use.

Measurement of PCBs in indoor air shall be carried out in accordance with Section 2.

Note: The guideline I (RW I) set by the AIR as a precautionary value for the total PCB load is 80 ng/m³. The Committee's guidelines for interior benchmarks describe benchmark I (RW I) as follows: '[...] the concentration of a substance in indoor air which, according to current knowledge, [...] is not expected to cause any adverse health effects if it is at or below this level.' [...] "RW I, or a value below it, can also be used as a remediation target." (AIR; Bundesgesundheitsblatt, 2025, 68:190–200).