DBI
FIRE AND SECURITY

CLASSIFICATION REPORT
LINEAR JOINT SEALS

Name of sponsor:	**Intumescent Systems Ltd and Envirograf Europe**		
Product name:	P40 VB/VWB and P58 AM mastic.		
File no.:	PCA10782G	**Revision No:**	0
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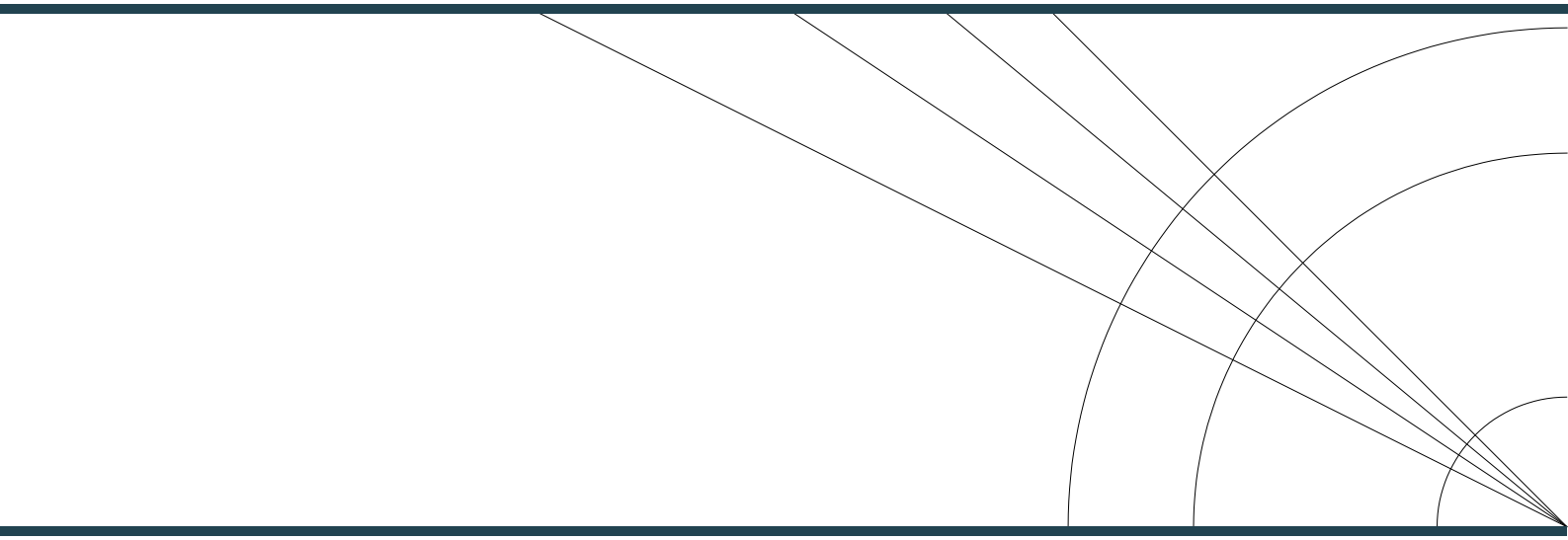


Danish Institute of Fire and Security Technology
Jernholmen 12, DK-2650 Hvidovre
Phone: +45 36 34 90 00 · Mail: dbi@dbigroup.dk · www.dbigroup.dk
Notified Body no. 0845

ilac-MRA DANAK
TEST Reg.no.0012

Client information

Client: Envirograf Europe ApS

Address: Lyngvejen 7, Sædding

6900 Skjern

Denmark

Client: Intumescent Systems Ltd

Address: Barfrestone, Dover

CT15 7JG KENT

United Kingdom

The results relate only to the items tested. The classification report should only be reproduced in extenso – in extracts only with a written agreement with this institute.

Content

1. Introduction

This classification report defines the classification assigned to the product in accordance with the procedures given in EN 13501-2:2016.

This classification report includes the direct field of application of the test results.

2. Details of classified product

General

Producer of product: Envirograf Europe ApS

The tested product is designated: P40 VB/VWB

The classification is valid for the following end use application: Linear joint seals in decks

Product description

The product is a linear joint seal system sealing horizontal joints in rigid floors.
The system consists of Product 58 sealant with a backing of Product 40 VB/VWB.
The seal is symmetric.

The details of the product are described in the DBI test reports listed below:

3. Reports in support of the classification

Test report

The product was successfully tested in accordance with EN 1366-4:2021. The evidence for this is given in the test report listed below:

Reference test:				
Name of Laboratory	Name of sponsor	Test report file no.	Test method	Date of test
Danish Institute of Fire and Security Technology	Envirograf Europe ApS Intumescent Systems Ltd	PGA12059A dated 25-04-2022.	EN 1366-3:2009 EN 1366-4:2021	14-12-2021
Danish Institute of Fire and Security Technology	Envirograf Europe ApS Intumescent Systems Ltd	PGA11979B dated 27-08-2021	EN 1366-4:2021	21-06-2021

Test results

DBI test report PGA12059A concerns a total of 23 different penetration seals and one linear joint seal that were tested in a deck for 135 minutes. The linear joint seal is within the scope of this classification report.
DBI test report PGA12059A concerns the linear joint seal in this classification report.

Test specimens								Results	
Test report	Specimen No.	Type and Orientation	Aperture Width x Depth	Supporting construction	Backing material	Sealant depth		Integrity	Insulation
						Exp.	Unexp.		
			[mm x mm]			[mm]	[mm]	[min]	[min]
PGA11979B	3	Floor	25 x 150	Aerated concrete, density 575 kg/m^3	40 mm deep P40 VB/VWB	12	12	**242**	**242**
PGA12059A	20	Floor	1.25 x 150	Aerated concrete, density 575 kg/m^3	40 mm deep P40 VB/VWB	12	12	**135**	**135**

4. Classification and field of application

Reference

This classification has been carried out in accordance with clause 7.5.9 of EN 13501-2:2016.

Classification

The classes obtained for the linear joint seals, specified by letters indicating the test condition, cf. clause 7.5.9 of EN 13501-2:2016, are given in the table below.
The letters indicate the following test conditions:

H: Horizontal supporting construction
V: Vertical supporting construction – vertical joint
T: Vertical supporting construction – horizontal joint
X: No movement induced in the joint
B: Type of splice: Both manufactured and field
W: Joint width range (in mm)

Test specimen:	**Classes specified by letters indicating test conditions:**
3	EI 120 – H – X – B – W1 to W25
20	EI 240 – H – X – B – W25 to W25

The classification of the two different seals are presented in the table above. The direct field of application for the different seals are described in the following sections.

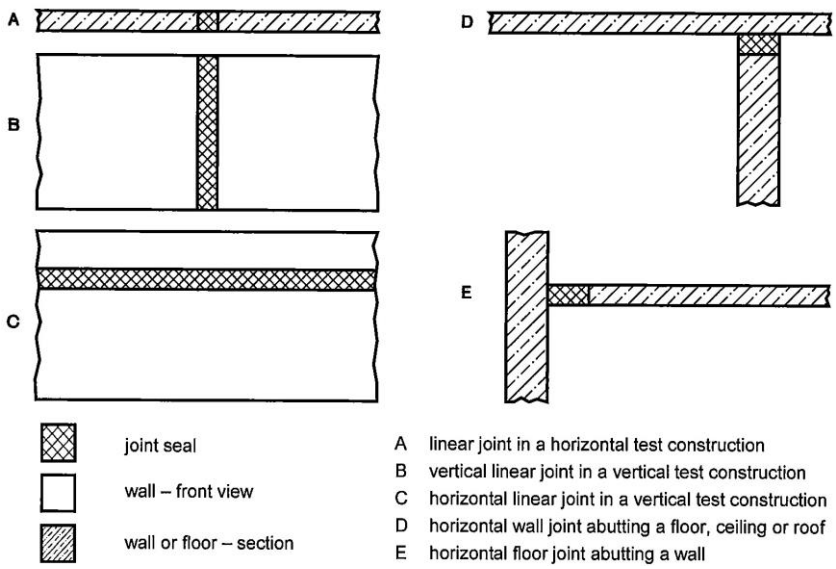
4.1 Field of application

The classification is valid for linear seals with unlimited length and the following end use conditions:

The test results are directly applicable to similar constructions where one or more changes in this field of application are made and the construction continues to comply with the appropriate design code for its stiffness and stability. Other changes are not permitted.

Seal orientation:

- The allowed orientation of the linear joint seals is listed in Table 1 in clause 13.1 in EN 1366-4:2021. The seals were tested in orientation Type A, allowing an application as Type A and Type C (see figure below).



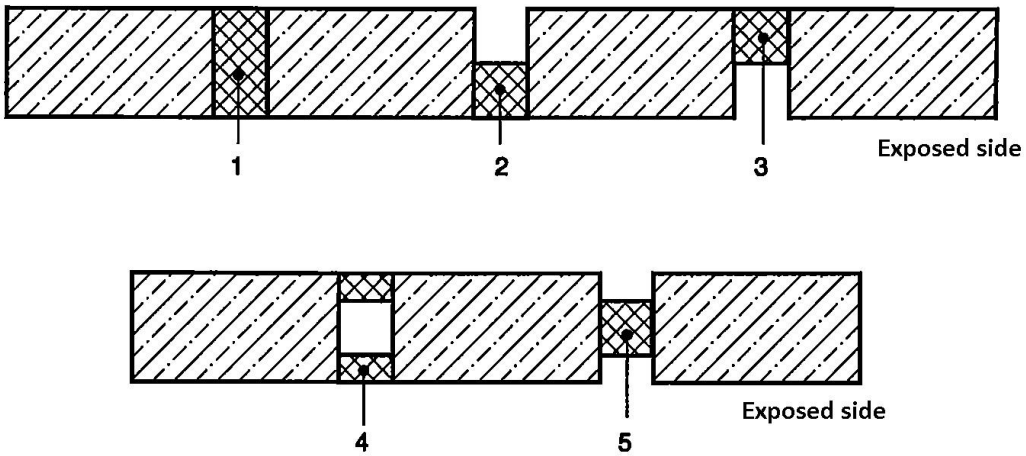
- The seals can be used in all lengths.
- The depth of the seal shall be minimum 150mm.

Supporting construction:

- Results obtained with lightweight concrete standard supporting construction apply to concrete, block work and masonry separating elements of a thickness of minimum 150mm and a density of 575 kg/m^3 or greater.

Position and movement:

- The test results are valid as tested only for position 4 (see figure).



- Up to 7.5% movement within the joint is allowed.

5. Limitations

This document does not represent type approval or certification of the element.

Danish Institute of Fire and Security Technology

Gustav Wallgren
B.Sc (Fire Eng.)

Jeanne B. Kirk
M.Sc. (Eng.)

Envirograf Europe ApS

Lyngvejen 7, Sædding

6900 Skjern

Denmark