



CERTIFICATE NO. T.C.285.K1.015
CERTIFICAT N°

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TRANSPORT CANADA
BOARD OF STEAMSHIP INSPECTION
CERTIFICATE OF APPROVAL

TRANSPORTS CANADA
BUREAU D'INSPECTION DES NAVIRES À VAPEUR
CERTIFICAT D'APPROBATION

THIS CERTIFIES THAT THE ITEM SPECIFIED HEREIN HAS BEEN APPROVED BY THE BOARD OF STEAMSHIP INSPECTION, IN ACCORDANCE WITH THE PROVISIONS OF THE CANADA SHIPPING ACT AND REGULATIONS MADE THEREUNDER AND SUBJECT TO CONDITIONS SET FORTH ON THE REVERSE SIDE.

LES PRÉSENTES FONT FOI QUE L'ARTICLE MENTIONNÉ DANS LE PRÉSENT CERTIFICAT A ÉTÉ APPROUVÉ PAR LE BUREAU D'INSPECTION DES NAVIRES À VAPEUR, CONFORMÉMENT AUX DISPOSITIONS DE LA LOI SUR LA MARINE MARCHANDE DU CANADA ET DE SES RÈGLEMENTS D'EXÉCUTION ET SOUS RÉSERVE DES CONDITIONS FIGURANT AU VERSO.

ISSUED TO - TITULAIRE C.C. JENSEN A/S Window Division Løvholmen 13 DK-5700 Svendborg Denmark
ITEM - L'ARTICLE A-60 CLASS WINDOW
DESCRIPTION "A-60" Window 1200 x2200 composed of steel frame incorporating a double glazed unit incorporating nominally 10 mm thick toughened glass separated from Contraflam N2 glass by a 15 mm air cavity. Total glass unit tickness: 48 mm.
REMARKS - REMARQUES 1. This approval is based on tests carried out by Warrington Fire Research Centre Limited on a prototype unit described in the Fire Test Report WARRES No. 112609 dated June 19, 2000. 2. The test complies with IMO Resolution A.754 (18) adopted on November 4, 1993 as described in the FTP Code Part 3, Annex A.1, and SOLAS 74, Regulation II-2//3.2 and 4.1.3, as amended. 3. Conditions of approval are specified on reverse side of this certificate. 4. Schedule attached forms part of this certificate. 5. The validity of this Certificate is contingent upon Det Norske Veritas remaining in force.

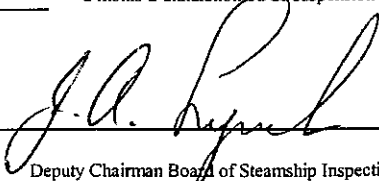
This certificate is not transferable and is effective until
Le présent certificat ne peut pas être cédé et il est valable jusqu'au

March 31, 2009

Unless cancelled or suspended by proper authority,
à moins d'annulation ou de suspension par l'autorité compétente.

March 16, 2004

Date


Deputy Chairman Board of Steamship Inspection
Vice-président du Bureau d'inspection des navires à vapeur



Transport
Canada

Transports
Canada

A8706-23

Canada



SCHEDULE OF APPROVAL

APPLICATION / LIMITATION:

1. Approved for use as an A-60 Window. By analogy, this approval allows approval of windows of the same type, with lesser dimensions in term of the height and width of the same or greater thickness.
2. Approved to be use as an integrated part of fire resisting division of class A-60.
3. Maximum size of the fire technical glazing unit: 1200 mm x 2200 mm (W x H).
4. The window assembly submitted to the fire test was asymmetrical and was tested such that the 10 mm layer of toughened glass was exposed to the heating conditions of the test. As such the results obtained may not be applicable should exposure be from the opposite face to that tested.
5. The window has only been evaluated in respect to fire technical properties (e.g. strength requirements was not considered). Arrangement and location of any window is subject to approval of the attending Marine Safety Inspector.

APPROVAL DOCUMENTATION:

1. Warrington Fire Research Centre Limited Fire Test Report WARRES No. 112609 dated June 19, 2000.
2. Det Norske Veritas EC-Type Examination Certificate No. MED-B-1685 valid until April 04, 2006.
3. C.C. Jensen A/S Drawings No.:

Dated	
VA9100 0701	Rev. 1
VA9100 0701b	Rev. 1
VE0221 1034	Rev. 2
VE0103 7001	-
VD1104 7017	-
VD1901 9001-20	Rev. 1
VE0103 9021-40	Rev. 5
VA9100 0701g	Rev. 3
VE1206 4033	Rev. 1
VD1904 9001-20	Rev. 1
VE0221 1035	Rev. 2
VD1104 7005	-
VE0103 7004-20	-
VA9100 0702	-
VA9100 0703	-
VA9100 0703a	-

MARKING:

1. The product is to be marked with name of manufacturer, type designation, fire technical rating and Transport Canada Certificate of Approval number.
2. Manual (or instruction) for installation, use and maintenance must be provided in both official languages French and English.
3. It is the responsibility of the manufacturer to ensure that the container in which the material is packed is identified with respect to its trade name and manufacturing date.



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SCHEDULE OF APPROVAL (Cont'd)

CONSTRUCTION / INSTALLATION / INSULATION

1. The construction of the "A-60" Window 1200 x2200 must be the same as the prototype tested by the Warrington Fire Research Centre Limited Fire and described in their test report mentioned above.
2. The arrangement, details, and materials of construction of the window assemblies must be in accordance with those shown on the manufacturers drawings listed above, which were endorsed with the stamp of Transport Canada on March 16, 2004 and no departure will be permitted without the consent of the Board of Steamship Inspection.
3. Constructed, installed and insulated with the same components and type of material as used in the prototype unit described in the above referenced test report. The method of installing the "A-60" Window 1200 x2200 shall not deviate from the manufacturer's instructions of installation and to the satisfaction of the attending Transport Canada Marine Safety Inspector.
4. Hose stream test was carried out with satisfactory results according to IMO Res. A.754 (18) Appendix A.I.5.

CONDITIONS:

1. This approval is granted on the understanding that the Board of Steamship Inspection reserves the right to require check tests to be carried out on the "A-60" Window 1200 x2200 at any time and that C.C. JENSEN A/S, will accept the responsibility for informing ship owners, naval architects, shipbuilders and their sub-contractors of the conditions of this approval.
2. The "A-60" Window 1200 x2200 must prove satisfactory in service.
3. This certificate may be suspended or cancelled if the manufacturer deviates from any of the conditions described herein without the prior consent of the Board of Steamship Inspection.

END OF CERTIFICATE