



## 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.

<b>Manufacturer</b>	<b>Daoming Optics &amp; Chemical Co.,Ltd</b>
<b>Address</b>	No.001 Yingbin Avenue, No.3, Xiangzhu Industrial Park, Xiangzhu Town, Yongkang City, jinhua City, Zhejiang, 321313, China
<b>Type</b>	Retro-Reflective Material
<b>Description</b>	Retro-Reflective Sheeting
<b>Trade Name</b>	Class II "DM1101A"
<b>Specified Standard</b>	IMO Res. MSC.481(102)

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**

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



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Certificate No: LR2086295SS-03  
Issue Date: 16/12/2024  
Expiry Date: 15/05/2029  
Reference: UKITSO/LSA/TA/LT/ TSO/24-018786/PRJ11100459155

## DESIGN APPRAISAL DOCUMENT

### **ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2086295SS-03**

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 is amendment of certificate No : LR2086295SS-02

#### **APPROVAL DOCUMENTS**

<b><u>Drawing Title</u></b>	<b><u>UDoc. No</u></b>	<b><u>UDate</u></b>
Technical Specification	Q/ZDM 06 – 2016	23/08/2016
Product Structure	DM1101A-001	24/03/2016

#### **TEST REPORTS**

DM1101A Test Report No 2021052 conducted at Wuhan testing Centre of Marine Life Saving Appliance, in accordance with IMO Res. MSC.481(102) dated 22/09/2021.

#### **CONDITIONS OF CERTIFICATION**

1. The material shall be marked and identified as required by the paragraph 1.2.2.9 of LSA code and other applicable regulations
2. Approval of this material is only applicable to its use when applied to Life-Saving Appliance as defined by the applicable Regulation stated on Page 1 of this Certificate
3. When fitting retroreflective material on life saving appliances, guidance may be taken in accordance with examples shown in Annex 1 of IMO Resolution IMO Res. MSC.481(102).
4. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply
5. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.
6. 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
7. Should a change of Place of Production from that stated below be required i.e., where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

#### **PLACE OF PRODUCTION**

Zhejiang Longyou Daoming Optics & Chemical Co., Ltd  
No.7, Xingye Road, Chengnan Industrial New City,  
Donghua Street, Longyou County,  
Quzhou City, Zhejiang  
People's Republic of China

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**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2086295SS-03**

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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