

## SOUNDPROOFING SANDWICH PANEL (Effective SSP)

### IMPACT SOUND ABSORBENT PLYWOOD COMPOSITE PANELS



Effective SSP HL

Effective SSP CR

PRODUCT NAME	PANEL THICKNESS	BARRIER MATERIAL	DENITY	PANEL WEIGHT (KG/M2)	NOISE REDUCTION RW CURVE @ 125 Hz.
Effective SSP HL 22 SOUND PANEL HL (8-6-8) 1,20 X 2,48 M	22 MM	MASS LOADED HEAVY LAYER	1778 Kg/m3	20,06	19,3
Effective SSP HL 18 SOUND PANEL HL (6-6-6) 1,20 X 2,48 M	18 MM	MASS LOADED HEAVY LAYER	1778 Kg/m3	17,09	19
Effective SSP HL 12 SOUND PANEL HL (4-4-4) 1,20 X 2,48 M	12 MM	MASS LOADED HEAVY LAYER	1778 Kg/m3	12,03	16,2
Effective SSP CR 21 SOUND PANEL CR (8-5-8) 1,20 X 2,48 M	21 MM	CORK RUBBER	650 Kg/m3	14,03	22,1
Effective SSP CR 17 SOUND PANEL CR (6-5-6) 1,20 X 2,48 M	17 MM	CORK RUBBER	650 Kg/m3	12,08	18,1
Effective SSP CR 11 SOUND PANEL CR (4-3-4) 1,20 X 2,48 M	11 MM	CORK RUBBER	650 Kg/m3	7,55	15,5

### Effective SSP CR (Cork Rubber) :

SSP CR is an ideal product for impact sound insulation. It can be used under parquet, laminate, carpet and ceramic tiles. Reduces unwanted noise in your interior - on the walls of your walls and cabin. It offers pleasant comfort.

### Effective SSP HL (Heavy Layer) :

SSP HL is a high performance foil faced mass-loaded vinyl noise barrier offering superior acoustic transmission loss and upgraded fire resistance. interior - on the walls of your walls and cabin.

### Production and Office Address

İstim Sanayi Sitesi / İstasyon Mah.  
Yarış Çıkmazı Sk. No : 3 İç Kapı : 3  
Tuzla / İstanbul / TÜRKİYE

E-mail: [info@noisedampingsolution.com](mailto:info@noisedampingsolution.com)



### Product Testing ( BARRIER MATERIAL)

Tensile strength	(ISO 1798) approx. 0.6 N/mm <sup>2</sup>
Elongation at break	(ISO 1798) approx. 20%
Density	650 - 750 kg/m <sup>3</sup>
Temperature range	-30° to 80°C
Heat transmission coefficient (DIN 52612)	0.06 m <sup>2</sup> K/W for 5 mm
Flammability rating	(EN 13501) Efl

Impact sound improvement: (ISO 140-8/ISO 717-2)

ΔL<sub>w</sub> = 29dB with carpet

ΔL<sub>w</sub> = 20dB under 8 mm laminate flooring

ΔL<sub>w</sub> = 19dB under 13 mm parquetry

ΔL<sub>w</sub> = 18dB under 16 mm solid parquetry

ΔL<sub>w</sub> = 18dB under 9mm tiles

### Product Testing ( BARRIER MATERIAL)

#### ACOUSTIC PERFORMANCE

Frequency (Hz)	4 MM	6MM
100	13.3	18.9
125	16.2	19.3
160	22.6	22.6
200	20.5	23.4
250	22.3	25.2
315	23.2	26.1
400	25.0	28.1
500	26.0	29.3
630	28.6	30.5
800	30.1	32.3
1000	32.7	34.9
1250	33.4	35.7
1600	34.1	36.4
2000	35.9	38.4
2500	37.6	40.4
3150	39.7	42.7
4000	42.1	45.7
5000	45.0	48.7
R <sub>w</sub>	31	34
STC	31	34

FREQUENCY (Hz)	R
125	23,7
250	24,2
500	29,2
1000	35,4
2000	43,4
4000	54,6
Weighted Sound Reduction Index A, $R_A$	33
Sound Reduction Index, $R_w$	34

## TECHNICAL SPECIFICATIONS

TECHNICAL DATA	Test method	VSP-HPI	Unit
Density	-	2.010	Kg/m3
Tensile strength	NT-67	>30	N/50mm
Elongation	NT-67	> 500	%
Cold flexibility	EN 1109	-20	°C
Tear Strength (nail)	EN 12310-1	153-235	N/50 mm
Fire class	UNE-EN 13501-1	Bs2d0	-
Vapour water resistant factor	UNE-EN 1931 met B	$\mu \geq 1806$	-
Water absorption (24h a 23°C)	ISO 62 met 1	0,003	%
Shore hardness A	NT 74	30 $\pm$ 10	-

# Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>F.A.MOURIKIS</b>	
<b>Address</b>	Kalamki, Corinth, Postal code 20 003, Greece	
<b>Type</b>	Plywood And Other Wood Boards	
<b>Description</b>	Marine plywood constructed from Okoume and/or Sapelli, with or without decorative outer veneers bonded with melamine urea formaldehyde (MUF) adhesive	
<b>Trade Name</b>	Mourikis Okoume Marine Plywood & Mourikis Sapelli Marine Plywood	
<b>Application</b>	Marine, offshore and industrial use for the construction of pleasure craft, small craft and other constructions	
<b>Specified Standard</b>	BS 1088:2018 BS EN 310:1993 BS EN 314-1:2004 BS EN 314-2:2004 BS EN 1246-3:2016	
<b>Ratings</b>	Durability of Okoume (to BS1088:2003) Panel thickness (mm):  Veneer thickness (mm):	Non-durable 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 18, 20, 22, 25, 30, 35, 40, & 45 1.1, 1.5, 2.2, & 3.0



**Mayur Jogia**

Lead Specialist - Non-Metallics to Lloyd's Register EMEA  
A member of the Lloyd's Register group

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# Type Approval Certificate

Durability of Sapelli (to BS 1088:2003)	Moderately-durable
Panel thickness (mm):	3, 4, 5, 6, 9, 12, 15, 18, 20, 22 & 25
Veneer thickness (mm):	1 & 1.5

## Other Conditions

Irrespective of the durability of the outer veneer, the overall classification of the panel will be that of non-durable in the case of Okoume or mix Okoume and Sapelli, and moderately durable in the case of Sapelli

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. and its supplementary Type Approval Terms and Conditions form part of this Certificate.



**UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND  
CERTIFICATE OF TYPE APPROVAL**

(EC Certificate of Type Examination-2014/90/EU Directive Module B)

**Certificate Number: 1121/EWC MED0439TE**

Applicant:- Pyrotek Pty Ltd

Manufacturer:- Pyrotek CZ s.r.o

Address:- 147-149 Magowar Road, Girraween  
2145 NSW, Australia

Dolni Lhota 203, Blansko, Ceska republic,  
67801

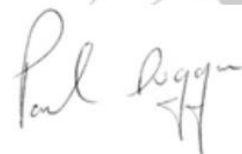
This is to certify that the applicant has submitted details of a surface material with Low flame-spread characteristics and low smoke and toxic fume emissions (Item Number MED3.18a: decorative veneer), known and designated as:-

**"Quadzero™dBX"**

having the technical specification given in the schedule of equipment on this certificate which has been tested and complies with the recommended criteria given in the following methods, published by the International Maritime Organisation, and which are contained in the relevant parts of the International Code for Application of Fire Test Procedures (FTP Code) namely:-

- IMO Resolution MSC 307(88) Annex 1 Part 5 and Annex 2.
- IMO Resolution MSC 307(88) Annex 1 Part 2 and Annex 2.
- Smoke and Toxicity is satisfied by meeting the total heat release ( $Q_t$ ) and peak heat release ( $Q_p$ ) as stated in IMO Fire Test Procedures Code, Annex 2 Section 2.2.

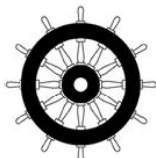
This certificate is issued on behalf of the Maritime and Coastguard Agency (MCA). The system complies with the relevant international testing standards under which legislation (The Merchant Shipping Marine Equipment) Regulations 1999 and also the Marine Equipment Directive 2014/90/EU as amended, the certificate is issued.



P Duggan  
Manager  
Warringtonfire  
Holmesfield Road  
Warrington WA1 2DS

Date of Issue: 20<sup>th</sup> January 2015  
Date of amendment: 7<sup>th</sup> November 2016  
Date of amendment: 30<sup>th</sup> January 2019  
Date of Amendment: 25<sup>th</sup> April 2019  
This certificate is valid until: 19<sup>th</sup> January 2020

**This certificate is not valid for equipment, the design or manufacture  
of which, has been varied or modified from the specimens tested.**



## Certificate of Type Approval Schedule of Equipment

The applicant declared that the following comprises an accurate description of the system type to which this certificate applies.

General description		Glass cloth material adhered to a rubber type material
Product reference		<b>"Quadzero™dBX"</b>
Name of manufacturer		Pyrotek
Thickness		2.5mm to 4mm nominal
Weight per unit area		5kg/m <sup>2</sup> to 8kg/m <sup>2</sup> nominal
Facing	Generic type	Aluminium glass cloth
	Product reference	<b>See Note 1 Below</b>
	Name of manufacturer	Pyrotek
	Thickness	<b>See Note 1 Below</b>
	Weight per unit area	<b>See Note 1 Below</b>
	Colour reference	"Silver"
	Flame retardant details	<b>See Note 2 Below</b>
Adhesive	Generic type	<b>See Note 1 Below</b>
	Product reference	<b>See Note 1 Below</b>
	Name of manufacturer	<b>See Note 1 Below</b>
	Colour reference	<b>See Note 1 Below</b>
	Application rate	<b>See Note 1 Below</b>
	Application method	<b>See Note 1 Below</b>
	Flame retardant details	<b>See Note 3 Below</b>
Thermoplastic barrier	Curing process	<b>See Note 1 Below</b>
	Generic type	<b>See Note 1 Below</b>
	Product reference	<b>"Quadzero™dBX"</b>
	Composition details	<b>See Note 1 Below</b>
	Name of manufacturer	<b>See Note 1 Below</b>
	Thickness	<b>See Note 1 Below</b>
	Weight per unit area	5kg/m <sup>2</sup> to 8kg/m <sup>2</sup> nominal
Colour reference	"Dark Grey"	
Brief description of manufacturing process		<b>See Note 1 Below</b>

Note 1. The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

Note 2. The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

Note 3. The sponsor was unable to provide this information.

The under noted documents have been approved for compliance with the relevant requirements of International Conventions and European Union Legislation for the EC Type examination of Marine Equipment for use on Ships Registered in the European Economic Area.

### **Approved Documents - Test Reports**

- (1) WF 344504 (dated October 2014). Surface Flammability test to IMO Resolution MSC 307(88) Annex 1 Part 5 and Annex 2.
- (2) WF 399512 (Issue 2, dated 13<sup>th</sup> June 2018). Surface Flammability test to IMO Resolution MSC 307(88) Annex 1 Part 5.
- (3) WF 377177 (dated 6<sup>th</sup> December 2016). Surface Flammability test to IMO Resolution MSC 307(88) Annex 1 Part 5.
- (4) WF 381223 (dated 17<sup>th</sup> March 2017). Surface Flammability test to IMO Resolution MSC 307(88) Annex 1 Part 5.



Smoke and Toxicity is satisfied by meeting the total heat release ( $Q_t$ ) and peak heat release ( $Q_p$ ) as stated in IMO Fire Test Procedures Code, Annex 2 Section 2.2.

Warringtonfire, Holmesfield Road, Warrington WA1 2DS

Certificate Number: 1121/EWC MED0439TE