

## CERTIFICATE OF FIRE 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>	Deansteel Manufacturing Company
<b>Address</b>	111 Merchant Street San Antonio Texas 78204-1496 United States of America (USA)
<b>Type</b>	A-60 WINDOW (STANDARD FIRE TEST)
<b>Description</b>	Fire Resisting Window - Type: "DS WD A-60"
<b>Specified Standard</b>	IMO Fire Test Procedures Code, Annex 1, Part 3

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.

Date of issue	29 May 2003	Issued by	Lloyd's Register of Shipping, London
Expiry date	28 May 2008		
Certificate No.	SAS F030203	Signed	
Sheet No	1 of 2	Name	J.D. Burr Marine Support Group London

**Note:**

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 of any modification or changes to the equipment in order to obtain a valid Certificate.

Page 2 of 2
Document number SAS F030203
Issue number 1

### DESIGN APPRAISAL DOCUMENT

Date 29 May 2003	Quote this reference on all future communications MSG/STAT/DCG/FITA/WM
---------------------	---

#### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F030203

This Design Appraisal Document forms part of the Certificate.

#### APPROVAL DOCUMENTATION

Southwest Research Institute (SWRI) San Antonio, Texas, USA, Test Report No. 01.06213.01.001a, dated March 2003.

#### CONDITIONS OF CERTIFICATION

1. Maximum clear opening width: 1016mm.
2. Maximum clear opening height: 1524mm.
3. Glass panel of: 45mm thick Swissflam identified as a layer of Climalit SF30-N2, Swissflam 30 N2 and Securit Planilux 6mm.
4. The window was tested with the internal side exposed to the fire.

#### NOTE

The window satisfied the requirements of the hose stream test in Appendix A.1 of IMO Resolution A.754.

#### PLACE OF PRODUCTION

Deansteel Manufacturing Inc.  
111 Merchant Street  
San Antonio  
Texas 78204-1496  
United States of America (USA)



Capt. J. D. Burr  
Principal Surveyor  
Dry Cargo Ship Section  
Statutory Department  
Marine Support Group



#### 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*