

LPCB Red Book



Part: 3

Smoke and fire ventilation systems

bre

Introduction

BRE Global Ltd, based in the UK near London, is an independent third party organisation offering certification of fire, security and sustainability products and services to an international market. LPCB is the certification brand used for fire and security products and services. The LPCB mark is accepted worldwide. We have representative offices in China, India and Dubai. We are owned by the BRE Trust, a not-for-profit organisation. LPCB listings can be accessed, free of charge, at www.redbooklive.com. BRE Global additionally carries out: - Fire Investigation - Fire Risk Assessment - Fire Safety Engineering - Research - Training

Part 3

*Smoke and fire ventilation
systems*

SMOKE AND FIRE VENTILATION SYSTEMS

INTRODUCTION

Fire ventilation systems are installed to:

- Keep escape and access routes free from smoke.
- Facilitate fire fighting operations by creating a smoke free layer.
- Delay and/or prevent flashover and the subsequent full development of the fire.
- Protect equipment, furnishings, contents, etc.
- Reduce the thermal effects on structural components during a fire.
- Reduce damage caused by thermal decomposition of products and hot gases.

The key components of smoke and fire ventilation systems, i.e. fire dampers, ductwork, smoke curtains and powered smoke and heat exhaust ventilation fans, are listed in this section.

Their functions are:

Fire dampers:

- To maintain compartmentation where air distribution ducts pass through compartment walls and floors.

LPCB approves fire dampers to LPS 1162: *Requirements for the approval of fire dampers*.

Fire resistant ductwork:

- To maintain compartmentation when air distribution ducts pass through compartment walls and floors and where fire resisting dampers are not used to provide the compartmentation.
- To achieve the same fire resistance in terms of integrity and, if required, insulation as required for the compartment walls or floors.

LPCB approves fire resistant ductwork to BS 476: Part 24 *Fire tests on building materials and structures: Method for determination of the fire resistance of ventilation ducts and/or EN 1366 Part 1 Fire resistance tests for service installations Ducts*.

Smoke Extraction Ducts

The purpose of smoke duct systems are for the prevention of transmission of smoke and combustion products from a fire zone, smoke control duct sections are utilised to contain the spillage of otherwise harmful and toxic extinguishing gases from the affected area, and for the control of pressurising and excess air relief within pressurisation systems.

Smoke control ducts are commonly used in smoke and heat control systems. They may serve single

compartments or a number of different fire compartments. The systems may be dedicated smoke extraction or possibly a combined environmental ventilation/smoke extraction.

LPCB approves Smoke Extraction Ducts to EN 1366 Part 8 or EN 1366-9 *Fire resistance tests for service installations. Single compartment smoke extraction ducts*

Smoke curtains:

- To create a smoke reservoir by containing and limiting the travel of smoke.
- To channel smoke in a predetermined direction.
- To prevent or retard smoke entry to another area or void.

LPCB approves Smoke curtains to LPS 1182: *Requirements for the approval of fixed fabric smoke curtains, fixed metal smoke curtains and powered smoke curtains*.

Powered smoke and heat exhaust ventilation fans:

- To channel heat and smoke in a predetermined direction.
- To prevent smoke logging of the protected space.

Powered smoke and heat exhaust ventilation fans are approved in accordance with EN 12101-3 *Smoke and heat control systems. Part 3 Specification for powered smoke and heat exhaust ventilation*.

SMOKE AND FIRE VENTILATION SYSTEMS

Grease filters used in commercial kitchen extract systems:

- To reduce flammable and volatile grease droplets from the cooking exhaust of commercial cooking equipment.

LPCB categorises and approves grease filters in accordance with the requirements of LPS 1263:

Requirements for the approval and listing of the fire performance of grease filters used in commercial kitchen extract systems.

TABLE OF CONTENTS

Fire dampers	2
Fire resistant ducts V2	3
Grease filters used in commercial kitchen extract systems	16
Powered smoke and heat exhaust ventilation	17
Smoke curtains	19
Smoke extraction ducts	20

FIRE DAMPERS

Fire dampers are installed:

- - To maintain compartmentation where air distribution ducts pass through compartment walls and floors.
- To achieve the same fire resistance in terms of integrity as required for compartment walls or floors.
- To close completely as soon as a fire is detected.

All the fire resistant dampers listed in Section 1 of this part of the list have been tested and assessed against the requirements of LPS 1162 *Requirements and tests for the LPCB approval of fire dampers*.

FIRE RESISTANT DUCTS V2

Fire resistant ductwork is installed:

- To maintain compartmentation when air distribution ducts pass through compartment walls and floors where fire resisting dampers are not used to provide the compartmentation
- To achieve the same fire resistance in terms of integrity, and if required insulation, as required for the compartment walls or floors.

All the fire resistant ducts listed in here have been tested and assessed against the requirements of BS 476:Part 24 *Fire tests on building materials and structures: Method for determination of the fire resistance of ventilation ducts* and/or EN 1366 Part 1 *Fire resistance tests for service installations Ducts*.

Certification is limited to the applications and fire resistances given.

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Certificate No: 1506a to BS 476 Part 24

Flameshield

Product Name	Duct Type	Condition	Type of Insulation-mineral wool reference	Insulation Thickness (mm)	Fire Resistance (integrity/stability)	Fire Resistance Insulation	LPCB Ref. No.
Flameshield	Ventilation	Fire inside	None	-	240	-	1506a/03
Flameshield	Smoke outlet	Fire inside	None	-	240	-	1506a/03
Flameshield	Kitchen extract	Fire inside	None	-	240	-	1506a/03
Flameshield	Ventilation	Fire outside	None	-	120	-	1506a/03
Flameshield	Smoke outlet	Fire outside	None	-	120	-	1506a/03
Flameshield	Kitchen extract	Fire outside	None	-	120	-	1506a/03
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	45	120	30	1506a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	60	1506a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	90	1506a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1506a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	240	120	1506a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1506a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	30	1506a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	60	1506a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1506a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	90	1506a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1506a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	90	120	120	1506a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1506a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	45	120	30	1506a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	60	1506a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	90	1506a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1506a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	120	1506a/04
Flameshield	Smoke	Fire	Rockwool FirePro Duct Slab	90	120	120	1506a/04

FIRE RESISTANT DUCTS V2

	outlet	inside					
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	30	1506a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	60	1506a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1506a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	90	1506a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1506a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	90	120	120	1506a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1506a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	45	120	30	1506a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	40	120	30	1506a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	90	120	60	1506a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	90	120	60	1506a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	45	120	30	1506a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	40	120	30	1506a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	90	120	60	1506a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	90	120	60	1506a/04

Certificate No: 1506b to EN 1366-1

FlameshieldEN

Product Name	Duct shape / Max size (w x h) (mm)	Supporting construction	Duct type	Classification Ref	Classification (EN 13501-3)	LPCB Ref. No.
Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1506b/01
Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct B	P104441-1002C/1	E 60 (ve i → o)	1506b/01
Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002B/1	E 60 (ho o → i) S	1506b/01
Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct A	P104441-1002D/1	E 60 (ve o → i) S	1506b/01
Galvanised steel / 0.8mm – thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002E/1	E 60 (ho i → o)	1506b/01
Galvanised steel / 1.2mm – thick	Circular (1)	Flexible wall	Duct A	P104441-1002G/1	E 60 (ho o → i) S	1506b/01
Galvanised steel / 1.2mm – thick	Circular (1)	Concrete floor	Duct B	P104441-1002H/1	E 60 (ve i → o)	1506b/01
Galvanised steel / 1.2mm – thick	Circular (1)	Flexible wall	Duct B	P104441-1002F/1	E 60 (ho i → o)	1506b/01
Galvanised steel / 1.2mm – thick	Circular (1)	Concrete floor	Duct A	P104441-1002I/1	E 60 (ve o → i) S	1506b/01
Galvanised steel / 1.2mm – thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002J/1	EI 20 (ho i → o)	1506b/01
Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002L/1	EI 60 (ho i → o)	1506b/01
Galvanised steel / 1.2mm – thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002M/1	EI 90 (ho i → o)	1506b/01
Galvanised steel / 1.0mm – thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002K/1	EI 45 (ho i → o)	1506b/01
Galvanised steel / 1.2mm – thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002N/1	EI 120 (ho i → o)	1506b/01
Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002O/1	EI 120 (ho o → i) S	1506b/01
Galvanised steel / 1.2mm - thick	Rectangular 1800 x 1000	Flexible or rigid wall	Duct B	13-H-131440	EI 120 (ho i → o)	1506b/01
Galvanised steel / 1.2mm - thick	Rectangular 2500 x 1250	Rigid wall	Duct B	13-H-131459	EI 120 (ho i → o)	1506b/01
Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Duct A	EFR-16-001724	EI 120 (ho o → i)	1506b/01
Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Kitchen Extract	EFR-16-001724	EI 30 (ho o → i)	1506b/01
Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Duct A	EFR-16-001727	EI 120 (ho o → i) S	1506b/01
Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Kitchen Extract	EFR-16-001727	EI 30 (ho o → i) S	1506b/01

FIRE RESISTANT DUCTS V2

Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct A	EFR-16-002671	EI 120 (ho o → i) S	1506b/01
Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Kitchen Extract	EFR-16-002671	EI 20 (ho o → i) S	1506b/01

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Certificate No: 1713a to BS 476: Part 24

Flameshield

Product Name	Duct Type	Condition	Type of Insulation-mineral wool reference	Insulation Thickness (mm)	Fire Resistance (integrity/stability)	Fire Resistance Insulation	LPCB Ref. No.
Flameshield	Ventilation	Fire inside	None	-	240	-	1713a/03
Flameshield	Smoke outlet	Fire inside	None	-	240	-	1713a/03
Flameshield	Kitchen extract	Fire inside	None	-	240	-	1713a/03
Flameshield	Ventilation	Fire outside	None	-	120	-	1713a/03
Flameshield	Smoke outlet	Fire outside	None	-	120	-	1713a/03
Flameshield	Kitchen extract	Fire outside	None	-	120	-	1713a/03
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	45	120	30	1713a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	60	1713a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	90	1713a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1713a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	240*	120	1713a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1713a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	30	1713a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	60	1713a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1713a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	90	1713a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1713a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	90	120	120	1713a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1713a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	45	120	30	1713a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	60	1713a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	90	1713a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1713a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	120	1713a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1713a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	30	1713a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	60	1713a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1713a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	90	1713a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1713a/04

FIRE RESISTANT DUCTS V2

Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	90	120	120	1713a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1713a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	45	120	30	1713a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	40	120	30	1713a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	90	120	60	1713a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	90	120	60	1713a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	45	120	30	1713a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	40	120	30	1713a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	90	120	60	1713a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	90	120	60	1713a/04

Certificate No: 1713b to SD198 (Appendix B12) / EN 1366-1

FlameshieldEN

Product Name	Steel type / gauge	Duct type / Max size (w x h) (mm)	Supporting construction	Duct type	Classification Ref.	Classification (EN 13501-3)	LPCB Ref. No.
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002B/1	E 60 (ho o → i) S	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct B	P104441-1002C/1	E 60 (ve i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct A	P104441-1002D/1	E 60 (ve o → i) S	1713b/01
FlameshieldEN	Galvanised steel / 0.8mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002E/1	E 60 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct B	P104441-1002F/1	E 60 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct A	P104441-1002G/1	E 60 (ho o → i) S	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct B	P104441-1002H/1	E 60 (ve i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct A	P104441-1002I/1	E 60 (ve o → i) S	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002J/1	EI 20 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002K/1	EI 45 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002L/1	EI 60 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002M/1	EI 90 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002N/1	EI 120 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002O/1	EI 120 (ho o → i) S	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1800 x 1000	Flexible or rigid wall	Duct B	13-H-131440	EI 120 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 2500 x 1250	Rigid wall	Duct B	13-H-131459	EI 120 (ho i → o)	1713b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001724	EI 120 (ho o → i) EI 30 (ho o → i)	1713b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001727	EI 120 (ho o → i) S EI 30 (ho o → i) S	1713b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-002671	EI 120 (ho o → i) S EI 20 (ho o → i) S	1713b/01

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Certificate No: 1732a to BS 476 Part 24

FIRE RESISTANT DUCTS V2

Flameshield

Product Name	Duct Type	Condition	Type of Insulation-mineral wool reference	Insulation Thickness (mm)	Fire Resistance (integrity/stability)	Fire Resistance Insulation	LPCB Ref. No.
Flameshield	Ventilation	Fire inside	None	-	240	-	1732a/03
Flameshield	Smoke outlet	Fire inside	None	-	240	-	1732a/03
Flameshield	Kitchen extract	Fire inside	None	-	240	-	1732a/03
Flameshield	Ventilation	Fire outside	None	-	120	-	1732a/03
Flameshield	Smoke outlet	Fire outside	None	-	120	-	1732a/03
Flameshield	Kitchen extract	Fire outside	None	-	120	-	1732a/03
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	45	120	30	1732a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	60	1732a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	90	1732a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1732a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	240*	120	1732a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1732a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	30	1732a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	60	1732a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1732a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	90	1732a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1732a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	90	120	120	1732a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1732a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	45	120	30	1732a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	60	1732a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	90	1732a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1732a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	120	1732a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1732a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	30	1732a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	60	1732a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1732a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	90	1732a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1732a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	90	120	120	1732a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1732a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	45	120	30	1732a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	40	120	30	1732a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	90	120	60	1732a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	90	120	60	1732a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	45	120	30	1732a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	40	120	30	1732a/04
Flameshield	Kitchen	Fire	Knauf Firetek BD917	90	120	60	1732a/04

FIRE RESISTANT DUCTS V2

	extract	outside					
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	90	120	60	1732a/04

Certificate No: 1732b to SD198 (Appendix B12)/EN 1366-1

FlameshieldEN

Product Name	Steel type / gauge	Duct shape / Max size (w x h)(mm)	Supporting construction	Duct type	Classification Ref.	Classification(EN 13501-3)	LPCB Ref. No.
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002B/1	E 60 (ho o → i) S	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct A	P104441-1002D/1	E 60 (ve o → i) S	1732b/01
FlameshieldEN	Galvanised steel / 0.8mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002E/1	E 60 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct B	P104441-1002F/1	E 60 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct A	P104441-1002G/1	E 60 (ho o → i) S	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct B	P104441-1002H/1	E 60 (ve i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct A	P104441-1002I/1	E 60 (ve o → i) S	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002J/1	EI 20 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002K/1	EI 45 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002L/1	EI 60 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002M/1	EI 90 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002N/1	EI 120 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002O/1	EI 120 (ho o → i) S	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1800 x 1000	Flexible or rigid wall	Duct B	13-H-131440	EI 120 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 2500 x 1250	Rigid wall	Duct B	13-H-131459	EI 120 (ho i → o)	1732b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001724	EI 120 (ho o → i) EI 30 (ho o → i)	1732b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001727	EI 120 (ho o → i) S EI 30 (ho o → i) S	1732b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-002671	EI 120 (ho o → i) S EI 20 (ho o → i) S	1732b/01

Fenland Fire Contracts Limited

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Certificate No: 1176a to BS 476: Part 24

Fenland Fire Rated Ductwork

Product Name	Duct Tape	Condition	Type / Density of Insulation	Insulation Thickness (mm)	Fire Resistance (integrity / stability)	Fire Resistance (insulation)	LPCB Ref. No.
Fenland Fire Rated Ductwork	Ventilation, Smoke extract, Kitchen extract	Fire outside	None	-	240	-	1176a/01
Fenland Fire Rated Ductwork	Ventilation, Smoke extract, Kitchen extract	Fire inside and outside	None	-	240	-	1176a/01
Fenland Fire Rated Ductwork	Ventilation, Smoke extract, Kitchen extract	Fire outside	None	-	120	-	1176a/01
Fenland Fire Rated Ductwork	Ventilation, Smoke extract, Kitchen extract	Fire inside and outside	None	-	120	-	1176a/01
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire outside	Stone mineral/wool/160kg/m3	30	120	30	1176a/02
Fenland Fire	Ventilation, Smoke extract	Fire outside	Stone	40	120	60	1176a/02

25 Apr 2025

Page 8 of 21

FIRE RESISTANT DUCTS V2

Rated Ductwork			mineral/wool/160kg/m3				
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire outside	Stone mineral/wool/160kg/m3	45	120	90	1176a/02
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire outside	Stone mineral/wool/160kg/m3	50	120	120	1176a/02
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire inside and outside	Stone mineral/wool/160kg/m3	40	120	30	1176a/02
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire inside and outside	Stone mineral/wool/160kg/m3	55	120	60	1176a/02
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire inside and outside	Stone mineral/wool/160kg/m3	70	120	90	1176a/02
Fenland Fire Rated Ductwork	Ventilation, Smoke extract	Fire inside and outside	Stone mineral/wool/160kg/m3	90	120	120	1176a/02
Fenland Fire Rated Ductwork	Kitchen extract	Fire outside	Stone mineral/wool/160kg/m3	45	120	30	1176a/02
Fenland Fire Rated Ductwork	Kitchen extract	Fire outside	Stone mineral/wool/160kg/m3	90	120	60	1176a/02
Fenland Fire Rated Ductwork	Kitchen extract	Fire outside	Stone mineral/wool/160kg/m3	135 (3x45)	120	90	1176a/02

Firetrace Ductwork Limited

19 Marshall Road, Eastbourne, Sussex, BN22 9AD, United Kingdom

Tel: 01323 400680

E-mail: clive@firetrace-ductwork.co.uk • Website: www.firetrace-ductwork.co.uk

Certificate No: 1345a to SD 198 (Appendix B12/BS 476-24:1987)

Product Name	Duct Type	Condition	Duct Orientation Vertical V- or Horizontal H-	Type/density of insulation	Insulation Thickness (mm)	Fire Resistance (Integrity/ Stability)	Fire Resistance Insulation	LPCB Ref. No.
Caswell Firesafe	Ventilation Smoke Outlet Kitchen Extract	Fire inside (Type B) & Fire outside (Type A)	V or H	None	-	240	-	1345a/01
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	V or H	Mineral wool 160 kg/m3	25	30	30	1345a/02
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	H	Mineral wool 160 kg/m3	40	60	60	1345a/02
Caswell Firesafe	Kitchen Extract	Fire inside (Type B) & Fire outside (Type A)	H	Mineral wool 160 kg/m3	40	30	30	1345a/02
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	V or H	Mineral wool 160 kg/m3	70	90	90	1345a/02
Caswell Firesafe	Kitchen Extract	Fire inside (Type B) & Fire outside (Type A)	H	Mineral wool 160 kg/m3	90	60	60	1345a/02
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	H	Mineral wool 160 kg/m3	90	120	120	1345a/02
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	V	Mineral wool 160 kg/m3	30	60	60	1345a/02
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	V	Mineral wool 160 kg/m3	50	90	90	1345a/02
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	V or H	Mineral wool 100 kg/m3	50	30	30	1345a/03
Caswell Firesafe	Ventilation Smoke Outlet	Fire inside (Type B) & Fire outside (Type A)	V or H	Mineral wool 100 kg/m3	100 (2x50)	60	60	1345a/04

Notes:

1. LPCB Ref. Nos 1345a/01, 1345a/02, 1345a/03 and 1345a/04 - Uninsulated and Insulated Ductwork systems to be manufactured and installed to the specifications as detailed in Report no 335274 Issue 2 dated 15 July 2014.

2. LPCB Ref. No 1345a/02 Mineral wool specification: Rockwool FirePro Duct Slab with a nominal density of 160kg/m³. The boards of maximum size 2000mm x 1200mm, have thicknesses of 25, 30, 40, 50, 70 and 90mm.

3. LPCB Ref. No 1345a/03 Mineral wool specification: Rockwool RW5 Slab, 50mm thick and 100 kg/m³ nominal density.

4. LPCB Ref. No 1345a/04 Mineral wool specification: Rockwool Marine Firebatt 2000, 100mm (2 x 50mm) thick and 100 kg/m³ nominal density.

5. LPCB Ref. Nos 1345a/01- covers rectangular and circular ductwork up to 3000mm wide x 3000mm high, reference Firesafe Tables 1 to 4 and circular ductwork up to 1250mm diameter Table 9. The Firesafe systems may also be employed as attenuator casings as defined in Assessment Report no.335274 Issue 2 dated 15 July 2014 however the LPCB approval does not cover the attenuator itself.

6. LPCB Ref. Nos 1345a/02 - maximum size of steel duct without extra support to insulation for rectangular and circular insulated ductwork when insulation material thick 25mm, 30mm, 90mm is up to 1000mm x 1000mm, when insulation material thick 70mm - up to 1200mm x 1200mm and when insulation material thick 40mm, 50mm, 70mm - 1500mm x 1500mm. Where insulation is required for circular ducts, Firepro Duct Slab is fitted around the duct as a square box in the same manner as for rectangular ducts. On horizontal ducts additional hangers are fitted at 1510mm maximum centres. Where the diameter of the steel duct exceeds 610mm then studwelded pins and washers must be fitted at the mid-width of the board in the same manner as for rectangular ducts.

FIRE RESISTANT DUCTS V2

7. LPCB Ref. Nos 1345a/03 1345a/04 - covers rectangular and circular insulated ductwork up to 1000mm x 1000mm.

8. LPCB Ref. Nos 1345a/01, 1345a/02, 1345a/03 and 1345a/04 - Details of the modified penetration seal system, where the duct passes through fire compartment walls or floors, are shown in Firesafe drawings nos. CF213A, CF311B & CF312. The parts of the steel collars are bolted together instead of welded and that, for insulated ducts, a gasket of ceramic tape 100mm wide x 3mm thick is fitted between the collar and the duct wall on all four sides of the duct.

9. LPCB Ref. Nos 1345a/01, 1345a/02, 1345a/03 and 1345a/04 - thin film paint finishes may be applied to the outside of the steel ductwork. The foil facing of insulated ducts may also be painted provided that the paint is water based. The paint finish must comply with the reaction to fire requirements for the building in which the ductwork is being installed.

10. LPCB Ref. Nos 1345a/01, 1345a/02, 1345a/03 and 1345a/04 - an assessment report No 335274 covers systems manufactured from galvanised steel, mild steel and stainless steel and ducts over 3m longest side (in panel construction).

Ductwork Manufacturers

The following Companies manufacture the products listed on this certificate to a specification issued and controlled by Firetrace Duckwork Limited

These Companies are audited by the LPCB to ensure the product certification requirements are met.

Airtrace Sheet Metal Limited (LPCB Ref. No. 1345)

19 Marshal Road

Eastbourne

East Sussex

BN22 9AD

Gardner FRD Ltd

1-5 Bermondsey Street, London, SE1 2ER, United Kingdom

Tel: 0207 403 5894

E-mail: mark.duguid@gardnerco.net

Certificate No: 1494a to BS 476 Part 24

Flameshield

Product Name	Duct Type	Condition	Type of Insulation-mineral wool reference	Insulation Thickness (mm)	Fire Resistance (integrity/stability)	Fire Resistance Insulation	LPCB Ref. No.
Flameshield	Ventilation	Fire inside	None	-	240	-	1494a/03
Flameshield	Smoke outlet	Fire inside	None	-	240	-	1494a/03
Flameshield	Kitchen extract	Fire inside	None	-	240	-	1494a/03
Flameshield	Ventilation	Fire outside	None	-	120	-	1494a/03
Flameshield	Smoke outlet	Fire outside	None	-	120	-	1494a/03
Flameshield	Kitchen extract	Fire outside	None	-	120	-	1494a/03
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	45	120	30	1494a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	60	1494a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	90	1494a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1494a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	240*	120	1494a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1494a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	30	1494a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	60	1494a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1494a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	90	1494a/04
Flameshield	Ventilation	Fire	Rockwool FirePro Duct Slab	70	120	90	1494a/04

FIRE RESISTANT DUCTS V2

		outside					
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	90	120	120	1494a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1494a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	45	120	30	1494a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	60	1494a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	90	1494a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1494a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	120	1494a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1494a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	30	1494a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	60	1494a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1494a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	90	1494a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1494a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	90	120	120	1494a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1494a/04
Flamshiel	Kitchen extract	Fire inside	Knauf Firetek BD917	45	120	30	1494a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	40	120	30	1494a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	90	120	60	1494a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	90	120	60	1494a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	45	120	30	1494a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	40	120	30	1494a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	90	120	60	1494a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	90	120	60	1494a/04

Certificate No: 1494b to SD198 (Appendix B12)/EN 1366-1

FlameshieldEN

Product Name	Steel type / gauge	Duct shape / Max size (w x h) (mm) Duct shape / Duct shape / Duct shape /	Supporting construction	Duct type	Classification Ref.	Classification (EN 13501-3)	LPCB Ref. No.
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002B/1	E 60 (ho o → i) S	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct B	P104441-1002C/1	E 60 (ve i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct A	P104441-1002D/1	E 60 (ve o → i) S	1494b/01
FlameshieldEN	Galvanised steel / 0.8mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002E/1	E 60 (ho i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct B	P104441-1002F/1	E 60 (ho i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct A	P104441-1002G/1	E 60 (ho o → i) S	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct B	P104441-1002H/1	E 60 (ve i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct A	P104441-1002I/1	E 60 (ve o → i) S	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002J/1	EI 20 (ho i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002K/1	EI 45 (ho i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002L/1	EI 60 (ho i → o)	1494b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002M/1	EI 90 (ho i → o)	1494b/01

FIRE RESISTANT DUCTS V2

FlamrsjieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002N/1	EI 120 (ho i → o)	1494b/01
FlamshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002O/1	EI 120 (ho o → i) S	1494b/01
FlamshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1800 x 1000	Flexible or rigid wall	Duct B	13-H-131440	EI 120 (ho i → o)	1494b/01
FlamshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 2500 x 1250	Rigid wall	Duct B	13-H-131459	EI 120 (ho i → o)	1494b/01
FlamshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001724	EI 120 (ho o → i) EI 30 (ho o → i)	1494b/01
FlamshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001727	EI 120 (ho o → i) S EI 30 (ho o → i) S	1494b/01
FlamshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-002671	EI 120 (ho o → i) S EI 20 (ho o → i) S	1494b/01

Kent Ductwork Limited

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Certificate No: 1336a to BS 476-24

Flamshield Vertical and Horizontal insulated and uninsulated ducts

Product Name	Duct Type	Condition	Type of Insulation-mineral wool reference	Insulation Thickness (mm)	Fire Resistance (integrity/stability)	Fire Resistance Insulation	LPCB Ref. No.
Flamshield	Ventilation	Fire inside	None	-	240	-	1336a/03
Flamshield	Smoke outlet	Fire inside	None	-	240	-	1336a/03
Flamshield	Kitchen extract	Fire inside	None	-	240	-	1336a/03
Flamshield	Ventilation	Fire outside	None	-	120	-	1336a/03
Flamshield	Smoke outlet	Fire outside	None	-	120	-	1336a/03
Flamshield	Kitchen extract	Fire outside	None	-	120	-	1336a/03
Flamshield	Ventilation	Fire inside	Knauf Firetek BD917	45	120	30	1336a/04
Flamshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	60	1336a/04
Flamshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	90	1336a/04
Flamshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1336a/04
Flamshield	Ventilation	Fire inside	Knauf Firetek BD917	90	240*	120	1336a/04
Flamshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1336a/04
Flamshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	30	1336a/04
Flamshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	60	1336a/04
Flamshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1336a/04
Flamshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	90	1336a/04
Flamshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1336a/04
Flamshield	Ventilation	Fire outside	Knauf Firetek BD917	90	120	120	1336a/04
Flamshield	Flamshield	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1336a/04
Flamshield	Smoke outlet	Fire inside	Knauf Firetek BD917	45	120	30	1336a/04
Flamshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	60	1336a/04
Flamshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	90	1336a/04
Flamshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1336a/04
Flamshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	120	1336a/04

FIRE RESISTANT DUCTS V2

Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1336a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	30	1336a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	60	1336a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1336a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	90	1336a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1336a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	90	120	120	1336a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1336a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	45	120	30	1336a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	40	120	30	1336a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	90	120	60	1336a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	90	120	60	1336a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	45	120	30	1336a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	40	120	30	1336a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	90	120	60	1336a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	90	120	60	1336a/04

Certificate No: 1336b to SD198 (Appendix B12)/EN 1366-1

Fire resistant ductwork

Product Name	Steel type / gauge	Duct shape / Max size (w x h) (mm)	Supporting construction	Duct type	Classification Ref.	Classification (EN 13501-3)	LPCB Ref. No.
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002B/1	E 60 (ho o → i) S	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct B	P104441-1002C/1	E 60 (ve i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct A	P104441-1002D/1	E 60 (ve o → i) S	1336b/01
FlameshieldEN	Galvanised steel / 0.8mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002E/1	E 60 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct B	P104441-1002F/1	E 60 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct A	P104441-1002G/1	E 60 (ho o → i) S	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct B	P104441-1002H/1	E 60 (ve i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct A	P104441-1002I/1	E 60 (ve o → i) S	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002J/1	EI 20 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002K/1	EI 45 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002L/1	EI 60 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002M/1	EI 90 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002N/1	EI 120 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002O/1	EI 120 (ho o → i) S	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1800 x 1000	Flexible or rigid wall	Duct B	13-H-131440	EI 120 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 2500 x 1250	Rigid wall	Duct B	13-H-131459	EI 120 (ho i → o)	1336b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001724	EI 120 (ho o → i) EI 30 (ho o → i)	1336b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001727	EI 120 (ho o → i) S EI 30 (ho o → i) S	1336b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-002671	EI 120 (ho o → i) S EI 20 (ho o → i) S	1336b/01

FIRE RESISTANT DUCTS V2

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Certificate No: 1555a to BS 476: Part 24

Flameshield

Product Name	Duct Type	Condition	Type of Insulation-mineral wool reference	Insulation Thickness (mm)	Fire Resistance (integrity/stability)	Fire Resistance Insulation	LPCB Ref. No.
Flameshield	Ventilation	Fire inside	None	-	240	-	1555a/03
Flameshield	Smoke outlet	Fire inside	None	-	240	-	1555a/03
Flameshield	Kitchen extract	Fire inside	None	-	240	-	1555a/03
Flameshield	Ventilation	Fire outside	None	-	120	-	1555a/03
Flameshield	Smoke outlet	Fire outside	None	-	120	-	1555a/03
Flameshield	Kitchen extract	Fire outside	None	-	120	-	1555a/03
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	45	120	30	1555a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	60	1555a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	120	90	1555a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1555a/04
Flameshield	Ventilation	Fire inside	Knauf Firetek BD917	90	240*	120	1555a/04
Flameshield	Ventilation	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1555a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	30	1555a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	60	1555a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1555a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	45	120	90	1555a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1555a/04
Flameshield	Ventilation	Fire outside	Knauf Firetek BD917	90	120	120	1555a/04
Flameshield	Ventilation	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1555a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	45	120	30	1555a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	60	1555a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	90	1555a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	70	120	90	1555a/04
Flameshield	Smoke outlet	Fire inside	Knauf Firetek BD917	90	120	120	1555a/04
Flameshield	Smoke outlet	Fire inside	Rockwool FirePro Duct Slab	90	120	120	1555a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	30	1555a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	60	1555a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	40	120	60	1555a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	45	120	90	1555a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	70	120	90	1555a/04
Flameshield	Smoke outlet	Fire outside	Knauf Firetek BD917	90	120	120	1555a/04
Flameshield	Smoke outlet	Fire outside	Rockwool FirePro Duct Slab	90	120	120	1555a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	45	120	30	1555a/04

FIRE RESISTANT DUCTS V2

Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	40	120	30	1555a/04
Flameshield	Kitchen extract	Fire inside	Knauf Firetek BD917	90	120	60	1555a/04
Flameshield	Kitchen extract	Fire inside	Rockwool FirePro Duct Slab	90	120	60	1555a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	45	120	30	1555a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	40	120	30	1555a/04
Flameshield	Kitchen extract	Fire outside	Knauf Firetek BD917	90	120	60	1555a/04
Flameshield	Kitchen extract	Fire outside	Rockwool FirePro Duct Slab	90	120	60	1555a/04

Certificate No: 1555b to SD198 (Appendix B12)/EN 1366-1

FlameshieldEN

Product Name	Steel type / gauge	Duct shape / Max size (w x h) (mm)	Supporting construction	Duct type	Classification Ref.	Classification(EN 13501-3)	LPCB Ref. No.
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002A/1	E 60 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002B/1	E 60 (ho o → i) S	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct B	P104441-1002C/1	E 60 (ve i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Concrete floor	Duct A	P104441-1002D/1	E 60 (ve o → i) S	1555b/01
FlameshieldEN	Galvanised steel / 0.8mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002E/1	E 60 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct B	P104441-1002F/1	E 60 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Flexible wall	Duct A	P104441-1002G/1	E 60 (ho o → i) S	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct B	P104441-1002H/1	E 60 (ve i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Circular (1)	Concrete floor	Duct A	P104441-1002I/1	E 60 (ve o → i) S	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct B	P104441-1002J/1	EI 20 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002K/1	EI 45 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002L/1	EI 60 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002M/1	EI 90 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct B	P104441-1002N/1	EI 120 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1250 x 1000	Flexible wall	Duct A	P104441-1002O/1	EI 120 (ho o → i) S	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 1800 x 1000	Flexible or rigid wall	Duct B	13-H-131440	EI 120 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.2mm - thick	Rectangular 2500 x 1250	Rigid wall	Duct B	13-H-131459	EI 120 (ho i → o)	1555b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 800 x 800	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001724	EI 120 (ho o → i) EI 30 (ho o → i)	1555b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 400 x 400	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-001727	EI 120 (ho o → i) S EI 30 (ho o → i) S	1555b/01
FlameshieldEN	Galvanised steel / 1.0mm - thick	Rectangular 1250 x 1000	Flexible or rigid wall	Duct A Kitchen Extract	EFR-16-002671	EI 120 (ho o → i) S EI 20 (ho o → i) S	1555b/01

GREASE FILTERS USED IN COMMERCIAL KITCHEN EXTRACT SYSTEMS

LPS 1263 *Requirements for the LPCB Approval and Listing of the Fire Performance of Grease Filters Used in Commercial Extract systems.*

This standard covers the test procedures and method of calculating the fire performance rating of grease filters used for the reduction of flammable and volatile grease droplets from the cooking exhaust of commercial cooking equipment in such situations as restaurant kitchens, canteens or similar food preparation areas where it is necessary to reduce the cooking exhaust via a ventilation system.

POWERED SMOKE AND HEAT EXHAUST VENTILATION

Powered smoke and heat exhaust ventilation fans are used:

- To channel heat and smoke in a predetermined direction.
- To prevent smoke logging of the protected space.

All the fans listed have been approved against the requirements of EN 12101-3 *Smoke and heat control systems. Part 3 Specification for powered smoke and heat exhaust ventilation.*

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Certificate No: 937a to SD 198 (Appendix B13/EN 12101-3:2002)

Smoke and Heat Control Systems

Product Name	Model	Application Classes	Response Delay	Resistance to Fire Class	Motor Temp. Rating(1)	LPCB Ref. No.
SmokeVent axial fan	LCS025, LCS031, LCS035, LCS040, LCS045, LCS050, LCS056, LCS063, LCS071, LCS080, LCS090, LCS100, LCS112, LCS125, LCS140, LCS160, LCS180, LCS200, SCS025, SCS031, SCS035, SCS040, SCS045, SCS050, SCS056, SCS063, SCS071, SCS080, SCS090, SCS100, SCS112, SCS125, SCS140, SCS160, SCS180, SCS200, LCSCR025, LCSCR031, LCSCR035, LCSCR040, LCSCR045, LCSCR050, LCSCR056, LCSCR063, LCSCR071, LCSCR080, LCSCR090, LCSCR100, LCSCR112, LCSCR125, LCSCR140, LCSCR160, LCSCR180, LCSCR200	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F200	Class F / Class H or Class B / Class H	937a/01
SmokeVent axial fan	LCS040K2-A10/34/B, LCS125R4-A12/37/B	Uninsulated; smoke reservoir; dual purpose	N/A	F200	Class F / Class H or Class B / Class H	937a/01
JetVent Impulse (flanged - standard thrust) axial fan	JFSU-CPA-315 2/4-3, JFSU-CPA-400 2/4-3, JFSU-CPA-400 2-3, JFSR-CPA-315 2/4-3, JFSR-CPA-400 2/4-3, JFSR-CPA-400 2-3	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F200	Class F / Class H or Class B / Class H	937a/01
JetVent Impulse (flanged - enhanced thrust) axial fan	LCS031-CPU 2/4-3, LCS035-CPU 2/4-3, LCS040-CPU 2/4-3, LCS031-CPR 2/4-3, LCS035-CPR 2/4-3, LCS040-CPR 2/4-3	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F200	Class F / Class H or Class B / Class H	937a/01
SmokeVent axial fan	LCS025, LCS031, LCS035, LCS040, LCS045, LCS050, LCS056, LCS063, LCS071, LCS080, LCS090, LCS100, LCS112, LCS125, LCS140, LCS160, LCS180, LCS200, SCS025, SCS031, SCS035, SCS040, SCS045, SCS050, SCS056, SCS063, SCS071, SCS080, SCS090, SCS100, SCS112, SCS125, SCS140, SCS160, SCS180, SCS200, LCSCR025, LCSCR031, LCSCR035, LCSCR040, LCSCR045, LCSCR050, LCSCR056, LCSCR063, LCSCR071, LCSCR080, LCSCR090, LCSCR100, LCSCR112, LCSCR125, LCSCR140, LCSCR160, LCSCR180, LCSCR200	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/02
SmokeVent axial fan	JFSR-CPA 400 2-3, LCS125-R4-A12/29/B	Uninsulated; smoke reservoir; dual purpose	N/A	F300	Class F / Class H	937a/02
JetVent impulse (flanged - standard thrust) axial fan	JFSU-CPA-315 2/4-3, JFSU-CPA-400 2/4-3, JFSU-CPA-400 2-3, JFSR-CPA-315 2/4-3, JFSR-CPA-400 2/4-3, JFSR-CPA-400 2-3	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/02
JetVent impulse (flanged - enhanced thrust) axial fan	LCS031-CPU 2/4-3, LCS035-CPU 2/4-3, LCS040-CPU 2/4-3, LCS031-CPR 2/4-3, LCS035-CPR 2/4-3, LCS040-CPR 2/4-3	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/02

POWERED SMOKE AND HEAT EXHAUST VENTILATION

JetVent impulse (flanged standard and enhanced thrust) axial fan	JFU/F3-315, JFR/F3-315, JFU/F3-355, JFR/F3-355, JFU/F3-400, JFR/F3-400	emergency use Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/02
SmokeVent axial fan	LCS025, LCS031, LCS035, LCS040, LCS045, LCS050, LCS056, LCS063, LCS071, LCS080, LCS090, LCS100, LCS112, LCS125, SCS025, SCS031, SCS035, SCS040, SCS045, SCS050, SCS056, SCS063, SCS071, SCS080, SCS090, SCS100, SCS112, SCS125, LCSCR025, LCSCR031, LCSCR035, LCSCR040, LCSCR045, LCSCR050, LCSCR056, LCSCR063, LCSCR071, LCSCR080, LCSCR090, LCSCR100, LCSCR112, LCSCR125 LCS 140, SCS140, LCSCR140, SCSCR140 (Weg Pad only)	Insulated or uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F400	Class F / Class H	937a/03
JetVent centrifugal (Mark I) fan	JISU-CPC-50N, JISU-CPC-100N	Uninsulated; smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/04
JetVent centrifugal (MarkII) fan	JISU-2-CPC-50N, JISU-2-CPC-60N, JISU-2-CPC-100N, JISU-2-CPC-120N	Uninsulated; smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/05
JetVent impulse (unflanged - standard thrust) axial fan	JVSU-CPA-315 2/4-3, JVSU-CPA-400 2-3, JVSU-CPA-400 2/4-3, JVSR-CPA-315 2/4-3, JVSR-CPA-400 2-3, JVSR-CPA-400 2/4-3	Uninsulated; smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/06
JetVent impulse (flanged standard and enhanced thrust) axial fan	JFU/F4-315, JFR/F4-315, JFU/F4-355, JFR/F4-355, JFU/F4-400, JFR/F4-400	Uninsulated; smoke reservoir or non smoke reservoir; dual purpose or emergency use	N/A	F400	Class F / Class H	937a/07
JetVent - centrifugal (Mark III) fan	JVC/F3-100N, JVC/F3-50N	Uninsulated; smoke reservoir; dual purpose or emergency use	N/A	F300	Class F / Class H	937a/08

SMOKE CURTAINS

Smoke curtains are used:

- To create a smoke reservoir by containing and limiting the travel of smoke.
- To channel smoke in a predetermined direction.
- To prevent or retard smoke entry to another area or void.

All the smoke curtains listed in this section have been tested and assessed against the requirements of LPS 1182 *Requirements and tests for fixed fabric smoke curtains, fixed metal smoke curtains and powered smoke curtains*.

SMOKE EXTRACTION DUCTS

The purpose of smoke duct systems are for the prevention of transmission of smoke and combustion products from a fire zone, smoke control duct sections are utilised to contain the spillage of otherwise harmful and toxic extinguishing gases from the affected area, and for the control of pressurising and excess air relief within pressurisation systems.

Smoke control ducts are commonly used in smoke and heat control systems. They may serve single compartments or a number of different fire compartments. The systems may be dedicated smoke extraction or possibly a combined environmental ventilation/smoke extraction.

LPCB approves Smoke Extraction Ducts to EN 1366 Part 8 *Fire resistance tests for service installations. Smoke extraction ducts* or EN 1366-9 *Fire resistance tests for service installations. Single compartment smoke extraction ducts*.
