

**CERTIFIED COPY**



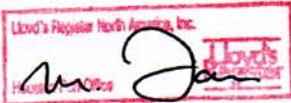
**CERTIFICATE OF FIRE APPROVAL**

This is to certify that

The product(s) detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations for use on offshore installations classed with Lloyd's Register, and for use on offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

**Manufacturer** Deansteel Manufacturing Company  
**Address** 111 Merchant Street  
San Antonio  
Texas 78204-1496  
United States of America (USA)  
**Type** H-60 DOOR SINGLE LEAF HINGED  
**Equipment Description** Fire Resisting Door - Type "Single Leaf Hinge Door, drawing No. 95022"  
**Specified Standard** Resolution A.754 (18).  
UK Department of Energy Hydrocarbon time/temperature relationship

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 4 September 2008 Expiry date 3 September 2013  
Certificate No. SAS F080231 Signed   
Sheet No 1 of 2 Name M. Fariier  
Surveyor to Lloyd's Register EMEA  
A Member of the Lloyd's Register Group

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.

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## DESIGN APPRAISAL DOCUMENT

Date	4 September 2008	Quote this reference on all future communications	LDSS/PAS/FITA/PG/MF
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### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS F080231

This Design Appraisal Document forms part of the Certificate.

#### APPROVAL DOCUMENTATION

Southwest Research Institute, Houston, Texas, USA; test report number 01.11812.01.202(1), dated 5 April 2007.

Drawing number 95022 sheet 1-11, dated 13 March 2006.

#### CONDITIONS OF CERTIFICATION

1. When fitted in a standard bulkhead with at least 76 x 76 x 13 mm stiffeners in way of opening or equivalent.
2. Consisting of a single leaf hinged doors whose clear opening size of 1219 mm wide x 2591 mm high. The door leaves having maximum dimensions of 1206 mm wide x 2580 mm high and overall thickness of 102 mm (4 3/16 inches). The door leaves comprise of 14 gage steel facing and back panel with a insulation core comprising four layers of insulfrax ceramic blanket 25 mm thick (1 inch thick, nominal density 128 kg/m<sup>3</sup>). Insulation is pinned in position.
3. The door is to be attached to the frame using a continuous hinge and be fitted with three latches.
4. The frame is bolted to the bulkhead with 9.5 mm diameter bolts spaced 152 mm (6 inches) from the corner and 203 mm (8 inches) C to C or continuously welded on at least one side.
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.

**NOTE:** This door may be used for A-60 applications.

#### PLACE OF PRODUCTION

Deansteel Manufacture Co.  
111 Merchant Street  
San Antonio,  
Texas  
USA 78204



M. Farrier  
Lead Specialist  
Product Approval Services  
London Design Support Services  
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).*