

CERTIFICATE OF CONSTANCY OF PERFORMANCE

LGAI Technological Center, S.A. (APPLUS)
Notified Body Nr. 0370

No. **0370-CPR-2827**

In compliance with Regulation (EU) Nr.305/2011 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:

SMOKE AND HEAT CONTROL SYSTEMS. SMOKE DUCT SECTIONS

PRODUCT: **STEEL RECTANGULAR SINGLE COMPARTMENT SMOKE CONTROL SYSTEM DUCT**

Placed on the market under the name of:

LINDAB VENTILATION AB

GREVIE, 26982 BASTAD (SWEDEN)

And produced in the manufacturing plant:

FACTORY: 23/32304551

LINDAB S.R.L. - Via Verga 82, 10036 Settimo Torinese – Torino (Italy)

LINDAB KFT. - Állomás u.1/A, 2051 Biatorbágy (Hungary)

LINDAB S.R.O. - Na Hůrce 1081/6, 16100 Prague 6-Ruzyně (Czech Republic)

LINDAB AS - SAHA-LOO TEE 4 - Iru küla, 74206 Jõelähtme vald, Harjumaa (Estonia)

OY LINDAB AB - Kankitie 3, 40320 Jyväskylä (Finland)

LINDAB S.R.L. - Soseaua de Centura nr.8, Stefanestii de Jos, Ilfov 077175 Romania

LINDAB A/S - Langkaer 20 / 6100 Haderslev (Denmark)

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

EN 12101-7:2011

under system 1 for the performance 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 29th September 2017 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. It is confirmed and modified on 28th July 2023.

The monitoring assessment will be done before 30th June 2024

Bellaterra, 28th July 2023


LGAI Technological Center, S.A.

Xavier Ruiz Peña
Managing Director, Product Conformity B.U.



This document is not valid without its technical annex; whose number coincides with that of the certificate.

You can check the validity of this certificate on our website: www.appluslaboratories.com/certified_products

The manufacturer, after the completion of the conformity assessment procedures and the declaration of performance, may affix the CE Marking under his responsibility

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Annex according to **EN 12101-7:2011**

SMOKE AND HEAT CONTROL SYSTEMS. PART 7: SMOKE DUCT SECTIONS

CERTIFIED PERFORMANCE

Essential characteristics	Clauses in this European standard	Mandated level(s) or class(es)
Fire resistance. Multi-compartment	4.1.1.	NA
Integrity	a)	NA
Insulation	b)	NA
Smoke leakage	c)	NA
Mechanical stability	d)	NA
Maintenance of cross-section (under E)	e)	NA
Fire resistance. Single compartment	4.1.2.	PASS
Integrity	a)	E ₆₀₀ 120 (ho) S 1500 Single
Smoke leakage	b)	E ₆₀₀ 120 (ho) S 1500 Single
Mechanical stability	c)	E ₆₀₀ 120 (ho) S 1500 Single
Maintenance of cross-section (under E)	d)	E ₆₀₀ 120 (ho) S 1500 Single

PASS; NPD = No Performance Determined; NA = Not Applicable

*not applicable for sizes >1250x1000mm and ≤1900x1700mm

PRODUCT

Main technical specification with details described in the fabrication master and installation manual of the manufacturer:

- Rectangular hot-dip galvanized steel smoke extraction duct exposed in 4 faces
- Duct tested in horizontal position up to 1900x1700mm
- Leakage in accordance to EN 1507:2007.
- Minimum thickness 0,8mm up to 1250x1000 and 1,0mm for upper size up to 1900x1700mm
- Maximum length of individual parts of the duct is 1500mm
- Elements are connected by slip-in RJFP flange spot-welded or by self-tapping screws (4,2x13mm) or steel blind rivets (4x10mm) every 150mm and joined with C-clamps RJBC every 250mm and M8 screw and nuts on the corners
- Element must be sealed along the flanges, corners and internal folding with SOUDAL FIRECRYL FR, or EPPLE 37 (EPPLE CHEMIE) or OTTOSEAL S94 (OTTO CHEMIE)
- Connection flange-to-flange must be sealed with ceramic gasket 25x3mm or with SOUDAL FIRECRYL FR, or EPPLE 37 (EPPLE CHEMIE) or OTTOSEAL S94 (OTTO CHEMIE)
- Elements with side longer than 500mm and up to 1250x1000mm size have internal stiffeners made by threaded rods M10, washer and, depending on the longer side of the duct, steel pipe.

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- Elements with size bigger than 1250x1000 and up to 1900x1700 have internal stiffeners as smaller size and also external stiffeners consisting in L-profile joined to the element with self-tapping screw and fixed together with M8 bolt and nuts
- Suspension spacing between the hangers is 1500mm
- With one side of the duct longer than 1000m and the circumference longer than 3600mm must use M10 threaded rods. In all other cases it must use M8 threaded rods.
- Suspension for elements up to 1250x1000m are C-cannel 41x21x1,6mm, for bigger size up to 1900x1700 are C-channel 41x41x2,5mm
- Compensator LCRSS included in the system - FR-029-14- AUNE, FR-142-14-AUNE, EFR-16-H-001517
- DUROFLEX compensator type "EVS-600 HO ISO EN12107-7/EN- 1366-9" assessment report 18-18017-1782

Accessories tested together with the smoke control system:

- Grilles (Lindab RGS/GRS) – FR-029-14- AUNE
- Rectangular silencers with baffles (Lindab SLRS) – FR-029-14- AUNE
- DUROFLEX compensator type "EVS-600 HO ISO EN12107-7/EN- 1366-9"
- Circular inspection opening (Lindab KCU) and rectangular inspection opening (Lindab IPLSS) - EFR-16-H-001517
- Multiblade regulating damper (Lindab DLTSS) – EFR-16-H-001517
- Threaded insert M12 (type Bollhoff) – EFR-16-H-001517
- Smoke duct horizontal classification according to EN 13501-4
- Additionally, in tests FR-142-14- AUNE, the vertical position is evaluated to complete the technical file of the product and all installation possibilities.

Classification:

(1250x1000mm)	E ₆₀₀ 120 (ho) S 1500 single
(>1250x1000mm ≤1900x1700mm)	E ₆₀₀ 120 (ho) S 1500 single

The certified range's complete data sheet is detailed in the technical file and test report FR-029-14- AUNE, EFR-16-H-001517 and the classification reports CR-111-14-AUPE, EFR-16-001517-Version 1.