Certificate No: LR2527850SS
Issue Date: 10/03/2025
Expiry Date: 09/03/2030

Certificate of Type Approval

This is to certify that the product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	**Survitec Group Ltd.**
Address	Kingsway, Dunmurry, Belfast, BT17 9AF, United Kingdom
Type	Liferafts
Description	25 person Davit Launched Inflatable Liferaft
Trade Name	RFD TOYO MkIV 25 DL
Specified Standard	IMO Resolution MSC.81 (70), as amended

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified 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 attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Lijo Thomas

Lijo Thomas

Fire & Safety - Senior Surveyor to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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DESIGN APPRAISAL DOCUMENT

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The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal and an Amendment of Certificate Number SAS S190009

APPROVAL DOCUMENTATION

Design Change Sheet DCS9005, Introduction of Survia MkIV Liferaft in place of Surviva MKIII Liferaft in RFD Toyo MED approved product range, dated 14/11/2008.

Design Change Sheet DCS0110, Introduction of a new Daniamant RL6 lighting system as an alternative lighting system on Marine MK4 SOLAS liferafts, dated 10/12/2012.

Drawing No.	Rev.	Date.	Description.
D51419	1	05/10/2009	General Arrangement/Design Data – RFD Toyo MkIV 25DL
D50165s01	2	27/02/2008	Leaflet, Immediate Action
D20879	3	16/04/2009	Poster, Davit Launching Procedure
D43409	13	24/09/2018	Instructions Installation & Servicing Marine Liferafts

Configuration: “RFD Toyo” liferafts consist of a standard SOLAS approved “Surviva MK IV” liferaft fitted with Leafield inflation system comprising approved pressure relief valve; A10, non- return valve and inlet valve that may be used with Asahi operating head and Toyo Cylinders. The liferaft is to be stowed in Toyo containers.

TEST REPORTS

Report No.	Date	Title or Description
91/08	18/11/2008	30m Drop test of the RFD Surviva MkIV 25DL Toyo Liferaft as witnessed by a LR surveyor
14/08	12/06/2008	36m Drop test of RFD Surviva Marine MKIV liferafts 6TO, 16DL & 25DL as witnessed by surveyor acceptable to LR
01/13	29/11/2012	46m Drop test of 25DL Surviva Marine MKIV as witnessed by a LR surveyor
23/10	03/03/2011	Jump test of RFD of 25DL Surviva MKIV Liferafts weight of dummy 83kg as witnessed by a LR surveyor
96/08	19/11/2008	Weight test RFD Surviva MkIV Toyo Liferafts (6, 10, 16, 20 & 25TO & 25DL) as witnessed by a LR surveyor
MSC/Circ.980	21/11/2014	Towing test of RFD-Toyo 25 DL MKIV as witnessed by a LR surveyor
92/10	22/02/2011	Towing test of Marine MKIV Liferafts (6, 10, 16 & 20TO & 25DL) as witnessed by a LR surveyor

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46/08	14/08/2008	Mooring out test of RFD Surviva MKIV Liferafts as witnessed by surveyor acceptable to LR
09/08	29/07/2008	Liferaft painter system test of RFD Surviva MKIV Liferafts (6TO & 25DL) as witnessed by surveyor acceptable to LR
DM-QTD 2020-093 Rev 1	March 2019	Qualification Test Document (QTD) Report of painter line cord, which serves as the Weak Link Strength Test supported by 09/2008
38/10	06/12/2010	Loading and seating test of Marine MKIV Liferaft Rages (12, 16, 20, 25TO & DL) as witnessed by a LR surveyor
27/2008	14/08/2008	Boarding test of RFD Surviva MKIV Liferafts (6TO, 16DL & 25DL) as witnessed by surveyor acceptable to LR
39/10	06/12/2010	Boarding test of RFD Surviva MKIV Liferafts Rages (20 & 25TO&DL) as witnessed by a LR surveyor
28/2008	14/08/2008	Closing arrangement test of RFD Surviva MKIV Liferafts (6TO, 16DL & 25DL) as witnessed by surveyor acceptable to LR
25/2008	14/08/2008	Stability test of RFD Surviva MKIV Liferafts (6TO, 16DL & 25DL) as witnessed by surveyor acceptable to LR
40/10	06/12/2010	Stability test of RFD Surviva MKIV Liferafts Rages (12, 16, 20, 25TO & DL) as witnessed by a LR surveyor
26/2008	14/08/2008	Manoeuvrability test of RFD Surviva MKIV Liferafts (6TO, 16DL & 25DL) as witnessed by surveyor acceptable to LR
41/10	25/11/2010	Manoeuvrability test of RFD Surviva MKIV Liferafts (12, 16, 20, 25TO & DL) as witnessed by a LR surveyor
24/2008	14/08/2008	Swamp test of RFD Surviva MKIV Liferafts (6TO, 16DL & 25DL) as witnessed by surveyor acceptable to LR
44/2008	14/08/2008	Canopy closure test of RFD Surviva MKIV Liferafts as witnessed by surveyor acceptable to LR
21/2008	14/08/2008	Buoyancy of float free liferafts of RFD Surviva MKIV Liferafts (6TO, 16DL & 25DL) as witnessed by surveyor acceptable to LR
42/10	06/12/2010	Damage test of RFD Surviva MKIV Liferafts Rages (12, 16, 20, 25TO & DL) as witnessed by a LR surveyor
43/09	12/06/2009	Ambient inflation test RFD Toyo MkIV as witnessed by surveyor acceptable to LR
02/09	08/01/2009	Hot inflation test of RFD Toyo Surviva MkIV 6TO & 25DL Liferaft as witnessed by a LR surveyor
04/09	22/01/2009	Cold inflation test of RFD Toyo Surviva MkIV 25DL liferaft as witnessed by surveyor acceptable to LR
48/08	15/08/2008	Pressure test of RFD Surviva MKIV Liferafts as witnessed by surveyor acceptable to LR
10/08	07/08/2008	Detailed inspection of RFD Surviva MKIV Liferafts as witnessed by surveyor acceptable to LR
64/10	-	Lifting components strength test of Marine MKIV Liferafts 12, 16, 20 & 25DL as witnessed by a LR surveyor

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47/2008	14/08/2008	Impact test of RFD Surviva MKIV Liferafts (16 & 25DL) as witnessed by surveyor acceptable to LR
60/10	07/12/2010	Impact test of Marine MKIV Liferaft (12, 16, 20 & 25DL) as witnessed by a LR surveyor
62/2008	27/08/2008	3m Drop test of RFS Surviva MKIV Liferafts (16 & 25DL) as witnessed by surveyor acceptable to LR
74/10	23/02/2011	3m Drop test of Marine MKIV Liferaft 25DL as witnessed by a LR surveyor
78/10	30/11/2010	Davit launched liferaft boarding test of Marine MKIV 25DL as witnessed by a LR surveyor
82/10	09/12/2010	Davit launched inflatable liferaft- Strength test Marine MKIV Liferafts 25DL as witnessed by a LR surveyor
86/10	16/02/2011	Cold overload test of Marine MKIV Liferaft 25DL as witnessed by a LR surveyor
90/10	09/12/2010	Lowering abrasion test of Marine MKIV Liferafts 25DL as witnessed by a LR surveyor
40/2008	10/07/2008	Wind velocity test of Surviva MKIV Liferafts (8TO & 25DL) as witnessed by surveyor acceptable to LR
60/2008	27/08/2008	Seam strength test of RFD Surviva MKIV Liferafts as witnessed by surveyor acceptable to LR
61/2008	27/08/2008	Seam strength test of RFD Surviva MKIV Liferafts as witnessed by surveyor acceptable to LR
0393	03/10/2010	Material test for Verification of Parameters of Rubber Coated Nylon Fabric to MSC 81(70)

CONDITIONS OF CERTIFICATION

1. Liferaft specifications:

SOLAS Pack	Container size/type	Stowed Height	Stowed Weight	Laden Weight	Towing Forces
A-pack	L	30 m	198kg	2260.50kg	0.92kn @ 2 kts 3.04kn @ 3 kts
B-pack	L	30 m	143kg	2205.50kg	0.92kn @ 2 kts 3.04kn @ 3 kts

2. The liferaft maximum stowage height of 46m above the waterline.
3. Rigid containers for liferafts to be launched by a launching appliance shall be so secured that the container or parts of it are prevented from falling into the sea during and after inflation and launching of the contained liferaft.
4. When the weight of the liferaft exceeds 185 kg, it shall not be stowed in a position providing for easy side-to-side transfer. The liferafts container shall be marked as required by the LSA Code Regulation IV/4.2.6.3 with the makers name or trade mark, serial number, approving authority, number of persons it is approved to carry, SOLAS, the type of emergency pack enclosed, date when last serviced, length of painter, mass of the packed liferaft, if greater than 185 kg, maximum stowage height and launching instructions.

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5. The liferaft shall be marked as required by the LSA Code Regulation IV/4.2.7.1 with the makers name or trade mark, serial number, date of manufacture, approving authority, name and place of last servicing station, and the number of persons it is approved to carry.
6. Provision shall be made for marking each liferaft as required by the LSA Code Regulation IV/4.2.7.2 with the name and port of registry of the ship to which the liferaft is supplied, in such a form that the ship identification can be changed at any time without opening the container.
7. Instructions on how to survive complying with IMO Resolution A.657(16) are to be provided on board the liferaft.
8. Detailed instructions for use, maintenance and installation of the liferaft complying with SOLAS Regulations III/35 and III/36 and also instructions for use and maintenance of the liferaft equipment shall be provided to each purchaser and be available on board.
9. **Installation on board:** The on-board arrangements and installation of the liferaft are not part of this design appraisal and shall be to the satisfaction of the attending Surveyor.
10. The liferaft and its equipment shall be kept in good working order at all times and checked at regular intervals according to the manufacturer's instructions and SOLAS requirements.
11. All equipment installed on board the liferaft is to be of an approved type as required by SOLAS and the LSA Code as applicable.
12. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
13. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5.
14. Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81 (70), Part 2 and each item, batch, or lot be delivered with an LR Certificate of SOLAS Production Testing issued by the attending LR Surveyors following their witness of the tests. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration.
15. Should a change of Place of Production from the stated on the application form be required, i.e. where the stages of manufacture/assembly/testing of this product takes place, the new Place of Production is to be advised to us prior to the change taking place. The updated notification about the Place of Production is required for this Approval to be maintained.

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Lijo Thomas
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s)

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