



CERTIFICATE OF APPROVAL

No CF 5083

This is to certify that, in accordance with
 TS00 General Requirements for Certification of Fire Protection Products
 The undermentioned products of

EUROSPEC

**Stancliffe Street, Millhill, Blackburn
 Lancashire, BB2 2QR.**
Tel: 01254 274100 Fax: 01254 274111

Have been assessed against the requirements of the Technical Schedule(s)
 denoted below and are approved for use subject to the conditions
 appended hereto:

CERTIFIED PRODUCT

**Enduro Ball Bearing Stainless
 Steel Hinges**

TECHNICAL SCHEDULE

**TS24 The Contribution of
 Single Axis Hinges to the
 Fire Resistance of Door
 Assemblies**

Signed and sealed for and on behalf of CERTIFIRE



Sir Ken Knight
 Chairman – Impartiality Committee

Issued: 17th October 2012
 Reissued: 31st July 2015
 Valid to: 4th May 2020

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Enduro Ball Bearing Stainless Steel Hinges

1. This approval relates to the use of Eurospec 'Enduro' ball bearing stainless steel, single axis hinges in contributing to the fire resistance performance of timber based doorsets, as defined by EN 1634-1 or BS 476: Part 22, for periods of 30 integrity (3" x 3" hinges only) and 60 minutes integrity. Subject to the undermentioned conditions, the doorsets will meet the relevant requirements of BS 5588 for doorsets when used in accordance with the provisions therein.
2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section D of the Technical Standards (Scotland) and Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.
3. The hinges are approved on the basis of:
 - i) Initial type testing to EN1935 and EN 1634-1
 - ii) An appraisal against TS24
 - iii) Certification of quality management system to ISO 9001: 2000.
 - iv) Inspection and surveillance of factory production control
 - v) Ongoing audit testing in accordance with TS24 requirements
4. The hinges are all ball bearing stainless steel, single axis, class 13 hinges. Only the hinges detailed below are included in this approval:

Reference	Description
HIN1433P	4" x 3" x 3 mm – Square corner
HIN1433P/R	4" x 3" x 3 mm – Radius corner
HIN1443P	4" x 4" x 3 mm – Square corner
HIN1443P/R	4" x 4" x 3 mm – Radius corner

All hinge models are approved in Satin stainless steel (SSS), Polished stainless steel (PSS) and Brass (PVD) finishes.

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5. This approval relates to the above hinges used with latched or unlatched single-leaf or double-leaf door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores and in timber frames (Code ITT) not less than 44 mm thick for 30 minute applications or 54 mm thick for 60 minute applications. The door frame shall consist of timber with a minimum density of 450kg/m³ for 30 minute applications or hardwood with a minimum density of 650 kg/m³ for 60 minute applications (with leaf to frame gaps not greater than 3 mm), for FD30, E30, EI30 FD60, E60 and EI60 applications. The hinges must be bedded onto a 2 mm thickness of mono ammonium phosphate intumescent material behind both blades.
6. The above hinges may only be fitted to previously tested timber door assemblies when fitted in the manner described in this certificate and when particular aspects of the door assembly are maintained.
7. Hinges shall only be fitted using the fixings supplied by the hinge manufacturer.
8. The doorset, including door frame and associated building hardware, should be either CERTIFIRE approved for the relevant application and classification or the doorset, including door frame and associated building hardware, should have achieved at least 30 minutes (3" x 3" hinges only) or 60 minutes fire resistance when tested, or subsequently assessed to BS 476: Part 22: 1987 or EN 1634-1. In either case regard should be paid to the maximum door mass permitted to be used with the hinge (see classification).
9. The doorset shall be installed in accordance with BS 8214: 2008.
10. The approval relates to on going production. Product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

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Matrix of acceptable doorset types

Class	Approved Door Type						
	IMM	MM	TT	ITT	ITM	ITC	TM
FD20	x	x	x	x	x	x	x
FD30	x	x	x	✓*	x	x	x
FD60	x	x	x	✓	x	x	x
FD120	x	x	x	x	x	x	x
FD240	x	x	x	x	x	x	x
E 20	x	x	x	x	x	x	x
EI 20	x	x	x	x	x	x	x
E 30	x	x	x	✓*	x	x	x
EI 30	x	x	x	✓*	x	x	x
E 60	x	x	x	✓	x	x	x
EI 60	x	x	x	✓	x	x	x
E 90	x	x	x	x	x	x	x
EI 90	x	x	x	x	x	x	x
E 120	x	x	x	x	x	x	x
EI 120	x	x	x	x	x	x	x
E 240	x	x	x	x	x	x	x
EI 240	x	x	x	x	x	x	x

* Approval for 30 minute applications applies only to HIN1433P and HIN1433P/R hinges.

Key:

- ✓ - approved
- x - Not approved



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Scope of Approval:

- All applications apply to glazed and unglazed doorsets.
- Only HIN1433P and HIN1433P/R hinges are approved for use with 30 minute timber based doorsets and these must be bedded onto a 1 mm thickness of mono ammonium phosphate intumescent sheet behind both blades for all 30 minute applications.
- Both blades of all hinges must be bedded onto a 2 mm thickness of mono ammonium phosphate intumescent sheet for all 60 minute applications.
- For 30 minute applications the door frame shall consist of timber with a minimum density of 450 kg/m³ (with leaf to frame gaps less than 3mm).
- For 30 minute applications the door leaf shall be a minimum of 44 mm thick and include timber lippings to the vertical edges having a minimum density of 650 kg/m³.
- For 60 minute applications the door frame shall consist of hardwood timber with a minimum density of 650 kg/m³ (with leaf to frame gaps less than 3mm).
- For 60 minute applications the door leaf shall be a minimum of 54 mm thick and include timber lippings to the vertical edges having a minimum density of 650 kg/m³.

Classification codes

The above approval provides the following classifications:

4	7	6	1	1	4	0	13
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Further Information

Further information regarding the details contained in this data sheet may be obtained from Eurospec Architectural Hardware Limited (Tel: 01254 274100).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).