

CERTIFICATE OF CONSTANCY OF PERFORMANCE

0809 - CPR - 20003435

In compliance with *Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011* (the Construction Products Regulation or CPR), this certificate applies to the construction product

Natural smoke and heat exhaust ventilators TIKLI SPT and SPTA

Motor operated, dual purpose, single lid, flat roof type ventilator for roof installations which is specified on pages 2 - 5

placed on the market under the name or trade mark of

Tikli Group Oy
Yhdystie 40
FI-62800 VIMPELI

and produced in the manufacturing plant

Tikli Group Oy
Puusepätie 3
FI-62800 VIMPELI.

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 12101-2:2003

under system 1 for the performances set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on August 18, 2020 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. The validity of the certificate may be confirmed at the web address www.sertifikaattihaku.fi.

Espoo May 31, 2023

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Manager, Certification and Inspection

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Product type	Tikli SPT Motor operated, dual purpose, single lid flat roof type ventilator for roof installations. Max. size of the hatch 1200 mm x 2600 mm Throat area: 1000 mm x 2400 mm Opening angle, max. ventilation opening 120°
Actuator	Multimat B23, 1500 N, 24-29 V, max 3.5 A. The ventilator actuating device
Characteristics	
Aerodynamic free area	$C_v = ** 1)$
Reliability	RE 1000
Snow load	SL 500
Low ambient temperature	T (00)
Wind load	WL 1500
Resistance to heat	B 600
Reaction to fire of the components	A2-s1,d0

1) $A_a = C_v \cdot A_v$ - Aerodynamic free area in the fire position is calculated according to the instructions based on C_v values stated in ITT test reports. A_a is stated in the declaration of performance.

** Below measured aerodynamic free areas.

NSHEV Tikli SPT C_v -value without wind deflector		upstand 300 mm	upstand 700 mm	upstand 1100 mm	upstand 1216 mm
L	W	C_v -value	C_v -value	C_v -value	C_v -value
(mm)	(mm)	(--)	(--)	(--)	(--)
1000	1000	0,36	0,54	0,77	0,78
1000	1200	0,24	0,48	0,76	0,77
1000	1600	0,12	0,38	0,66	0,70
1000	1800	--	0,33	0,61	0,67
1000	2000	--	0,28	0,56	0,64
1000	2400	--	0,27	0,55	0,63

NSHEV Tikli SPT C_v -value with wind deflector		upstand 300 mm		upstand 700 mm		upstand 1100 mm		upstand 1216 mm	
L	W	C_v - value	height wind deflector	C_v - value	height wind deflector	C_v - value	height wind deflector	C_v - value	height wind deflector
(mm)	(mm)	(--)	(mm)	(--)	(mm)	(--)	(mm)	(--)	(mm)
1000	1000	0,67	100	0,72	100	0,77	--	0,78	--
1000	1200	0,66	150	0,71	150	0,76	--	0,77	--
1000	1600	0,65	200	0,70	150	0,75	100	0,76	75
1000	1800	0,65	200	0,70	150	0,75	100	0,76	75

1000	2000	0,65	200	0,70	150	0,75	100	0,76	75
1000	2400	0,64	200	0,69	150	0,74	100	0,75	75

The C_v -value shall be reduced when using burglar bars by the following factor:

Dimensions of Tikli SPT NSHEV	Reduction in %
1000 x 1000	4
1200 x 1000	4
1600 x 1000	3
1800 x 1000	3
2000 x 1000	2
2400 x 1000	2

Product type	Tikli SPTA Motor operated, dual purpose, single lid flat roof type ventilator for roof installations. Max. size of the hatch 1200 mm x 2400 mm Footing of the hatch made of sandwich panels ² , height between 400 mm – 1200 mm Opening angle, max. ventilation opening 160°
Actuator	Actulux SA Power Single BA 90 cm - 120 cm. The ventilator actuating device
Characteristics	
Aerodynamic free area	$C_v = ** 1)$
Reliability	RE 1000
Snow load	SL 500
Low ambient temperature	T (-15)
Wind load	WL 1500
Resistance to heat	B 600
Reaction to fire of the components	B-s1,d0

1) $A_a = C_v * A_v$ - Aerodynamic free area in the fire position is calculated according to the instructions based on C_v values stated in ITT test reports. A_a is stated in the declaration of performance.

2) Panels:

- Kingspan KS1200 NC (IPN) panel, upstand 80 mm and flap 100 mm
- Kingspan KS1000/1100/1200 NC (QuardCore), upstand 80 mm and flap 100 mm
- Ruukki Constructions SP2B F-PIR panel, upstand 80 mm and flap 100 mm
- IzoWall PIR/PIR+, upstand 80 mm and flap 100 mm

Below measured aerodynamic free areas for NSHEV Tikli SPTA.

Opening angle 160° and Upstand height 400 mm

NSHEV Tikli SPTA C _v -value without wind deflector	Width W (mm)					
L (mm)	900	1000	1200	1600	2000	2400
900	0,62	0,62	0,62	0,63	0,63	0,64
1000		0,62	0,62	0,62	0,63	0,63
1100			0,62	0,62	0,62	0,63
1200			0,62	0,62	0,62	0,62

Below measured aerodynamic free areas for NSHEV Tikli SPTA.

Opening angle 160° and Upstand height 800 mm

NSHEV Tikli SPTA C _v -value without wind deflector	Width W (mm)					
L (mm)	900	1000	1200	1600	2000	2400
900	0,65	0,65	0,66	0,67	0,68	0,69
1000		0,66	0,66	0,67	0,67	0,68
1100			0,66	0,67	0,67	0,67
1200			0,67	0,67	0,67	0,67

Below measured aerodynamic free areas for NSHEV Tikli SPTA.

Opening angle 160° and Upstand height 1200 mm

NSHEV Tikli SPTA C _v -value without wind deflector	Width W (mm)					
L (mm)	900	1000	1200	1600	2000	2400
900	0,68	0,68	0,69	0,71	0,72	0,74
1000		0,69	0,70	0,71	0,72	0,73
1100			0,71	0,71	0,72	0,72
1200			0,72	0,72	0,71	0,71

Reduction when using burglar bars

Reduction in %	Width W (mm)					
L (mm)	900	1000	1200	1600	2000	2400
900	3	4	4	3	3	2
1000		4	4	3	3	2
1100			4	3	3	2
1200			4	3	3	2