



RISE Research Institutes  
of Sweden AB  
RISE Certifiering  
Box 553  
SE-371 23 Karlskrona  
Sweden

Tel: +46 10 516 63 00  
Web: [www.ri.se/eta](http://www.ri.se/eta)  
Mail: [certifiering@ri.se](mailto:certifiering@ri.se)



Member of



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## European Technical Assessment

**ETA 17/0765**  
of 2025-01-21

### General Part

**Technical Assessment Body issuing the European Technical Assessment:**

RISE Research Institutes of Sweden AB

**Trade name of the construction product**

Protega Novapipe S

**Product family to which the construction product belongs**

Fire stopping and fire sealing Product – Penetration seal- Collar “Protega Novapipe S”

Used to maintain the fire resistance of separating walls or floors where plastic pipes, metal pipes, cables and plastic conduits pass through

**Manufacturer**

Protega AB, Verkstadsgatan 6B, SE-231 66 Trelleborg, Sweden, [www.protega.se](http://www.protega.se)

**Manufacturing plant(s)**

Protega AB, Verkstadsgatan 6B, SE-231 66 Trelleborg, Sweden

**This European Technical Assessment contains**

16 pages including 1 Annex which form an integral part of this assessment.

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

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

**This version replaces**

ETA 17/0765 2019-04-09

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Specific parts

## 1 Technical description of the product

This European Technical Assessment refers to a fire stopping and fire sealing sealant with the designation “Protega Novapipe S” for use in penetration seals used to maintain the fire resistance of separating walls or floors where services pass through.

Protega Novapipe S is a collar consisting of stainless steel with integrated intumescent strips consisting of intumescent sealing material having a length (width) of 35 mm or 60 mm and a thickness of 3 mm or 5 mm. When exposed to fire and high temperatures the material expands to fill voids created by services that have been consumed by heat or fire. The product has a nominal density of 1.4 g/cm<sup>3</sup>.

## 2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

Protega Novapipe S is intended to form part of a penetration seal which is used to maintain the fire resistance of a separating element at the position where services pass through.

Penetration seals with Protega Novapipe S are intended to be penetrated by the following services:

- Cables single or bundled
- Pipes of reaction to fire class A1 according to EN 13501-1 with a melting or decomposition point greater than 1000 °C (e.g. steel, cast iron, copper and copper alloys, nickel alloys) either insulated or non-insulated referred to as “metal pipes”
- Pipes not classified A1 or A2 according to EN 13501-1 (e.g. made from thermoplastic material or thermosetting material) including non-homogeneous materials (e.g. glass fibre reinforced plastic pipes or layered pipes), either insulated or non-insulated, referred to as “plastic pipes”
- Conduits not classified A1 or A2 according to EN 13501-1 (e.g. made from thermoplastic material or thermosetting material) including non-homogeneous materials, either insulated or non insulated, hereafter referred to as “plastic conduits”.

### 2.1 Use condition

Protega Novapipe S fulfils the requirements of use condition Z<sub>2</sub> in accordance with EAD 350454-00-1104, September 2017, section 1.2.1.

Type Z<sub>2</sub>: Products intended for uses at internal conditions with humidity lower than 85 % RH excluding temperatures below 0 °C, without exposure to rain or UV.

## 3 Assumed working life of the construction product

The provisions and the verification and assessment methods included or referred to in this ETA have been written based upon the assumed working life of the Fire Stopping and/or Fire Sealing Product for the intended use of 25 years when installed in the works, provided that the Fire Stopping and/or Fire Sealing Product is subject to appropriate use and maintenance. However, if the product is a reactive material or includes a reactive material, the working life is assumed to be 10 or 25 years depending on available evidence. These provisions are based upon current state of the art and the available knowledge and experience.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee given by the product manufacturer or his representative nor by EOTA or the Technical Assessment Body issuing the ETA, but are regarded only as a means for choosing the appropriate products in relation to the expected economically reasonable working life of the works.

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

### 4.1 Essential characteristics and their performance

Basic requirement for construction work	Essential Characteristics	Performance
BWR 1 - Mechanical resistance and stability	None	Clause 4.1.1
BWR 2 - Safety in case of fire	Reaction to fire	Clause 4.1.2.1
	Resistance to fire	Clause 4.1.2.2
BWR 3 - Hygiene, health and the environment	Air permeability	Clause 4.1.3.1
	Water permeability	Clause 4.1.3.2
	Content and/or release of dangerous substances	Clause 4.1.3.3
BWR 4 - Safety in use	Mechanical resistance and stability	Clause 4.1.4.1
	Resistance to impact/movement	Clause 4.1.4.2
	Adhesion	Clause 4.1.4.3
	Durability	Clause 4.1.4.4
BWR 5 - Protection against noise	Airborne sound insulation	Clause 4.1.5.1
BWR 6 - Energy economy and heat retention	Thermal properties	Clause 4.1.6.1
	Water vapour permeability	Clause 4.1.6.2
BWR 7 - Sustainable use of natural resources	None	Clause 4.1.7.1

#### 4.1.1 Mechanical resistance and stability (BWR 1)

Not relevant, no performance assessed (NPA).

#### 4.1.2 Safety in case of fire (BWR 2)

##### 4.1.2.1 Reaction to fire

No performance assessed (NPA).

##### 4.1.2.2 Resistance to fire

The resistance to fire performance according to EN 13501-2 of penetration seals with Protega Novapipe S is given in Annex 1.

#### 4.1.3 Hygiene, health and the environment (BWR 3)

##### 4.1.3.1 Air permeability

No performance assessed (NPA).

#### 4.1.3.2 Water permeability

No performance assessed (NPA).

#### 4.1.3.3 Content and/or release of dangerous substances

No performance assessed (NPA).

### 4.1.4 Safety in use (BWR 4)

#### 4.1.4.1 Mechanical resistance and stability

No performance assessed (NPA).

#### 4.1.4.2 Resistance to impact/movement

No performance assessed (NPA).

#### 4.1.4.3 Adhesion

No performance assessed (NPA).

#### 4.1.4.4 Durability

##### Use condition

Protega Novapipe S fulfils the requirements of use condition Z<sub>2</sub> in accordance with EAD 350454-00-1104, September 2017, section 2.2.9.3.7

Type Z<sub>2</sub>: Products intended for uses at internal conditions with humidity lower than 85 % RH excluding temperatures below 0 °C, without exposure to rain or UV.

##### Component and materials compatibility

Protega Novapipe S fulfils the requirements of suitability of materials in contact in accordance with EAD 350454-00-1104, September 2017, section 2.2.9.4.

### 4.1.5 Protection against noise (BWR 5), Airborne sound insulation

No performance assessed (NPA).

### 4.1.6 Energy economy and heat retention (BWR 6)

#### 4.1.6.1 Thermal properties

No performance assessed (NPA).

#### 4.1.6.2 Water vapour permeability

No performance assessed (NPA).

### 4.1.7 Sustainable use of natural resources (BWR 7)

Not relevant, no performance assessed (NPA).

## 5 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 22 June 1999, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, as amended by Decision of the Commission 2001/596/EC of 8 January 2001, published in the Official Journal of the European Union (OJEU) L209/33 of 2/8/2001, of the European Commission the system of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) given in the following table 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

### 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 RISE Research Institutes of Sweden AB.

Issued in Borås on 2025-01-21  
By RISE Research Institutes of Sweden AB



Martin Tillander  
Director, Product certification

## Annex A - Resistance to fire classification

### 1 General information

Protega Novapipe S penetration seals where services pass through fire resistance separating walls or floor have been classified according to EN 13501-2 in accordance with SP, classification report 5P09646rev1 and RISE, classification report no O100408-1228067-4rev1.

#### 1.1 Collar Protega Novapipe S design groups

Design group	Type of Novapipe S collar	No of intumecent strips within collar	Width of intumecent strips (mm)
1	35/32, 35/50, 35/63, 35/75	2	35
2	35/90, 35/110, 35/125	3	35
3	60/140, 60/160	3	60
4	60/200	4	60

## 2 Classification, wall construction

Table 1

<b>Fire resistance classification</b>	EI 60-U/C / EI 60-C/U		
<b>Wall types</b>	Flexible wall with minimum thickness 100 mm, comprising 2 boards with a overall board thickness no less than 25 mm on each side.		
	Rigid wall with minimum thickness 100 mm, comprising concrete or masonry element.		
<b>Position of sealant</b>	Mounted on both sides of wall construction (symmetric).		
<b>Distance between transits</b>	Not less than 200 mm.		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
DIN 8074/8075, PE	1	50 - 75	1,9-6,8
EN 12201, PE	1	50 - 75	4,5 - 7,8
DIN 8077/8078, PP	1	50 - 75	1,9 - 6,8
DIN 8061/62, PVC	1	50 - 75	1,8
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	1	50 - 75	2,3 - 5,6
PE-RT-AL-PE-RT	1	50	4,0
EN 12201/EN13244, PE	2	90 - 110	6,6
DIN 8074/8075, PE	2	90 - 110	6,6
DIN 8077/8078, PP	2	90 - 125	3,9 - 7,1
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	2	90 - 110	5,3
CU pipe with cellular rubber insulation	2	42	1,5
DIN 8074/8075, PE	3	140 - 160	3,9 - 9,1
EN 12201, PE	3	140 - 160	7,0 - 9,5
DIN 8077/8078, PP	3	140 - 160	3,9 - 9,1
EN 15434, PP	3	140 - 160	3,9 - 9,1
FE pipe with cellular rubber insulation	3	114,3	4,0
<b>Others</b>	<p>Transits shall include a aperture frame.</p> <p>The distance between the seal and the first service support shall not be greater than 400 mm.</p> <p>Pipe carriers and conduits are not allowed to pass through the seal.</p>		

Cont. table 1

<b>Fire resistance classification</b>	EI 60-U/C / EI 60-C/U		
<b>Wall types</b>	Flexible wall with minimum thickness 100 mm, comprising 2 boards with a overall board thickness no less than 25 mm on each side.		
	Rigid wall with minimum thickness 100 mm, comprising concrete or masonry element.		
<b>Position of sealant</b>	Mounted on both sides of wall construction (symmetric).		
<b>Distance between transits</b>	Not less than 200 mm.		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
PEX-AL-PE pipe	1	32-50	-
DIN 8077/8078, PP-pipe	1	75	1,9-6,8
EN12201, PE-pipe	1	75	4,5
EN1452/ DIN 8061/62 PVC-pipe	1	75	1,8/2,3/3,6/5,6
	2	125	3,1
	3	160	1,8/3,2/11,0
CU-pipe with LS or CS pipe insulation	2	42	-
FE-pipe with LS or CS pipe insulation	3	114,3	-
<b>Others</b>	<p>Transits shall include a aperture frame.</p> <p>The distance between the seal and the first service support shall not be greater than 400 mm.</p> <p>Pipe carriers and conduits are not allowed to pass through the seal.</p>		

Table 2

<b>Fire resistance classification</b>	EI 90-U/C / EI 90-C/U		
<b>Wall types</b>	Flexible wall with minimum thickness 100 mm, comprising 2 boards with a overall board thickness no less than 25 mm on each side.		
	Rigid wall with minimum thickness 100 mm, comprising concrete or masonry element.		
<b>Position of sealant</b>	Mounted on both sides of wall construction (symmetric).		
<b>Distance between transits</b>	Not less than 200 mm.		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
EN 1519, EN 12201-2, EN 1519-1, EN 12666-1, PE	1	50 - 75	3,0 - 3,5
EN 12201, PE	1	50 - 75	7,8
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	1	50 - 75	2,2 - 5,6
Pipe in pipe Inner pipe: PE-RT-AL-PE-RT Outer pipe: PP	1	32 44	3,0 2,5
Insulated pipe in pipe Inner pipe: PE-RT-AL-PE-RT Outer pipe: PP with PE insulation	1	32 44 60	3,0 2,5 8,0
EN 12201, PE	2	90 - 125	6,6 - 7,4
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	2	90 - 125	3,1 - 6,0
EN 12666, EN 1519 PE	2	125	3,9-6,9
DIN 8077/8078, PP	2	125	3,1-7,1
CU pipe	2	42	1.5
<b>Others</b>	Transits shall include a aperture frame. The distance between the seal and the first service support shall not be greater than 400 mm. Pipe carriers and conduits are not allowed to pass through the seal.		

Cont. table 2

<b>Fire resistance classification</b>	EI 90-U/C / EI 90-C/U		
<b>Wall types</b>	Flexible wall with minimum thickness 100 mm, comprising 2 boards with a overall board thickness no less than 25 mm on each side.		
	Rigid wall with minimum thickness 100 mm, comprising concrete or masonry element.		
<b>Position of sealant</b>	Mounted on both sides of wall construction (symmetric).		
<b>Distance between transits</b>	Not less than 200 mm.		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
EN 61386-1, 12 PVC conduits in a bundle	2	25	1,8
Pipe in pipe Inner pipe: PE-RT-AL-PE-RT Outer pipe: PP	2	16	2,0
		25	2,2
EN 1519, EN 12201-2, EN 1519-1, EN 12666-1, PE	3	140 - 160	6,2
EN 1329, PVC	3	140 - 160	3,2
EN 12201, PE	3	140 - 160	9,5
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	3	140 - 160	6,0 - 11,8
EN 12666, PE	4	200	7,0
DIN 8074/8075, PE	4	200	4,9
EN 12201, PE	4	200	11,9
DIN 8077/8078, PP	4	200	3,0 - 11,4
DIN 8061/8062, PVC	4	200	4,0
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	4	200	6,0 - 9,6
EN12201/ DIN8074/75, PE-pipe	2	125	7,4
	3	160	7,0
	4	200	4,9
<b>Others</b>	<p>Transits shall include a aperture frame.</p> <p>The distance between the seal and the first service support shall not be greater than 400 mm.</p> <p>Pipe carriers and conduits are not allowed to pass through the seal.</p>		

Cont. table 2

<b>Fire resistance classification</b>	EI 90-U/C / EI 90-C/U		
<b>Wall types</b>	Flexible wall with minimum thickness 100 mm, comprising 2 boards with a overall board thickness no less than 25 mm on each side.		
	Rigid wall with minimum thickness 100 mm, comprising concrete or masonry element.		
<b>Position of sealant</b>	Mounted on both sides of wall construction (symmetric).		
<b>Distance between transits</b>	Not less than 200 mm.		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
DIN8077/8078, PP-pipe	2	125	3,1/7,1
EN1452/ DIN8061/62, PVC-pipe	2	75	2,2
	2	125	3,1/6,0
	4	200	4,0
Electrical plastic pipe in a bundle 12 pcs	2	25	-
Pipe in pipe	1	32/44	-
Pipe in pipe	1	32/44/60	-
Pipe in pipe in a bundle 8 pcs	2	16/25	-
EN1452, PVC pipe	2	125	6,0
	3	160	6,0
	4	200	6,0
<b>Others</b>	<p>Transits shall include a aperture frame.</p> <p>The distance between the seal and the first service support shall not be greater than 400 mm.</p> <p>Pipe carriers and conduits are not allowed to pass through the seal.</p>		

### 3 Classification, floor construction

Table 3

<b>Fire resistance classification</b>	EI 60-U/C / EI 60-C/U	<sup>1)</sup> EI 60-C/U	
<b>Floor type</b>	Rigid floor with a minimum thickness of 150 mm and a minimum density of 550 kg/m <sup>3</sup> .		
<b>Position of sealant</b>	Mounted on the lower side of floor construction (asymmetric).		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
PE-RT-AL-PE-RT	1	50	4,0
Insulated pipe in pipe Inner pipe: PE-RT-AL-PE-RT Outer pipe: PP with PE insulation	1	32 44 60	3,0 2,5 8,0
FE-pipe with cellular rubber insulation	3	114,3	4,0
DIN 8077/8078, PP	4	200	3,0 – 11,4
EN12201, PE-pipe	1	75	1,9
EN1452, PVC-pipe	3	160	11,8
<sup>1)</sup> FE-pipe with LS or CS pipe insulation	3	114,3	-
PEX-AL-PE pipe	1	50	-
Insulated plastic pipe in pipe	1	32/44/60	-
<b>Others</b>	The distance between the seal and the first service support shall not be greater than 400 mm. Pipe carriers and conduits are not allowed to pass through the seal.		

Table 4

<b>Fire resistance classification</b>	EI 90-U/C / EI 90-C/U		
<b>Floor type</b>	Rigid floor with a minimum thickness of 150 mm and a minimum density of 550 kg/m <sup>3</sup> .		
<b>Position of sealant</b>	Mounted on the lower side of floor construction (asymmetric).		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
EN 12201, PE	1	50 – 75	6,8 – 7,8
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	1	50 – 75	1,8 – 5,6
Insulated pipe in pipe Inner pipe: PE-RT-AL-PE-RT Outer pipe: PP	1	32 44	3,0 2,5
EN 12201, PE	2	90 – 110	6,6
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	2	90 – 110	5,3
16 PVC pipes in a bundle according to EN 61386	2	16	1,5
EN 12201, PE	3	140 – 160	3,9 – 9,5
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	3	140 – 160	1,8 – 11,8
EN12201, PE-pipe	1	75	6,8
	3	160	3,9/9,1
EN1452, PVC-pipe	1	75	1,8/5,6
	2	110	5,3
	3	160	1,8
EN12201, PE-pipe	2	110	6,6
Electrical plastic pipe in a bundle 12p cs (conduit)	2	25	-
Plastic pipe in pipe	1	32/44	-
<b>Others</b>	The distance between the seal and the first service support shall not be greater than 400 mm. Pipe carriers and conduits are not allowed to pass through the seal.		

Table 5

<b>Fire resistance classification</b>	EI 120-U/C / EI 120-C/U		
<b>Floor type</b>	Rigid floor with a minimum thickness of 150 mm and a minimum density of 550 kg/m <sup>3</sup> .		
<b>Position of sealant</b>	Mounted on the lower side of floor construction (asymmetric).		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
EN 1519, EN 12201-2, EN 1519-1, EN 12666-1, PE	1	50 - 75	3,0 - 3,5
EN 12201, PE	1	50 - 75	7,8
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	1	75	2,3 - 5,6
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	2	125	3,1 - 6,0
DIN 8077/78, PP	2	125	3,1 - 7,1
EN 1266, PE	2	125	4,8
EN 12201, PP	2	125	7,4
EN 1519, EN 12201-2, EN 1519-1, EN 12666-1, PE	2	125	4,8
CU pipe with cellular rubber insulation	2	42	1,5
12 pipes in pipe in a bundle. Inner pipe: PE-RT-AL-PE-RT, Outer pipe: PP	2	16 25	2,0 2,2
EN 1519, EN 12201-2, EN 1519-1, EN 12666-1, PE	3	140 - 160	6,2
EN 1329, PVC	3	140 - 160	3,2
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	3	140 - 160	11,8
<b>Others</b>	The distance between the seal and the first service support shall not be greater than 400 mm. Pipe carriers and conduits are not allowed to pass through the seal.		

Cont. table 5

<b>Fire resistance classification</b>	EI 120-U/C / EI 120-C/U	<sup>1)</sup> EI 120-C/U	
<b>Floor type</b>	Rigid floor with a minimum thickness of 150 mm and a minimum density of 550 kg/m <sup>3</sup> .		
<b>Position of sealant</b>	Mounted on the lower side of floor construction (asymmetric).		
<b>Pipe type</b>	<b>Design group</b>	<b>Pipe diameter (mm)</b>	<b>Pipe wall thickness (mm)</b>
EN 12666, PE	3	160	7,0
EN 12101, PE	3	160	9,5
DIN 8074/8075, PE	4	200	4,9
EN 12201, PE	4	200	11,9
DIN 8061/8062, PVC	4	200	4,0
EN 1452, EN 1329-1, EN 1453-1, EN 1452-1, EN 1566, PVC	4	200	9,6
EN1452, EN1329, DIN8061/62, PVC-pipe	1	75	2,3/5,6
	1	125	3,1/6,0
	3	160	3,2
	4	200	4,0
DIN8077/88, PP-pipe	2	125	3,1/7,1/7,4
EN12666, EN12666/12201, DIN8074/75, PE-pipe	2	125	4,8
	3	160	7,0/9,5
	4	200	4,9
<sup>1)</sup> CU-pipe with LS or CS pipe insulation	2	42	-
Plastic pipe in pipe in a bundle x 8	2	16/25	-
<b>Others</b>	The distance between the seal and the first service support shall not be greater than 400 mm. Pipe carriers and conduits are not allowed to pass through the seal.		