



Notified Body nr. 0370

CERTIFICATE



No.

0370-CPR-2537

CERTIFICATE OF CONSTANCY OF PERFORMANCE

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:

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

MODEL: **HFS-CE-SID (RECT) - E 120**

Produced by:

HARGREAVES DUCTWORK, LTD.

LORD STREET, BURY, LANCASHIRE BL9 0RG, ENGLAND

And produced in the manufacturing plant:

HARGREAVES DUCTWORK, LTD.

LORD STREET, BURY, LANCASHIRE BL9 0RG, ENGLAND

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

EN 12101-7:2011

under system 1 are applied and that **the product fulfils all the prescribed requirements set out above.**

This certificate was first issued on 29th July 2016 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly. It is confirmed on 21st July 2017.

The monitoring assessment will be done before June 2018

Bellaterra, 21st July 2017

 Applus⁺

LGAI Technological Center, S.A.
Jordi Brufau Redondo
General Manager

 Applus⁺

LGAI Technological Center, S.A.
Xavier Ruiz Peña
Product Conformity B.U., Managing Director



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

TECHNICAL ANNEX 0370-CPR-2537

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PRODUCT

- GMS steel sheet, rectangular, multi compartment smoke extraction duct with 4 sides exposed.
- Duct tested in horizontal (EN 1366-1 & EN 1366-8) and vertical position (EN 1366-1).
- Rectangular range dimensions up to 1250x1000 mm. and thickness 1 mm.
- Pittsburgh longitudinal joint.
- Suspension devices shall be made of steel and be sized such that the calculated stresses do not exceed:
 - 6 N/mm² for tensile stress in all vertically orientated components.
 - 10 N/mm² for Shearing stress in screws of property class 4.6 according to EN 20898-1.
- Fixing between sections by means of a rolled steel angle "RSA30" of 30x30x5 mm bolted with M10 bolts (one at each corner and three evenly distributed on each long side).
- Flange gaskets "Kerafix 2000" by FSi made by ceramic fibres of dimensions 15 x 6 mm are placed all around the perimeter of the flanges.
- Seam sealant references "A48 FR" by Apollo.
- L-shaped stiffeners SS30 RSA of 30x30x5 mm.
- Duct is directly supported on an auxiliary structure formed by L-shaped profiles of 50x50x6 mm with M12 threaded rods. These threaded rods subject themselves directly to the closing slab of the furnace.
- Sealing of the fire stopping section was done with:
 - Panel reference "Stopseal Fire Batt" by FSi composed by stone fibre core coated on both sides with "PS Coating". Density of the panel is 140 kg/m³
 - Acrylic coating reference "PS Coating" by FSi to all cut edges
 - Acrylic emulsion reference "Pyrocoustic Sealant" by FSi
 - "Insulfrax S" by Unifrax of 128 kg/m³ and 25 mm in thickness.
- Maximum distance between hangers: 1500 mm.
- Maximum distance between hangers and joints: 125 mm.
- Distance between the outer vertical surface of the duct and the centre line of the suspension device: 50 mm.
- Classification:

E 120 (ve ho) S 1000 multi

Complete technical details of the certified product are available in the technical file and in the test report 15/8449-1119 Part 1 & Part 2.

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ESSENTIAL CHARACTERISTICS	REQUIREMENTS CLAUSES EUROPEAN STANDARD	MANDATED LEVELS OR CLASSES
Fire resistance. Multi-compartment	4.1.1.	E 120(ve ho) S 1000 MULTI
Integrity	a)	E 120(ve ho) S 1000 MULTI
Insulation	b)	NA
Smoke leakage	c)	E 120(ve ho) S 1000 MULTI
Mechanical stability	d)	E 120(ve ho) S 1000 MULTI
Maintenance of cross-section (under E)	e)	E 120(ve ho) S 1000 MULTI
Fire resistance. Single compartment	4.1.2.	NA
Integrity	a)	NA
Smoke leakage	b)	NA
Mechanical stability	c)	NA
Maintenance of cross-section (under E)	d)	NA

PASS; NPД = No Performance Determined, NA = Not Apply

