

## NATIONAL DECLARATION OF PERFORMANCE

No. 27/2022



1. Name and trade name of the construction product: **Two-layer flexible air ducts without microbiological protection made of HDPE.**
2. Marking and type of the construction product: DN duct size: 50, 63, 75, 90, 110, 160, 200 mm
3. Intended use or uses: The ducts are used to transmit air in forced ventilation systems in residential and industrial buildings and for underground installation. Pipes with diameters of DN 160 and 200 should not be laid directly under driveways, roads, or buildings.
4. Manufacturer's name and address: Nest s.r.o.  
Záborské 431  
082 53 Záborské  
Slovakia
5. National system for the assessment and verification of the constancy of performance: System 4 (the participation of an accredited certification body is not required).
6. National technical specification: **EN 17192** "Ventilation for buildings - Ductwork - Non-metallic ductwork - Requirements and test methods"  
**EN 61386-24** "Conduit systems for cable management - Part 24: Particular requirements - Conduit systems buried underground."  
**EN 13501-1** „Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests.  
**EN ISO 846** "Plastics — Evaluation of the action of microorganisms"  
**ISO 22196** "Measurement of antibacterial activity on plastics and other non-porous surfaces"

7. Declared performance of the construction product:

Parameter:	Performance:	Remarks
Dimensions	Diameters: DN: from 50 to 200 mm including dimensional tolerances according to <b>EN 61386-24</b>  Minimum bending radius 3 x DN [mm] according to <b>EN 13180</b>	
Mechanical connection - class	MC0 Without a specially designed gasket / without a specially designed fastening	
Air tightness – class Operating pressure range	ATC2 -750 Pa - +2000 Pa	
Operating temperature	STL -15°C to STH +50°C	

Parameter:	Performance:	Remarks
Compression strength	500 N	
Thermal tolerance (thermal conductivity)	25.2 W/K/mb	
Microbiological resistance	No resistance	
Reaction to fire class	D-s2,d2	
Pressure drop	Table below	

Volumetric air flow rate	Unit pressure drop	Air velocity	Pressure drop coefficient over the length A
m <sup>3</sup> /h	Pa/m	m/s	-
10	0.41	0.97	0.040
15	0.46	1.45	0.038
20	0.87	1.94	0.036
25	1.42	2.42	0.035
30	2.13	2.91	0.032
35	2.99	3.39	0.030
40	4.01	3.88	0.028
45	5.20	4.36	0.026
50	6.56	4.85	0.023
55	8.09	5.33	0.021
60	9.80	5.82	0.020
80	18.47	7.76	0.019
100	30.20	9.69	0.019
120	45.13	11.63	0.018
140	63.38	13.57	0.018
160	85.06	15.51	0.018



8. The performance characteristics of the product referred to above are in accordance with those set out in point 7. This National Declaration of Performance has been issued pursuant to the Act of 16 April 2004 on Construction Products under the sole responsibility of the manufacturer.

*14/03/2022 Prešov*

place and date of issue

*Quality Department Manager  
Ing. Anton Haško*

  
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full name and signature of the authorised person