CERTIFICATE OF APPROVAL
No CF 783

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

HAEFELE GMBH & CO KG

Postfach 12 37, D-72192 Nagold, Germany

Tel: +49 7452 950 Fax: +49 7452 95-200

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	TECHNICAL SCHEDULE
Haefele High Performance Architectural Hinges	**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
WCL Impartiality Committee

Paul Duggan
Certification Manager
Warrington Certification Ltd

Issued: 31st August 2010
Reissued: 2nd March 2016
Valid to: 1st March 2021

This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

CERTIFICATE No CF 783
HAEFELE GMBH & CO KG

HAEFELE GmbH & CO KG High Performance Architectural Hinges

1. This approval relates to the use of Haefele high performance 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 60 minutes and/or 90 minutes integrity as identified later in this document. This approval also relates to the use of Haefele high performance stainless steel single axis hinges in contributing to the fire resistance performance of metallic based doorsets, as defined by EN 1634-1 or BS 476: Part 22, for periods of up to 240 minutes integrity.

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: 2008.
   iv. Inspection and surveillance of factory production control
   v. On-going audit testing in accordance with TS24 requirements

4. The Haefele high performance hinges are stainless steel, single axis ball bearing butt hinges to class 13 with the exception of 926.33.003 which is class 11. The model references approved are shown in the table below:

926.33.003	926.33.203
926.33.102	926.33.286
926.90.203	926.33.287
926.90.280	926.33.302
926.90.281	926.33.303
926.90.290	926.33.403
926.90.213	926.33.486
926.90.227	926.33.503
926.90.237	926.33.603
926.33.202	

Issued: 31st August 2010
Reissued: 2nd March 2016
Valid to: 1st March 2021

This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

CERTIFICATE No CF 783
HAEFELE GMBH & CO KG

HAEFELE GmbH & CO KG High Performance Architectural Hinges

5. This approval relates to all 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 54 mm thick doors. The door frame shall consist of timber with a minimum density of 650 kg/m³ (with leaf to frame gaps not greater than 3 mm), for 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. This approval also relates to hinges reference 926.33.003, 926.33.102, 926.90.203, 926.90.280, 926.90.281, 926.90.213, 926.90.290, 926.90.227 & 926.90.237 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 64 mm thick doors. The door frame shall consist of timber with a minimum density of 620 kg/m³ (with leaf to frame gaps not greater than 3 mm), for FD90, E90 and EI90 applications. The hinges must be bedded onto a 2 mm thickness of mono ammonium phosphate intumescent material behind both blades.

7. This approval also relates to the above hinges used with latched or unlatched single-leaf or double-leaf door assemblies consisting of metallic faced and edged leaves hung within metallic frames (Codes MM and IMM) not less than 44 mm thick.

8. The above hinges may only be fitted to previously tested door assemblies when fitted in the manner described in this certificate and when particular aspects of the door assembly are maintained.

9. Hinges shall only be fitted using the fixings supplied by the hinge manufacturer.

10. 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 the relevant fire resistance performance 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 classifications).

11. Timber based doorsets shall be installed in accordance with BS 8214: 2008.

12. The approval relates to on-going production. The 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.

Issued: 31st August 2010
Reissued: 2nd March 2016
Valid to: 1st March 2021

This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

CERTIFICATE No CF 783
HAEFELE GMBH & CO KG

HAEFELE GmbH & CO KG High Performance Architectural Hinges

Matrix of acceptable doorset types and fire resistance periods for 926.33.003, 926.33.102, 926.90.203, 926.90.280, 926.90.281, 926.90.213, 926.90.290, 926.90.227 & 926.90.237 hinges:

	Approved Door Type					
Class	**IMM**	**MM**	**TT**	**ITT**	**ITM**	**ITC**
FD20	✓	✓	✗	✗	✗	✗
FD30	✓	✓	✗	✗	✗	✗
FD60	✓	✓	✗	✓	✗	✗
FD90	✓	✓	✗	✓*	✗	✗
FD120	✓	✓	✗	✗	✗	✗
FD240	✓	✓	✗	✗	✗	✗
E 20	✓	✓	✗	✗	✗	✗
EI 20	✓	✓	✗	✗	✗	✗
E 30	✓	✓	✗	✗	✗	✗
EI 30	✓	✓	✗	✗	✗	✗
E 60	✓	✓	✗	✓	✗	✗
EI 60	✓	✓	✗	✓	✗	✗
E 90	✓	✓	✗	✓*	✗	✗
EI 90	✓	✓	✗	✓*	✗	✗
E 120	✓	✓	✗	✗	✗	✗
EI 120	✓	✓	✗	✗	✗	✗
E 240	✓	✓	✗	✗	✗	✗
EI 240	✓	✓	✗	✗	✗	✗

Key:

✓ - approved

✗ - Not approved

Issued: 31st August 2010
Reissued: 2nd March 2016
Valid to: 1st March 2021

This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

CERTIFICATE No CF 783
HAEFELE GMBH & CO KG

HAEFELE GmbH & CO KG High Performance Architectural Hinges

Matrix of acceptable doorset types and fire resistance periods for 926.33.003, 926.33.202, 926.33.203, 926.33.286, 926.33.287, 926.33.302, 926.33.303, 926.33.403, 926.33.486, 926.33.503 & 926.33.603 hinges:

	Approved Door Type					
Class	**IMM**	**MM**	**TT**	**ITT**	**ITM**	**ITC**
FD20	✓	✓	✗	✗	✗	✗
FD30	✓	✓	✗	✗	✗	✗
FD60	✓	✓	✗	✓	✗	✗
FD90	✓	✓	✗	✗	✗	✗
FD120	✓	✓	✗	✗	✗	✗
FD240	✓	✓	✗	✗	✗	✗
E 20	✓	✓	✗	✗	✗	✗
EI 20	✓	✓	✗	✗	✗	✗
E 30	✓	✓	✗	✗	✗	✗
EI 30	✓	✓	✗	✗	✗	✗
E 60	✓	✓	✗	✓	✗	✗
EI 60	✓	✓	✗	✓	✗	✗
E 90	✓	✓	✗	✗	✗	✗
EI 90	✓	✓	✗	✗	✗	✗
E 120	✓	✓	✗	✗	✗	✗
EI 120	✓	✓	✗	✗	✗	✗
E 240	✓	✓	✗	✗	✗	✗
EI 240	✓	✓	✗	✗	✗	✗

Key:

✓ - approved

✗ - Not approved

Issued: 31st August 2010
Reissued: 2nd March 2016
Valid to: 1st March 2021

This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.

CERTIFICATE No CF 783
HAEFELE GMBH & CO KG

HAEFELE GmbH & Co KG High Performance Architectural Hinges

Scope of Approval

- All applications apply to glazed and unglazed doorsets.
- When fitted to timber based doorsets both blades of all hinge models must be bedded onto 2 mm thickness of mono ammonium phosphate intumescent sheet.
- Timber based doorsets of 60 minutes integrity shall incorporate a door frame of hardwood timber with a minimum density of 650 kg/m³ (with leaf to frame gaps no more than 3 mm).
- Timber based doorsets of 90 minutes integrity shall incorporate a door frame of hardwood timber with a minimum density of 620 kg/m³ (with leaf to frame gaps no more than 3 mm).
- A minimum of 15 mm wide x 6 mm deep perimeter intumescent shall by-pass the hinges on timber based doorsets of 90 minutes integrity.

Classification codes

The approval provides the following classifications:

For hinge model 926.33.003

4	7	4	1	1	4	0	11

For all other hinge models

4	7	6	1	1	4	0	13

Further Information

Further information regarding the details contained in this certificate may be obtained from HAEFELE GmbH & Co KG (Tel: +49 7452 950).

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

Issued: 31st August 2010
Reissued: 2nd March 2016
Valid to: 1st March 2021

This certificate is the property of Warrington Certification Limited, Holmesfield Road, Warrington, Cheshire WA1 2DS, UK. Registered company No. 02250182.