

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.

Manufacturer	Bolton Gate Company Limited
Address	Waterloo Street, Bolton, LANCASHIRE, BL1 2SP, United Kingdom (UK)
Type	A-0 ROLLER SHUTTER
Description	Fire Resisting Roller Shutter
Trade Name	"A-0 Roller Shutter – Fireroll A0"
Specified Standard	IMO Res.MSC.61(67) - (FTP Code) Annex 1 Part 3 IMO MSC/Circ.1120 IMO Res. MSC.307 (88) - (2010 FTP Code) Section 8 IMO Res. MSC.307 (88) - (2010 FTP Code) Annex 1 Part 3

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 North America, Inc. of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form 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.



Bruce McDonald

Technical Authority - Statutory to Lloyd's
Register North America, Inc.
A member of the Lloyd's Register group

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR22224336SF-02

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.

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This Certificate is an Amendment of Certificate Number LR22224336SF

APPROVAL DOCUMENTATION**TEST REPORTS**

VTT Technical Research Centre of Finland, Kivimiehentie, Finland; Fire Test Report No: VTT-S-9021-08 dated 12th November 2008.

Warringtonfire, Holmesfield Road, Warrington, WA1 2DS, United Kingdom, Fire Test Report No. 501639/R Issue 2 dated 10th September 2021.

CONDITIONS OF CERTIFICATION

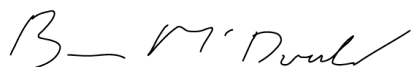
1. Tested with the shutter mounted on the fire risk side for both external motor and manual variants.
2. Tested with the external motor on the fire risk side.
3. When fitted in an approved A0 Class steel bulkhead.
4. Maximum overall shutter size when fitted with external motor: 3427mm wide x 3150mm high x 0.9mm thick.
5. Maximum clear opening size when fitted with external motor : 3380mm wide x 2675mm high.
6. Maximum overall shutter size with manual operation: 2616mm wide x 2745mm high x 0.9mm thick.
7. Maximum clear opening size with manual operation : 2430mm wide x 2310mm high.
8. Roller blind consisting of: 0.9mm thick steel interlocking laths, 51mm wide.
9. Roller blind for external motor applications fixed to a steel barrel of 3mm steel, diameter 133mm, with 20 off M10 steel screws at centres not exceeding 300mm.
10. Roller blind for manual applications fixed to a steel barrel of 1.6mm steel, diameter 102mm, with 10 off 12.7mm self tapping steel screws at centres not exceeding 300mm.
11. Bottom rail of 6mm thick steel screwed to bottom lath with M6 steel screws at centres not exceeding 300mm.
12. Roller shutter guide angles of 3mm steel, end plates of 5mm thick steel for external motor applications, 3mm thick steel for manual applications, all secured with M8 steel screws to the bulkhead at 150mm centres.
13. Steel casing secured to the bulkhead with M8 steel screws at centres not exceeding 300mm.
14. Composition, application and installation of sub components, including any adhesives, seals and any fire retardants, to be maintained in production and use in accordance with originally tested composition formula and method of application and installation, and manufacturer's instructions.

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15. 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.
16. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products, whether manufactured by themselves or their licensee manufacturers, if agreed by Lloyd's Register, are fully compliant with the relevant statutory regulations and Lloyd's Register Class rules as applicable and designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties .

PLACE OF PRODUCTION

Bolton Gate Company Limited
Waterloo Street
Bolton
Lancashire BL1 2SP
United Kingdom (UK)



Bruce McDonald
Technical Authority-Statutory
Lloyd's Register Americas

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).