



### Firetuf FTP 120 - Fire Resistant Armoured Power Cable

Draka Firetuf FTP120 is a fire resistant armoured power cable solution for all three categories of fire performance required by BS8519, Category 1,2 and 3. FTP120 is third party approved by LPCB for 120 min classification in BS8491. This is the test for fire resistance that includes direct flame, direct impact and water jet at 850°C. FTP120 holds third party BASEC certification to BS7846, the construction requirements for fire resistant armoured cables. LU approved cable (LU Approval ref 406).



#### Construction

Manufacturing standard: BS 7846

Conductors: Stranded plain annealed copper wire (Class 2) to BS EN 60228

Insulation: Mica-glass fire resistant tapes, covered by an extruded layer of XLPE

**Binder:** Polyester tape, glass tapes where performance requires

 Bedding:
 Zero Halogen, Low Smoke (OHLS®)

 Armour:
 Galvanised Steel Wire Armour

 Sheath:
 Zero Halogen, Low Smoke (OHLS®)

 Core colours:
 Two core: Brown and Blue

Three core: Brown, Black and Grey Four core: Brown, Black, Grey and Blue

**Physical Characteristics** 

Voltage rating (Uo/U): 600/1000V

Operating temp: -25°C to +90°

(the cable should not be installed when either the ambient or cable

temperature is below 0°C)

Min, bending radius: 8 x overall diameter of cable

Current rating: Refer to tables 4E4A & 4E4B in BS7671 or ERA 69-30 Part V

Note: In the event of a fire, the increase in impedance may require consideration to the installation of larger conductor sizes, to accommodate motor starting loads and the performance of protective conductors.

### **Performance Characteristics**

Circuit integrity: BS 7846 F120

BS 8491 30, 60 and 120mins

Smoke emission:

Acid gas emission:

BS EN 60754-1

Flame propagation:

BS EN 60332-1-2
BS EN 60332-3-24









# FIP 120 FIRETUF®

### 2 Core FTPP2H

Nominal area of	Armour wire	Approx. diameter	Approx. overall	Approx.		conductor tance	Nominal area of	Maximum armour
conductor mm <sup>2</sup>	diameter mm	under armour mm	diameter mm	weight kg/km	DC at 20 C Ω/km	AC at 90 C Ω/km	armour mm²	resistance at 20°C Ω/km
4*	1.25	14.9	21	780	4.61	5.878	19	7.9
6*	1.25	14.7	21	830	3.08	3.927	22	7
10*	1.25	17.3	23	1100	1.83	2.333	26	6
16*	1.25	18.5	25	1250	1.15	1.466	42	3.7
25*	1.25	21	27	1550	0.727	0.926	42	3.7
35*	1.6	24	31	2100	0.524	0.6685	60	2.6
50	1.6	23	30	2100	0.387	0.494	68	2.3
70	1.6	26	33	2600	0.268	0.3412	80	2
95	2.0	27	36	3400	0.193	0.2471	113	1.4
120	2.0	31	39	4100	0.153	0.1964	125	1.3
150	2.0	33	42	4800	0.124	0.1597	138	1.2
185	2.5	37	47	6200	0.0991	0.1284	191	0.82
240	2.5	41	51	7500	0.0754	0.0989	215	0.73
300	2.5	45	56	9000	0.0601	0.0801	235	0.67
400	2.5	50	61	10900	0.047	0.0641	265	0.59

### **3 Core FTPP3H**

Nominal area of	Armour wire	Approx. diameter	Approx. overall	Approx. cable		conductor tance	Nominal area of	Maximum armour
conductor mm <sup>2</sup>	diameter mm	under armour mm	diameter mm	weight kg/km	DC at 20 C Ω/km	AC at 90 C Ω/km	armour mm²	resistance at 20°C Ω/km
4*	1.25	15.7	22	910	4.61	5.878	20	7.5
6*	1.25	15	21	860	3.08	3.927	23	6.7
10*	1.25	18.7	25	1200	1.83	2.333	39	4
16*	1.25	19.7	26	1400	1.15	1.466	45	3.5
25*	1.6	23	30	2000	0.727	0.926	62	2.5
35*	1.6	26	33	2500	0.524	0.6685	68	2.3
50	1.6	26	33	2700	0.387	0.494	78	2
70	1.6	29	36	3400	0.268	0.3412	90	1.8
95	2.0	32	41	4600	0.193	0.2471	128	1.3
120	2.0	35	44	5500	0.153	0.1964	141	1.2
150	2.5	39	49	7000	0.124	0.1597	201	0.78
185	2.5	43	53	8300	0.0991	0.1284	220	0.71
240	2.5	47	58	10300	0.0754	0.0989	250	0.63
300	2.5	52	63	12400	0.0601	0.0801	269	0.58
400	2.5	58	69	15200	0.047	0.0641	304	0.52

#### **4 Core FTPP4H**

4 COIE FIFE	711			1				
Nominal area of	Armour wire	Approx. diameter	Approx. overall	Approx. cable		conductor tance	Nominal area of	Maximum armour
conductor mm <sup>2</sup>	diameter mm	under armour mm	diameter mm	weight kg/km	DC at 20°C Ω/km	AC at 90°C Ω/km	armour mm²	resistance at 20°C Ω/km
4*	1.25	15.3	21	860	4.61	5.878	22	6.8
6*	1.25	16.4	23	1000	3.08	3.927	36	4.3
10*	1.25	21	26	1400	1.83	2.333	42	3.7
16*	1.25	22	28	1650	1.15	1.466	50	3.1
25*	1.6	26	33	2400	0.727	0.926	70	2.3
35*	1.6	29	36	3000	0.524	0.6685	78	2
50	1.6	30	37	3300	0.387	0.494	90	1.8
70	2.0	32	41	4600	0.268	0.3412	131	1.2
95	2.0	36	45	5800	0.193	0.2471	147	1.1
120	2.5	40	50	7400	0.153	0.1964	206	0.76
150	2.5	44	54	8700	0.124	0.1597	230	0.68
185	2.5	49	59	10500	0.0991	0.1284	255	0.61
240	2.5	54	65	13100	0.0754	0.0989	289	0.54
300	2.5	59	70	15800	0.0601	0.0801	319	0.49
400	3.15	66	79	20400	0.047	0.0641	452	0.35

\*Circular conductors, all others are shaped conductors











### Certificate No: **189/001/071**

Issue No: 5

### Certificate of Product Approval

#### Licensee:

### Draka UK Ltd

Chickenhall Lane, Eastleigh, SO50 6YU, Hampshire, United Kingdom

Factory: Chickenhall Lane, Eastleigh, SO50 6YU, Hampshire, United Kingdom

Standard: BS 7846:2015

Description:
Armoured fire resistant power cables

Details:

Resistance to fire - Category F120. This approval is based on the use of 1.25mm armour wire for the following cables: Table 4 two core 4, 6 & 10sqmm, Table 5 three core 4 & 6sqmm, Table 6 four core 4sqmm and Table 7 five core 4sqmm.

Materials: Insulation GP 8, Sheath LTS 1

Brand Name: FTP120, FIRETUF POWER PLUS

Origin Mark: DRAKA UK (B)

Permissible Approval Marks:





BASEC name

BASEC roundel

Signed for and on behalf of BASEC Group Ltd

Krean O'Krin Date: 06/06/2022

Date of original issue: 06/10/2012

Check BASEC website to verify validity.

Page 1 of 2

BASEC Group Ltd, Presley House, Presley Way, Milton Keynes, MK8 0ES, UK Registered in England No. 13950143, Tel: +44 (0)1908 267300 Email: mail@basec.org.uk Web: www.basec.org.uk

BSF079 Issue 5 (20-03-2023)



Expiry date: 11/08/2026





### Certificate No: 189/001/071

Issue No: 5

### Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
4	N/A	Class 2	2	4	70
5	N/A	Class 2	3	4	70
6	N/A	Class 2	4	4	50
7	N/A	Class 2	5	4	35

Signed for and on behalf of **BASEC** Group Ltd

Krean O'Krin Date: 06/06/2022

Date of original issue: 06/10/2012

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BSF079 Issue 5 (20-03-2023)





Expiry date: 11/08/2026





### Certificate No: **189/003/024**

Issue No: 6

### Certificate of Product Approval

#### Licensee:

### Draka UK Ltd

Chickenhall Lane, Eastleigh, SO50 6YU, Hampshire, United Kingdom

Factory: Oak Road

Wrexham Industrial Estate, Wrexham, LL13 9PH, Clwyd, United Kingdom

Standard: BS 7846:2015

Description:
Armoured fire resistant power cables

Details:
Resistance to fire - Category F120.

Materials: Insulation GP 8, Sheath LTS 1

Brand Name: FTP120, FIRETUF POWER PLUS

> Origin Mark: DRAKA UK (W)

Permissible Approval Marks:





BASEC name

BASEC roundel

Signed for and on behalf of BASEC Group Ltd

Krean O'Krin Date: 20/07/2023

Date of original issue: 06/10/2012 Check BASEC website to verify validity.

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BSF079 Issue 5 (20-03-2023)



Expiry date: 11/08/2026





### Certificate No: 189/003/024

Issue No: 6

### Type(s) and Range(s) of Approval

Table / Clause	Code Designation	Conductor Class	Range of Cores	Min Nominal Size -sqmm	Max Nominal Size - sqmm
4	N/A	Class 2	2	95	400
5	N/A	Class 2	3	95	400
6	N/A	Class 2	4	70	400

Signed for and on behalf of BASEC Group Ltd

Krean O'Krin Date: 20/07/2023

Date of original issue: 06/10/2012

Check BASEC website to verify validity. Page 2 of 2

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BSF079 Issue 5 (20-03-2023)





Expiry date: 11/08/2026



www.redbooklive.com

### Certificate of Product Approval

Certificate Number: 1134d

Issue: 02

### DRAKA UK LIMITED

Chickenhall Lane Bishopstoke Eastleigh Hants SO50 6YU United Kingdom

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix

### Product(s)

Cable Types as listed below: FTP 120

### Standard(s) (see Appendix for details)

BS 8491:2008 EN 60754-1:2014 BS EN 61034-2:2005

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Mluch

Signed for BRE Global Ltd.

Karen Coull

7 March 2019

1 March 2013

Certification Scheme Manager

Date of Issue

Date of First issue





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BRE Global Ltd, Garston, Watford, WD25 9XX T: +44 (0)333 321 8811 E: enquiries@breglobal.com

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Appendix to Certificate No: 1134d **DRAKA UK LIMITED** 

Product name				LPCB Ref No
FTP 120				1134d/01
Nominal csa of conductor (mm²)	Core Construction	BS 8491	EN 60754-1	BS EN 61034-2
2,5(1)	7	120 min	<0.5% HCI	>60%
4,0(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
6.0(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
10(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
16 <sup>(1)</sup>	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
25(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
35(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
50(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
70(1)	2 <sup>(2)</sup> & 3	120 min	<0.5% HCI	>60%

### Uo/U 600/1000V

### Notes:

1. Stranded conductor only.

2. All 2 core cables have the blue core designed as a neutral conductor; only phase to earth voltage was applied.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Signed for BRE Global Ltd.

Karen Coull

7 March 2019

1 March 2013

Certification Scheme Manager

Date of Issue

Date of First issue





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Issue: 02



### Appendix to Certificate No: 1134d DRAKA UK LIMITED

Product name				LPCB Ref. No.
FTP 120				1134d/02
Nominal csa of conductor (mm²)	Core Construction	BS 8491	EN 60754-1	BS EN 61034-2
70(1)	4	120 min	<0.5% HCI	>60%
95(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
120(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
150(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
185(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
240(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
300 <sup>(1)</sup>	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%
400(1)	2 <sup>(2)</sup> , 3 & 4	120 min	<0.5% HCI	>60%

### Uo/U 600/1000V

#### Notes:

- 1. Stranded conductor only.
- 2. All 2 core cables have the blue core designed as a neutral conductor; only phase to earth voltage was applied.

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Kelnel

Karen Coull

7 March 2019

1 March 2013

Signed for BRE Global Ltd.

Certification Scheme Manager

Date of Issue

Date of First issue





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Issue: 02

# 消 防 處 牌 照 及 審 批 總 區 通 風 系 統 課

香港九龍尖沙咀東康莊道 1 號

消防總部大廈 5樓

本處檔號 Our Ref.:

FP(LC) 317/21

來函檔號

Your Ref .:

圖文傳真 Fax:

2367 3206

電 話 Tel. No.:

2733 1557



### FIRE SERVICES DEPARTMENT LICENSING & CERTIFICATION COMMAND

#### **Ventilation Division**

5/F, Fire Services Headquarters Building, No. 1 Hong Chong Road, Tsim Sha Tsui East, Kowloon, Hong Kong

24 May 2018

Prysmian Hong Kong Holding Limited, Unit 06, 22<sup>nd</sup> Floor, CDW Building, 388 Castle Peak Road,

B

388 Castle Peak Ro Tsuen Wan, Hong Kong.

(Attn.: Mr. Eric TANG)

Dear Sir,

### "Draka" FTP120 Fire Resistant Armoured Power Cables

I refer to your letter dated 10.1.2018 enclosing catalogues and test certificates and the supplementary information submitted on 4.5.2018 and 9.5.2018 with respect to the captioned products for the assessment of this Department.

According to FSD Circular Letter No. 1/2007, this Department is not going to assess and comment on the captioned products subject to their valid LPCB listing in compliance with BS 8491:2008 as listed in the LPCB Redbook (for cable size:  $2.5 \text{ mm}^2$  with 7 cores and  $4.0 - 400 \text{ mm}^2$  with 2, 3 & 4 cores), their valid BASEC listing in compliance with BS 7846:2015 as listed in the Product Schedule of the BASEC web site (for cable size:  $4.0 - 35 \text{ mm}^2$  with 5 cores) and their correct cable markings.

Yours faithfully,

(LEUNG KAM-man) for Director of Fire Services

KML/chl

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### 消 防 處 牌照及審批總區

香港九龍尖沙咀東部康莊道1號5樓 消防總部大廈



### FIRE SERVICES DEPARTMENT LICENSING & CERTIFICATION COMMAND

FIRE SERVICES HEADQUARTERS BUILDING, 5/F, No. 1 Hong Chong Road, Tsim Sha Tsui East, Kowloon, Hong Kong

本處檔號 Our Ref.:

(1) in FP 314/07 VI

來函檔號 Your Ref.:

圖文傳真 Fax: 852-2723 2197 電 話 Tel. No. 2733 7744

電子郵件 E-mail: lcpolic2@hkfsd.gov.hk 7 May 2007

To: Recipients of FSD Circular Letters

Dear Sir/Madam,

## FSD Circular Letter No. 1/2007 Guidelines on New Arrangement on Product Approval of Fire Service Installations and Equipment

Currently, all applications for approval / acceptance of fire service installations and equipment shall be submitted to the Investigation and Research Section of the Licensing and Certification Command of this Department for processing and evaluation. Every application shall be accompanied by supporting documents indicating that the under installation/equipment application has been tested to an acceptable national/international test standard. Supporting documents include full test report, certificate, product catalogue, etc. At present, we accept either the original copy or photocopy of the test report issued by a recognized laboratory as the requisite documentary proof of the product's conformity to relevant acceptable standard.

In the global market, we understand that some renowned and well-established Product Certification Bodies (PCBs)<sup>(see remark)</sup> are providing independent certification of products with Listing Scheme / Services, which may be used by purchasers and regulatory authorities to assess product's conformity. Once a product attains the required standards in accordance with the certification procedures, the PCBs will list it on their websites or through publications for ease of reference, hereinafter referred to as "listed equipment".

To help us decide whether we could make use of these listing services for local application and to find means to verify the authenticity of the submitted documents, thorough consultation has been made with The Association of Registered Fire Service Installation Contractors of Hong Kong Limited, FSD / Authorized Persons Liaison Group and the Fire Safety Standard Advisory Group. It is finally agreed that the following new arrangements on product approval will be adopted:

PRODUCTS	NEW ARRANGEMENT ON APPLICATION FOR PRODUCT APPROVAL
1. Portable Equipment (i.e. Portable fire extinguishers and fire blankets under Regulation 3 of the Fire Service (Installations and Equipment) Regulations, Cap 95B)	As it is a statutory requirement for the Director of Fire Services to approve portable equipment, the current application procedures in accordance with the guidelines as stipulated in the Fire Protection Notice No. 15 shall remain unchanged.  However, applicants are required to provide FSD with an original test report / its copy certified true by the respective testing laboratory for verification, after that
	the document will be returned to the applicant; and an additional photocopy of it for FSD's processing and retention.
2. Other FSI and	a) Listed Equipment
Equipment (Fire service installations and equipment except items 10, 11(i), 13 and 14 as shown in Appendix I of the Fire Protection Notice No.15)	If a piece of equipment has been listed by PCBs, it is deemed to be accepted by this Department subject to such equipment and its installation being in conformity with all relevant local requirements. In this regard, the current practice to apply for its acceptance by this Department is no longer necessary and be ceased henceforth. Notwithstanding, should there be doubt on the listed equipment, FSD has the sole authority to decide its acceptance to be used in Hong Kong and the procedures stated in item (1) above will be required for product approval of such equipment.
	b) Non-Listed Equipment  The procedures same as item (1) above will be applied.

To facilitate the compliance inspection process to be undertaken by staff of FSD, FSI contractors are required, when in submission of FSI/501 for compliance inspection of FSI & Equipment, to provide us with a completed checklist of FSI and equipment at *Annex I* together with relevant documentary proof such as product listing certificates / records / letters issued by respective PCBs or product approval / acceptance letters issued by FSD. Please note that for stocks of the de-listed products kept by FSI

Contractors, the acceptance shall remain valid if the products were manufactured before the de-listing date. In such cases, the manufacturing date of the products will be checked where necessary.

Notwithstanding the above, FSI and equipment previously approved or accepted by the Director of Fire Services shall remain valid unless the Director of Fire Services has ruled otherwise.

We hereby announce the implementation of the above new arrangement with effect from the date of this Circular. FSD Circular Letter No. 4/1998 is therefore to be repealed and replaced by this Circular. For easy reference, we have enclosed at *Annex II* a revised Fire Protection Notice No.15 "*Guidance for Product Approval of Fire Service Installations and Equipment*", which can also be downloaded at < <a href="http://www.hkfsd.gov.hk/home/eng/safety.html">http://www.hkfsd.gov.hk/home/eng/safety.html</a>>.

Should you need further clarification on this matter, please do not hesitate to contact our officers at 2733 7827 or 2733 7557.

Yours faithfully,

for Director of Fire Services

### Remarks:

<u>Product Certification Bodies (PCBs)</u>: mean (i) overseas laboratory / organization, such as Loss Prevention Certification Board (LPCB), Underwriters Laboratory Inc.(UL), FM Approvals (FM), VdS Schadenverhutung GmbH (VdS), TUV SUD PSB (PSB), etc., that provides product certification service with Listing Scheme / Service and is being accredited by overseas accreditation bodies; or (ii) local laboratory / organization that provides product certification service with Listing Scheme / Service and is being accredited by the Hong Kong Accreditation Service through the Hong Kong Certification Body Accreditation Scheme. For details of the listed products, you may refer to the following websites:-

- i) LPCB < http://www.brecertification.co.uk >
- ii) UL < http://www.ul.com >
- iii) FM < http://www.fmglobal.com >
- iv) VdS < http://www.vds.de >
- v) TUV SUD PSB < http://www.tuv-sud-psb.sg >

### $\underline{Fire\ Service\ Installations-Equipment\ List}$

(To be appended to Form FSI/501)

FP Ref. no. 43/19/20 ...... Address of Premises:

Item	System/ Equipment	Manufacturer/	FSD Approval/	Listir	ng Certificat	es/Records/	Documents i	issued by Pr	oduct
		model no./ part no.	Acceptance			Certificati	on Bodies		
			Reference			(0	e)		
		(a)	(b)	UL	FM	LPCB	VdS	PSB	Others
A	<b><u>Automatic Actuating Device</u></b>								
A1	Emergency exit device and electromagnetic door								
	releasing device to be used in conjunction with								
	automatic fire alarm system								
В	Automatic Fixed Installation other than Water								
B1	Fixed carbon dioxide installation								
В2	Fixed clean agent installation								
В3	Fixed dry chemical installation								
B4	Fixed Halon installation								
C	<u>Deluge system</u>								
C1	Deluge valve								
C2	Sprinkler head								
C3	Alarm valve								
D	<u>Drencher System</u>								
E	Fire Alarm System								
E1	Manual call point								
E2	Alarm bell								
F	Automatic Fire Alarm System								
F1	Fire alarm control panel								
F2	Heat detector								

Item	System/ Equipment	Manufacturer/	FSD Approval/	Listin	ng Certificat	es/Records/l	Documents i	issued by Pr	roduct
		model no./ part no.	Acceptance			Certificati	on Bodies		
			Reference			(0	c)		
		(a)	(b)	UL	FM	LPCB	VdS	PSB	Others
F3	Smoke detector								
F4	Beam detector								
F5	Smoke detector with integration device								
F6	Flame detector								
F7	Intrinsically safe/ explosion proof detector								
F8	Alarm/ sounder integrated with strobe light for use								
	in conjunction with automatic fire alarm system								
G	Fire Hydrant/ Hose Reel System								
G1	Hose reel unit (incl. hose reel tubing, nozzle and								
	drum)								
G2	Hydrant inlet/ outlet valve								
G3	Check valve								
G4	Pressure reducing valve								
G5	FS inlet/ fireboat inlet								
Н	Fixed Automatically Operated Approved								
	Appliance (Wall/ Ceiling Mounted Type)								
H1	Halogenated Fixed Sprayer Unit								
H2	Clean Agent Fixed Sprayer Unit								
I	Fixed Foam System/ Equipment								
I1	Foam Monitor								
I2	Foam proportioner/ maker								
I3	Foam nozzle								
I4	Foam water nozzle								

Item	System/ Equipment	Manufacturer/	FSD Approval/	Listin	ng Certificat	es/Records/	Documents	issued by Pr	oduct
		model no./ part no.	Acceptance			Certificat	ion Bodies		
			Reference			(	c)		
		(a)	(b)	UL	FM	LPCB	VdS	PSB	Others
I5	Bladder tank								
J	Gas Detection System								
J1	Chlorine gas								
J2	Hydrogen gas								
J3	Ammonia gas								
J4	Electronic gases								
J5	Methane gas								
K	Hand-Operated Approved Appliances						N.A.		
K1	Fire Blanket								
K2	Carbon dioxide fire extinguisher								
К3	Foam fire extinguisher								
K4	Water type fire extinguisher			_					
K5	Halogenated fire extinguisher			_					
K6	Dry chemical fire extinguisher								
K7	Clean agent fire extinguisher								
K8	Wheeled type fire extinguisher								
L	Pressurization of Staircase								
L1	Smoke detector								
L2	Proprietary made fire/ smoke damper								
M	Smoke Extraction Systems								
M1	Smoke detector								
M2	Proprietary made fire/ smoke damper								
N	Sprinkler system								
N1	Sprinkler head							_	

Item	System/ Equipment	Manufacturer/	FSD Approval/	Listir	ng Certificat	es/Records/	Documents i	ssued by Pr	oduct
		model no./ part no.	Acceptance			Certificati	on Bodies		
			Reference			(0	e)		
		(a)	(b)	UL	FM	LPCB	VdS	PSB	Others
N2	Alarm valve								
N3	Accelerator								
N4	Butterfly valve (motorized)								
N5	Flow switch								
N6	Ratio flow controller								
N7	Piping and associated fittings e.g. CPVC piping/								
	fittings								
N8	Vortex inhibitor								
N9	Sprinkler water storage tank other than concrete								
N10	Sprinkler control and indicator panel								
N11	Pressure switch								
O	<b>Ventilation/ Air Conditioning Control System</b>								
O1	Probe type smoke detector								
O2	Ceiling smoke detector								
P	Water Spray System								
P1	Water spray nozzle								
P2	Deluge valve								
Q	<u>Others</u>								

Notes:

- 1. Column (a) must be filled in with details
- 2. Sub-columns should be ticked as appropriate if certificates, records, or documents from the recognized laboratories/organizations are available and appended to the Equipment List.
- 3. Certificates, records, or documents from the recognized laboratories/organizations should adopt the item numbers such as 'A1', 'B1', etc., corresponding to the same of the Equipment List.
- 4. If column (c) is not applicable, reference of approval or acceptance letter of Fire Services Department should be entered.



防火通告第十五號 FIRE PROTECTION NOTICE NO. 15

消防裝置及設備的產品認可指引 GUIDANCE FOR PRODUCT APPROVAL OF FIRE SERVICE INSTALLATIONS AND EQUIPMENT

### FIRE PROTECTION NOTICE NO. 15

### Guidance for Product Approval of Fire Service Installations and Equipment

### 1. Introduction

- 1.1 Pursuant to Regulation 3 of the Fire Service (Installations and Equipment) Regulations, Cap. 95B, Laws of Hong Kong, all portable equipment, i.e. portable fire extinguishers and fire blankets, shall be approved by the Director of Fire Services before they are allowed to be supplied or sold in Hong Kong.
- 1.2 Other fire service installations and equipment, e.g. sprinkler system/equipment, fire alarm installation/equipment which are required by the Director of Fire Services for the protection of buildings shall be of an accepted type. However, if a piece of equipment has been listed and published by some renowned and well-established Product Certification Bodies<sup>(see remark)</sup> for public access, it is deemed to be accepted by this Department subject to such equipment and its installation being in conformity with all relevant local requirements. For details, please refer to Fire Services Department Circular Letter No. 1/2007 at < http://www.hkfsd.gov.hk/home/eng/circular.html >.
- 1.3 A list of fire service installations and equipment requiring approval / acceptance is at Appendix I.

### 2. Application Procedure

- 2.1 All applications for approval / acceptance of fire service installations and equipment, other than the listed equipment as mentioned in paragraph 1.2 above, shall be submitted to the Investigation and Research Section of the Licensing and Certification Command for processing and evaluation.
- 2.2 Every application shall be accompanied by supporting documents indicating that the installation/equipment under application has been tested to an acceptable national/international test standard. Such documents include:-
  - 2.2.1 full test report with cover page, test records, and test conclusion (an original test report/its copy certified true by respective laboratory and an additional photocopy of it);
  - 2.2.2 technical details and drawings; and
  - 2.2.3 product catalogue, etc.
- 2.3 In order to facilitate evaluation on the product under application, test reports or product certificates submitted shall be in Chinese or English. Test reports shall be issued by a testing organisation currently recognised by the Fire Services Department.
- 2.4 Test report issued by a recognised testing organisation is only valid for 10

years from the date of issue. Upon its expiry, a new test report will be required. This department will not accept expired test report for application.

### 3. Processing of Application

- 3.1 Applications are generally dealt with on a first come, first served basis.
- 3.2 All applications will be processed as soon as possible. Under normal circumstances, processing of applications for portable equipment (i.e. portable fire extinguishers and fire blankets) and other fire service installations will not exceed 15 and 45 working days respectively.
- 3.3 A letter of approval / acceptance will be issued to the applicant if all conditions for product approval are met or otherwise the applicant will be informed of any discrepancy noted in the submitted documents.

### 4. Recognition of Testing Organisation

- 4.1 Only test report issued by a recognised testing laboratory shall be accepted by this Department. Recognition of the testing laboratories may be granted via the following ways: -
  - 4.1.1 seeking accreditation from the Hong Kong Accreditation Service (HKAS) under the Hong Kong Laboratory Accreditation Scheme (HOKLAS); or
  - 4.1.2 seeking accreditation from one of the overseas laboratory accreditation bodies (see Appendix II) which has signed mutual recognition agreements with the HKAS.
- 4.2 However, before the acceptance of a testing laboratory by this Department, the Accreditation Certificate together with the Scope of Accreditation issued by one of the accreditation bodies should be submitted to this Department for verification.

### 5. Enquiry

For further information and advice regarding the approval of fire service installations and equipment, please contact:-

Licensing and Certification Command (Investigation & Research Section) 5/F, Fire Services Headquarters Building 1, Hong Chong Road Tsim Sha Tsui East Kowloon

Tel. No. : (852) 2733 7827 / 2733 7557

Fax. No. : (852) 2367 3631

E-mail: lcpolic2@hkfsd.gov.hk

### Remark

Product Certification Bodies (PCBs): mean (i) overseas laboratory/organization, such as Loss Prevention Certification Board (LPCB), Underwriters Laboratory Inc.(UL), FM Approvals (FM), VdS Schadenverhutung GmbH (VdS), TUV SUD PSB (PSB), etc., that provides product certification service with Listing Scheme/Service and is being accredited by overseas accreditation bodies; or (ii) local laboratory/organization that provides product certification service with Listing Scheme/Service and is being accredited by the Hong Kong Accreditation Service through the Hong Kong Certification Body Accreditation Scheme. For details of the listed products, you may refer to the following websites:-

- i) LPCB < http://www.brecertification.co.uk >
- ii) UL < http://www.ul.com >
- iii) FM < http://www.fmglobal.com >
- iv) VdS < http://www.vds.de >
- v) TUV SUD PSB < http://www.tuv-sud-psb.sg >

### Fire Service Installations and Equipment Requiring FSD Approval

System		Components
1.	Automatic Actuating Device	<ul> <li>i) Emergency Exit Device</li> <li>ii) Electromagnetic Door Releasing Device to be used in conjunction with Automatic Fire Alarm System</li> </ul>
2.	Automatic Fixed Installation other than Water	<ul><li>i) Fixed Carbon Dioxide Installation</li><li>ii) Fixed Clean Agent Installation</li><li>iii) Fixed Dry Chemical Installation</li></ul>
3.	Automatic Fire Alarm System	<ul> <li>i) Fire Alarm Control Panel</li> <li>ii) Heat Detector</li> <li>iii) Smoke Detector</li> <li>iv) Beam Detector</li> <li>v) Smoke Detector with Integration Device</li> <li>vi) Flame Detector</li> <li>vii) Intrinsically Safe / Explosion Proof Detector</li> <li>viii) Alarm/Sounder Integrated with Strobe Light</li> </ul>
4.	Manual Fire Alarm System	i) Manual Call Point     ii) Alarm Bell
5.	Automatic Fixed Installation using water	i) Deluge System  a. Deluge Valve  b. Sprinkler Head  c. Alarm Valve  ii) Drencher System  iii) Water Spray System  a. Water Spray Nozzle  b. Deluge Valve  iv) Sprinkler System  a. Sprinkler Head  b. Alarm Valve  c. Accelerator  d. Butterfly Valve (motorised)  e. Flow Switch  f. Ratio Flow Controller  g. Piping and associated fittings  e.g. CPVC Piping/Fittings  h. Vortex Inhibitor  v) Water Mist System

System		Components
6.	Fire Hydrant/Hose Reel System	<ul> <li>i) Hose Reel Unit (including Hose Reel Tubing, Nozzle and Drum)</li> <li>ii) Hydrant Inlet/Outlet Valve</li> <li>iii) Check Valve</li> <li>iv) Pressure Reducing Valve</li> <li>v) FS Inlet/Fireboat Inlet</li> </ul>
7.	Fixed Automatically Operated Approved Appliance (Wall/ Ceiling Mounted Type)	Fixed Sprayer Unit
8.	Fixed Foam System/ Equipment	<ul> <li>i) Foam Monitor</li> <li>ii) Foam Proportioner/Maker</li> <li>iii) Foam Nozzle</li> <li>iv) Foam Water Nozzle</li> <li>v) Bladder Tank</li> </ul>
9.	Gas Detection System	<ul> <li>i) Chlorine Gas</li> <li>ii) Hydrogen Gas</li> <li>iii) Ammonia Gas</li> <li>iv) Electronic Gases</li> <li>v) Methane Gas</li> </ul>
10.	Fire Blanket	,
11.	Fire Extinguisher	<ul> <li>i) Portable Fire Extinguisher</li> <li>a. Carbon Dioxide</li> <li>b. Clean Agent</li> <li>c. Dry Powder</li> <li>d. Foam</li> <li>e. Water</li> <li>f. Miscellaneous</li> <li>ii) Wheeled Type Fire Extinguisher</li> </ul>
12.	Fire Retardant Solution	<ul> <li>i) For wall and ceiling linings in accordance with Class 1 or Class 2 of BS 476: Part 7</li> <li>ii) For Curtains and Drapes in accordance with Type B requirements of BS 5867: Part 2</li> </ul>
	Flammable Liquid Dispensing Device for Petrol Filling Station Flammable Liquid Storage Tank	
	for Petrol Filling Station	Control low wystom stores as touly sthem them are not
13.	Other	Sprinkler water storage tank other than concrete

This list is by no means exhaustive, registered FSI contractors have the responsibilities of checking with the Fire Service Installations Division or the Investigation and Research Section of the Licensing and Certification Command to see whether or not the equipment/installation requires prior approval before use.

### **Overseas Laboratory Accreditation Bodies**



OAA (Argentina)



NATA (Australia)



BMwa (Austria)



INMETRO (Brazil)



SCC (Canada)



<u>CAEAL</u> (Canada)



ONARC (Cuba)



<u>CAI</u> (Czech Republic)



<u>DANAK</u> (Denmark)



NLAB (Egypt)



EAK (Estonia)



COFRAC (France)



**FINAS** 

(Finland)





ESYD (Greece)



NABL (India)



KAN (Indonesia)



ISRAC (Israel)



INAB (Ireland)





**KOLAS** 



(Latvia)

LATAk



<u>LA</u> (Lithuania)



DSM (Malaysia)



ema (Mexico)







AND DO THE REAL



CNAS BI



PCA

 $\frac{RvA}{(Netherlands)}$ 

IANZ (New Zealand)

NA (Norway)

CNAS (People's Republic of China)

BPSLAS (Philippines)

PCA (Poland)



acreditação SAC-SING











<u>IPAC</u> (Portugal)

















SAS

(Switzerland)



TAF (Taiwan,China)



TISI (Thailand)



TURKAK (Turkey)



<u>UKAS</u> (UnitedKingdom)



(Up-to-date information on overseas laboratory accreditation bodies is provided on the internet in the HKAS's website at < http://www.itc.gov.hk/en/quality/hkas/hoklas/agreement.htm >)