



# PASSIVETEC<sup>®</sup> XT SEAL

INTUMESCENT SEALANT

## DESCRIPTION

PassiveTec® XT Sealant One part, neutral curing, silicone rubber based sealant with fire resistant.

## CHARACTERISTICS

- One component room temperature vulcanising (RVT), easy application system.
- Its low modulus ensures easy joint movement during expansion and contraction.
- Excellent adhesion, highly versatile, unaffected by water, sun, and in general, by the weather.
- It does not contract or crack, neither is there any sweating.

### Application:

- Sealing all kinds of joints used in construction industry where fire resistance is required.
- For internal and external perimeter pointing around door and windows frames, where the integrity of fire walls need to be maintained.
- All Expansion joints.
- Exterior use.

## TESTED BY

- Up to EI-240 tested by standard UNE EN 1366-4 and classification UNE EN 13501-2
- UNE 85232. Sealant E. DIN 18545. Parte 2. Glazing sealant. Selladores, Tipo E. TT-S-001543 A. Class A: Resistant products 50 % of maximum joint movement. ISO 11600 F+G 25 LM NFP 85305 25 E.

### Resistance to Fire : EN 1366-4, Classification EN 13501-2

	PassiveTec® XT Sealant					
Width (mm)	10	10	20	30	10	20
Depth (mm)	10	10	10	15	10	10
Joint Type	1	2	2	2	1	2
Backing	PE	PE	PE	PE	MW	MW
Classification	EI 120	EI 180	EI 240	EI 240	EI 240	EI 240

1: Simple Joint

2: Double Joint

MW: Mineral Wool density 100 KG/M<sup>3</sup>

PE: Polyethylene Foam



## TECHNICAL FEATURES

### Uncured PassiveTec® XT Seal

Appearance	Homogeneous creamy paste
Slump resistance (NF P 85501)	mm. 0
Skin over time (BS 5889 Ap.A):	----- 35
Curing rate at 23° C And 55% h.r.	mm / day 2
Application temperature	° C + 5 to + 50

### Cured PassiveTec® XT Seal (4 weeks at 23° C and 55% H.R.)

Appearance	Similar to rubber
Shore A Hardness (DIN 53505)	----- 22
Elastic recovery (NF P 85506)	% 90
Modulus 100% (DIN 53504) (NF P 85507)	Mpa. 0,36
Tensile strength (DIN 53504) (NF P 85507)	Mpa. 0,34
Tensile strength (DIN 53504) (NF P 85507)	Mpa. 1,1
Elongation at break (DIN 53504) (NF P 85507)	% 0,60
Elongation at break (DIN 53504) (NF P 85507)	% 600
Elongation at break (DIN 53504) (NF P 85507)	% 300
Movement accomodation factor	% 25
Temperature in service:	° C - 50 + 150
Storage	18 months dry conditions

### Chemical resistance

Water, soapy water, brine	Excellent
Inorganic diluted acids and alkalis	Very good
Mineral oils and grease	Very good
Oil, fuel, hydrocarbons	Very good
Other products	Consult

## PassiveTec® XT Seal Tunnel application

	PassiveTec® XT Sealant				
Width (mm)	10	10	15	20	30
Depth (mm)	25	10	10	15	15
Backing	-	MW	MW	MW	MW
Classification	EI 120	EI 120	EI 120	EI 120	EI 120

MW: Mineral Wool density 100 KG/M<sup>3</sup>

## INSTALLATION

**Dimensioning of joints:** Joint width should be at least 4 times that of the anticipated joint movement.

Depth of sealant is chosen on the basis of the joint's width, according to the following table (in mm):

WIDTH	5/6	7/9	10/12	12/15
DEPTH	5	8	7	8

For joints width > than 16mm, the depth must be at least half of the width. i.e. Joint Width 20mm then joint depth is at least 10mm.

### Formation of joints:

A filler should be used in order to avoid adhesion of PassiveTec® XT Seal to the bottom of the joint. Ensuring a correct depth / width of joint increases yield. The material to be used must be inert, mechanically stable, homogeneous, corrosion resistant, and must not adhere to either the sealant or contiguous materials. A suitable product is closed celled polyethylene foam, extruded in regular-section strips, such as POLITEN-CELL or equivalent.

In order to obtain the best results of fire resistance, it is necessary to use mineral wool ( density 100 kg/m<sup>3</sup>).

### Treatment of joints:

The surfaces to be sealed must be clean and dry. If necessary, in addition to mechanical means, cleaning with non-grease solvent such as acetone is recommended. For joints to be subjected to major stress, we suggest the use of an appropriate primer for each type of substrate.

For glass and enamels, better results are obtained without primer. Any material not known by the user in terms of adhesiveness must first be tested by or consulted with our Technical Department.

Futher treatment: PassiveTec® XT Seal may not be painted or varnished.

## Installation Procedure:

- Cut off cap from adapter nipple, screw the nozzle on the cartridge, clip the tip of the nozzle to required opening and insert into caulking gun.
- Fill in the appropriately treated joint with PassiveTec® XT Seal . In order to avoid messing the edges, they may be protected with masking tape.
- For a better finish, the seal may be smoothed with a spatula.



## INSTALLATION SEQUENCE

### Yield

The following formula is an approximate guideline in order to calculate foreseen yield for a standard cartridge of PassiveTec® XT Seal.:

$$L = \frac{300}{A \times P}$$

Where:

L = Length of sealant in metres obtained per cartridge of PassiveTec® XT Seal.

A = Joint width in mm.

P = Joint depth in mm.



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