DBI
FIRE AND SECURITY

CLASSIFICATION REPORT
Linear Joint Seals

Name of sponsor:	**SEWATEK OY**		
Product name:	INCA WFS Net®		
File no.:	PCA10819C	**Revision No:**	0
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TEST Reg.no.0012

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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

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.

Details of classified product

General

Producer of product: International Carbide Technology – INCA AB.

Distributor of product: Sewatek Oy.
The product was designated: INCA WFS Net® by Sewatek Oy.

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

Product description

The linear joint seals were 900 mm long and the seal depth was 95 mm with a supporting construction of timber with a thickness of 95 mm. The width of the linear joint seal varied between 25-45 mm. Two different aluminium meshes designated “TJB Aluminium Insektsnät” with a mesh size of 1.3 mm were fixed to the top of the supporting construction using staples. The mesh width before mounting was 65 or 85 mm depending on the seal width.
The bottom of the linear joint seal consisted of a wired steel mesh with intumescent coating designated INCA WFS Net® by SEWATEK. The wired steel mesh was formed like a top hat profile and fixed to the bottom of the studs using wood screws. The steel mesh with intumescent covered the bottom of the test specimen.

The details of the product are described in DBI test report PGA12128A.

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	Sewatek Oy	PGA12128A dated 2022-08-04	EN 1366-4:2021	2022-06-08

Test results

The test consisted of 4 different linear joint seals.

Two different types of sealants were used:

Test specimen A+B: INCA WFS Net®: D622-3440 – wired steel mesh with intumescent coating.
Test specimen C+D: INCA WFS NET®: D622-3480 – wired steel mesh with more intumescent coating than the D622-3440 variation.

DBI test report PGA12128 concerns 4 different seals described in detail in the test report.
The relevant details of the test and the results are listed below:

Test specimens in PGA12128A						Results	
no	Type and Orientation	Width x Depth [mm x mm]	Supporting construction	Backing material	Sealant Exp.	Integrity [min]	Insulation [min]
Specimen A	Deck	25 x 95	Timber Depth: 95 mm	TJB Aluminium Inseksnät	INCA WFS Net®: D622-3440	**61**	**57**
Specimen B	Deck	35 x 95	Timber Depth: 95 mm	TJB Aluminium Inseksnät	INCA WFS Net®: D622-3440	**61**	**55**
Specimen C	Deck	35 x 95	Timber Depth: 95 mm	TJB Aluminium Inseksnät	INCA WFS NET®: D622-3480	**61**	**54**
Specimen D	Deck	45 x 95	Timber Depth: 95 mm	TJB Aluminium Inseksnät	INCA WFS NET®: D622-3480	**61**	**50**

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 product is classified according to the following combinations of performance and classes as appropriate.

Test specimen:	Classes specified by letters indicating test conditions:
Specimen A+B	EI 45 / E 60 – H – X – F – W25 to W35
Specimen C+D	EI 45 / E 60 – H – X – F – W25 to W45

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
F: Type of splice: Field
W: Joint width range (in mm)

The classification is valid for fire resistance from the underside. The intumescent seal must be towards the exposed side.

Field of application

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

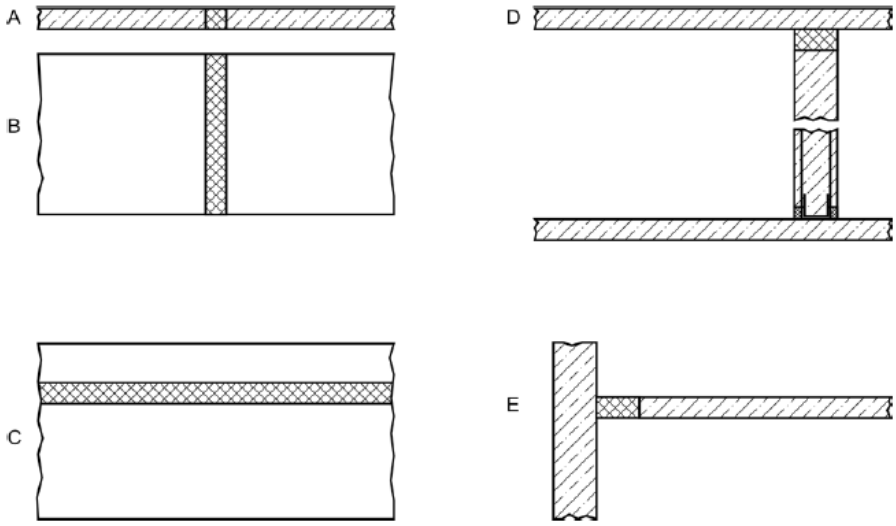
The test results are directly applicable to similar constructions where one or more changes in this field of application are made, and the construction continues to comply with the appropriate design code for its stiffness and stability. Other changes are not permitted.

The seal depth must be as tested or deeper.

The seal must be fixed to the supporting construction with the minimum fixing length tested.

Seal orientation:

- The allowed orientation of the linear joint seals are listed in table 2 in clause 13.1 of EN 1366-4:2021. The seals are tested as orientation type **A**, which allows for the application of orientations **A** and **C** (see figure below).



Key

	joint seal	A	linear joint in a horizontal test construction
	wall – front view	B	vertical linear joint in a vertical test construction
	wall or floor – section	C	horizontal linear joint in a vertical test construction
		D	horizontal wall joint abutting a floor, ceiling or roof (Top of Wall or Bottom of Wall)
		E	horizontal floor joint abutting a wall

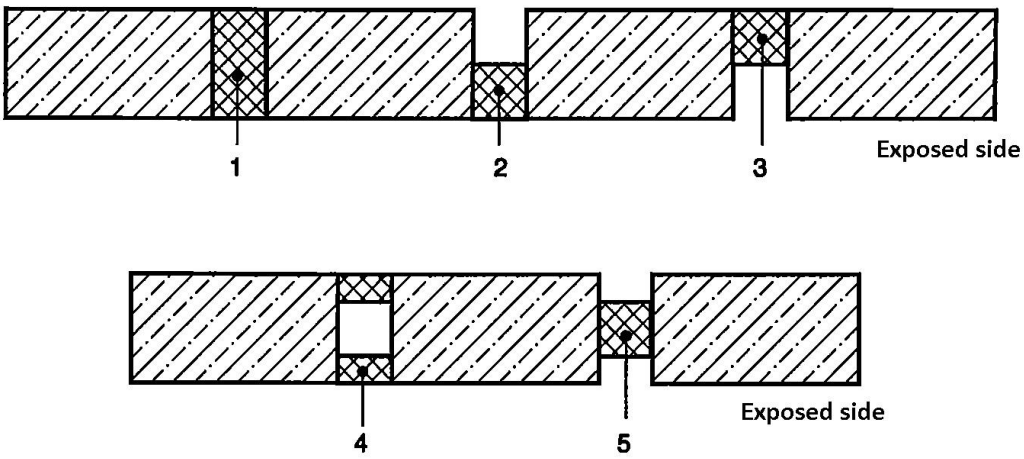
- The seals can be used in all lengths as long as the seals were tested with a minimum length of 900 mm as all the seals were in these tests.

Supporting construction:

- Results obtained with timber supporting construction apply to timber separating elements of a thickness and density equal to or greater than that tested. The minimum thickness and density of the timber should be 95mm and 439kg/m³.

Position and movement:

- The test results are valid for where the position of the coated mesh is placed in position 2, 3 and 5 (see figure below). In all cases the minimum distance between the aluminium mesh and coated mesh should be 50 mm.



The movement of the seal during a fire scenario shall be below 7.5%.

Limitations

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

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