



ETA-Danmark A/S
Göteborg Plads 1
DK-2150 Nordhavn
Tel. +45 72 24 59 00
Internet www.etadanmark.dk

Authorised and notified
according to Article 29 of the
Regulation (EU)
No 305/2011 of the European
Parliament and of the Council
of 9 March 2011

MEMBER OF EOTA



European Technical Assessment ETA-20/1307 of 2021/01/01

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

HENSOTHERM® System für Schachtwand

Product family to which the above construction product belongs:

Fire Stopping and Sealing Product:
• Penetration Seals

Manufacturer:

RUDOLF HENSEL GMBH
Lauenburger Landstr.11
Börnsen 21039
Germany

Manufacturing plant:

RUDOLF HENSEL GMBH
Lauenburger Landstr.11
Börnsen 21039
Germany

This European Technical Assessment contains:

10 pages including 1 annex which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

EAD 350454-00-1104 for Fire stopping and fire sealing products - Penetration seals, September 2017

This version replaces:

-

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full [except the confidential Annex(es) referred to above]. However, partial reproduction may be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- 1) HENSOTHERM® System für Schachtwand is a sealant, HENSOTHERM® 7 KS viskos used to form a penetration seal around single multilayer pipes, composite pipes and conduits, in combination with HENSOTHERM® 7KS Gewebe pipe wraps (ETA 16/0369), to reinstate the fire resistance performance of shaftwall constructions, where they have been provided with apertures for the penetration of services.
- 2) HENSOTHERM® 7 KS viskos, supplied in liquid form in cans, cartridges or tubes. HENSOTHERM® 7KS Gewebe pipe wraps (ETA 16/0369) are also incorporated into the penetration seal where required.
- 3) HENSOTHERM® System für Schachtwand contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.
- 4) The applicant submitted a written declaration that HENSOTHERM® System für Schachtwand does not contain substances which have to be classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No 1272/2008 and listed in the "Indicative list on dangerous substances" of the EGDS - taking into account the installation conditions of the construction product and the release scenarios resulting from there. An emission report has also been provided.

In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

- 5) The use category of HENSOTHERM® System für Schachtwand in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): EAD 350454-00-1104

Detailed information and data is given in Annex A.

- 1) The intended use of HENSOTHERM® System für Schachtwand is to reinstate the fire resistance performance of flexible wall, rigid wall and rigid floor constructions where they are penetrated by pipes.
- 2) The specific elements of construction that the system HENSOTHERM® System für Schachtwand may be used to provide a penetration seal in, are as follows:

- a. Shaft walls: The wall must have a minimum thickness of 90 mm and comprise min. steel studs lined on one face with minimum 2 layers of 20 mm thick boards.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

- 3) The System HENSOTHERM® System für Schachtwand may be used to provide a penetration seal with pipes and conduits (for details see Annex A).
- 4) Services shall be supported at maximum 200 mm from both faces of the wall.
- 5) The provisions made in this European Technical Assessment are based on an assumed working life of the HENSOTHERM® System für Schachtwand of 10 years, provided that the conditions for the packaging/transport/ storage/installation/use/repair are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer or the Technical Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.
- 6) Type X: Intended for uses in external conditions. Includes lower classes.

3 Performance of the product and references to the methods used for its assessment

Product-type: Sealant		Intended use: Penetration Seal
	Essential characteristic	Product performance
BWR 2 Safety in case of fire		
	Reaction to fire	Class E
	Resistance to fire	Annex A
BWR 3 Hygiene, health and environment		
	Air permeability	No performance assessed
	Water permeability	No performance assessed
	Content, emission and/or release of dangerous substances	Use categories: IA1, S/W3 Declaration of manufacturer
BWR 4 Safety in use		
	Mechanical resistance and stability	No performance assessed
	Resistance to impact/movement	
	Adhesion	
	Durability	X
BWR 5 Protection against noise		
	Airborne sound insulation	No performance assessed
BWR 6 Energy economy and heat retention		
	Thermal properties	No performance assessed
	Water vapour permeability	No performance assessed

4 ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO ITS LEGAL BASE

According to the decision 1999/454/EC – Commission Decision of date 22nd June 1999 on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards fire stopping, fire sealing and fire protective products, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, see <http://eur-lex.europa.eu/JOIndex.do> of the European Commission¹, as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table(s) applies (apply).

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Fire stopping and Fire Sealing Products	For fire compartmentation and/or fire protection or fire performance	Any	1

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark A/S prior to CE marking

Issued in Copenhagen on 2021-01-01 by



Thomas Bruun

Managing Director, ETA-Danmark

¹ Official Journal of the European Communities L178/52 of 14/7/1999

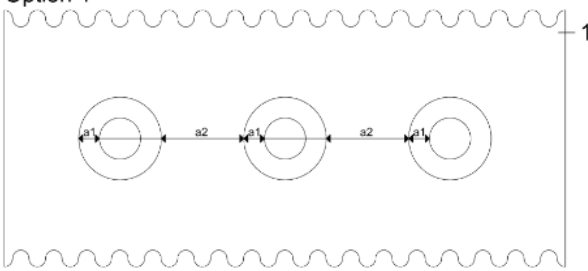
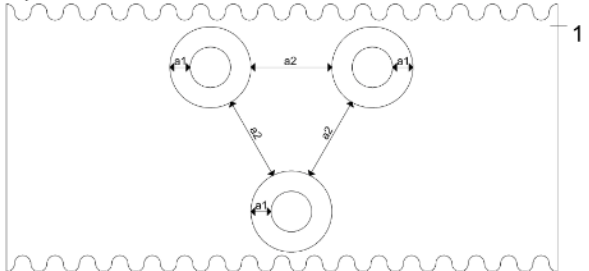
ANNEX A – Resistance to Fire Classification – HENSOTHERM® System für Schachtwand

A.1 Shaft wall constructions with wall thickness of minimum 90 mm

A.1.1 Service Types

Services	Types
Plastic conduits	NA
Composite pipes with Armaflex insulation	<ul style="list-style-type: none"> • KE KELIT KELOX • Geberit Mepla
Multilayer pipes	<ul style="list-style-type: none"> • Polokal XS • Polokal NG • Silent PP

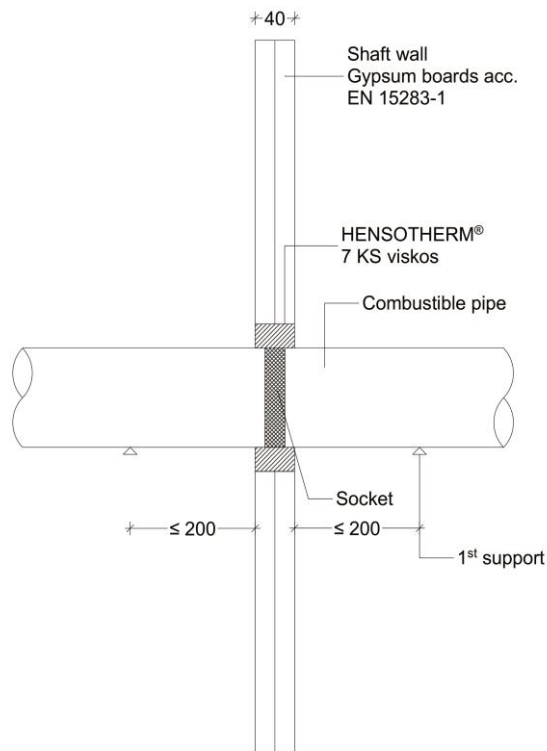
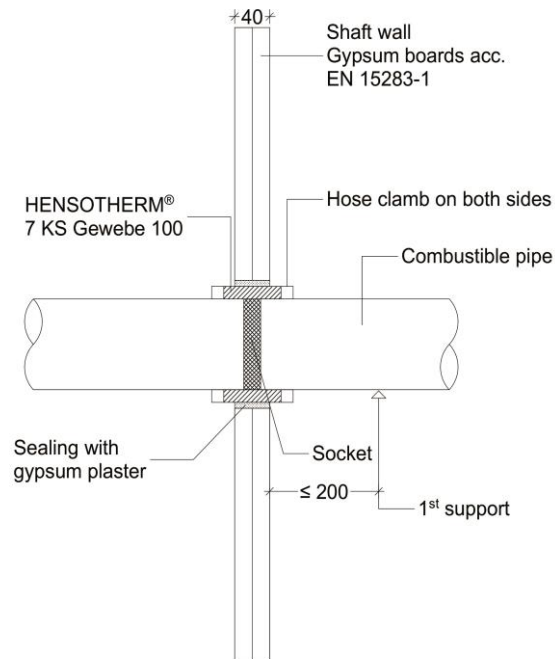
A.1.2 Permitted Distances

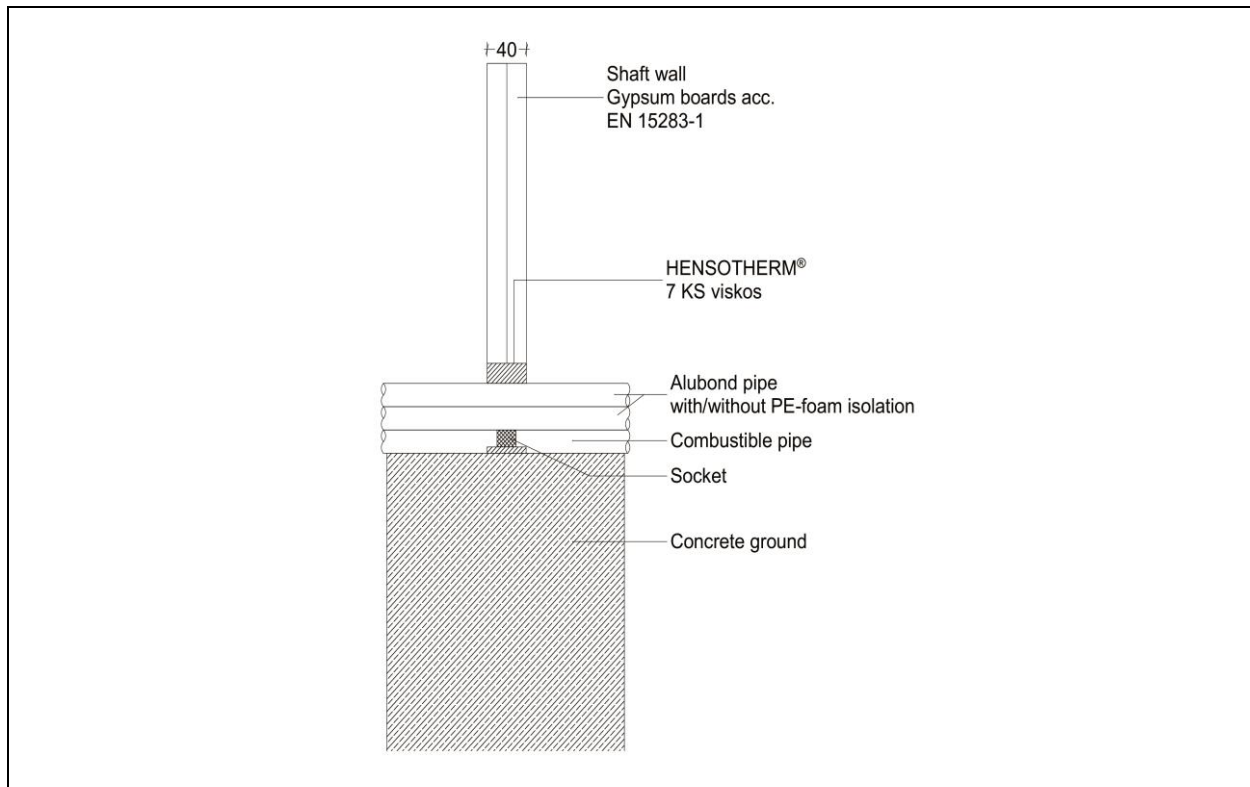
<p>a1: annular space = nominally 0 mm and any remaining space filled with plaster or HENSOTHERM® 7 KS viskos depending on pipe size</p> <p>a2: Separation between seals ≥ 0 mm</p> <p>Distance 1st support service ≤ 200 mm</p>	
<p>Option 1</p>  <p>1 Supporting construction a1 Pipe/Edge of seal separation (annular space) a2 Separation between penetration seals</p>	<p>Option 2</p>  <p>1 Supporting construction a1 Pipe/Edge of seal separation (annular space) a2 Separation between penetration seals</p>

A.1.3 Single Pipes

Penetration Seal: Plastic and Alubond pipes installed with a pipe joint within the wall. Pipes ≥ 50 mm diameter sealed with 1 x lengths of HENSOTHERM® 7 KS Gewebe 100 fitted central to the wall boards and fixed on both sides with steel hose clamps, and the annular gap infilled with Knauf Fireboard Spachtel. Pipes ≤ 50 mm diameter sealed with HENSOTHERM® 7 KS viskos (full depth). Min. Separation between seals (a_2) = 0 mm, annular space (a_1) nominally 0 mm and any remaining space filled as described. Service may be installed at 0 mm distance to the floor.

Construction details:





A.1.3.1 Multilayer pipes

Pipes	Maximum Pipe diameter mm	Pipe wall thickness mm	Annular space mm	Layers of HENSOTHERM® 7 KS Gewebe 100 (1 mm)	Additional Components	Classification
Polokal NG	≤50	2.0	15	-	HENSOTHERM® 7 KS viskos	EI 90 U/U E 90 U/U EI 60 U/U
	≤75	2.6	10-20	4	-	
	≤110	3.4	10-20	6	-	
Polokal XS	≤50	2.0	15	-	HENSOTHERM® 7 KS viskos	EI 90 U/U
	≤75	2.6	10-20	4	-	
	≤110	3.4	10-20	6	-	
Silent PP	≤50	1.8	15	-	HENSOTHERM® 7 KS viskos	EI 90 U/U E 90 U/U EI 60 U/U EI 90 U/U
	≤75	2.6	10-20	4	-	
	≤110	3.6	10-20	6	-	

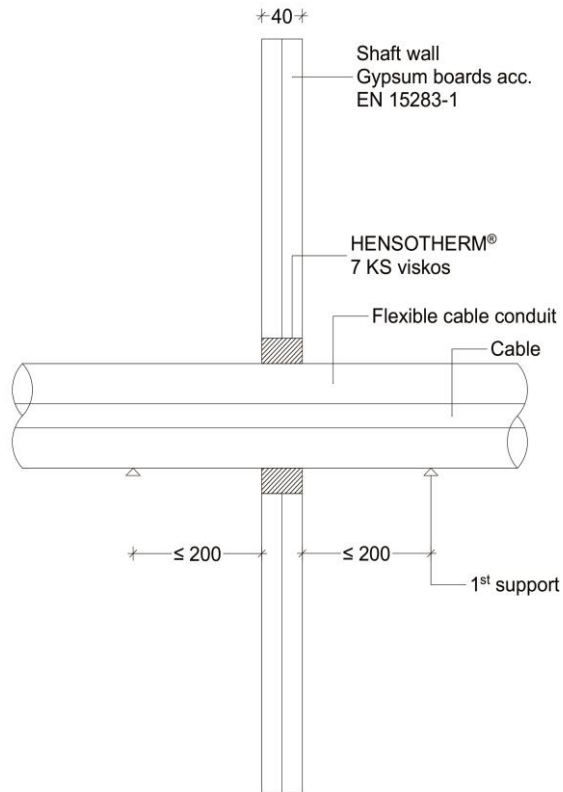
A.1.3.2 Composite pipes

Pipes	Maximum Pipe diameter mm	Pipe wall thickness mm	Annular space mm	Pipe insulation Continuous Sustained (CS)	Additional Components	Classification
Geberit Mepla	≤25	3.0	15	9 mm PE	HENSOTHERM® 7 KS viskos	EI 90 U/C
	≤25	3.0	15	None		
	≤32	3.0	15	None		
KEKELIT Kelox	≤25	2.5	15	9 mm PE	HENSOTHERM® 7 KS viskos	EI 90 U/C
	≤25	2.5	10-20	None		
	≤32	3.0	10-20	None		

A.1.4 Conduits

Penetration Seal: Cable conduits sealed with HENSOTHERM® 7 KS viskos. Min. Separation between seals (a2) = 0 mm, annular space (a1) nominally 0 mm and any remaining space filled as described. Service may be installed at 0 mm distance to the floor.

Construction details:



A.1.4.1 Conduits

Cables	Maximum conduit diameter mm	Annular space mm	Classification
Bundle NYM-J 3x1.5 mm ²	32	15	EI 90 C/C