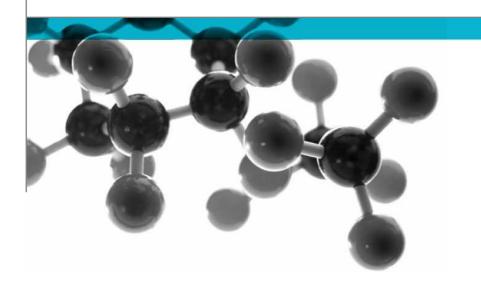
Exova Warringtonfire Key Industrial Park Fernside Road Willenhall West Midlands WV13 3YA T : +44 (0) 1902 722 122 F : +44 (0) 1902 727 242 E : willenhall@exova.com W: <u>www.exova.com</u>



BS EN 1906:2012



ASSESSMENT OF SPRUNG LEVER HANDLES

A Report To: Hafele GMBH & Co KG

Postfach 1237 D-72192 Nagold Germany

Document Reference: WIL319902 B Ass

Date: 20/11/2013

Copy: Final

Issue No.: 4

Page 1







ASSESSMENT CONCLUSIONS

Samples of: Sprung Lever Furniture
Manufacturer HAFELE GMBH + CO KG

Product : Sprung Lever Furniture

Models Models: (EHK-HLO1) 903.91.358, 903.92.358, 903.93.358, 903.91.359, 903.92.359,

903.93.359

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903.91.556, 903.92.556, 903.93.556, 903.91.557, 903.92.557, 903.93.557
              903.91.179, 903.92.179, 903.93.179, 903.91.180, 903.92.180, 903.93.180
 (EHK-HL02) 903.91.116, 903.92.116, 903.93.116, 903.91.117, 903.92.117, 903.93.117
              903.91.566, 903.92.566, 903.93.566, 903.91.567, 903.92.567, 903.93.567
              903.91.238, 903.92.238, 903.93.238, 903.91.239, 903.92.239, 903.93.239
 (EHK-HL03) 903.91.177, 903.92.177, 903.93.177, 903.91.178, 903.92.178, 903.93.178
              903.91.576. 903.92.576. 903.93.576. 903.91.577. 903.92.577. 903.93.577
              903.91.314, 903.92.314, 903.93.314, 903.91.315, 903.92.315, 903.93.315
 (EHK-HL07) 903.91.195, 903.92.195, 903.93.195, 903.91.196, 903.92.196, 903.93.196
              903.91.616, 903.92.616, 903.93.616, 903.91.617, 903.92.617, 903.93.617
              903.91.456, 903.92.456, 903.93.456, 903.91.457, 903.92.457, 903.93.457
(EHK-HLO9) 903.91.197, 903.92.197, 903.93.197, 903.91.198, 903.92.198, 903.93.198
              903.91.636, 903.92.636, 903.93.636, 903.91.637, 903.92.637, 903.93.637
              903.91.466, 903.92.466, 903.93.466, 903.91.467, 903.92.467, 903.92.467
(EHK-HL10) 903.91.233, 903.92.233, 903.93.233, 903.91.234, 903.92. 234, 903.93.234
              903.91.646, 903.92.646, 903.93.646, 903.91.474, 903.92.474, 903.93.474
              903.91.475, 903.92.475, 903.93.475
(EHK-HL11) 903.91.235, 903.92.235, 903.93.235, 903.91.236, 903.92.236, 903.93.236
              903.91.656, 903.92.656, 903.93.656, 903.91.657, 903.92.657, 903.93.657
              903.91.476, 903.92.476, 903.93.476, 903.91.477, 903.92.477, 903.93.477
(EHK-HL13) 903.91.292, 903.92.292, 903.93.292, 903.91.293, 903.92.293, 903.93.293
              903.91.676, 903.92.676, 903.93.676, 903.91.677, 903.92.677, 903.93.677
              903.91.492, 903.92.492, 492.93.492, 903.91.493, 903.92.493, 903.93.493
(EHK-HL15) 903.91.296, 903.92.296, 903.93.296, 903.91.297, 903.92.297, 903.93.297
              903.91.696, 903.92.696, 903.93.696, 903.91.697, 903.92.697, 903.93.697
              903.91.496, 903.92.496, 903.93.496, 903.91.497, 903.92.497, 903.93.497
(EHK-HL17) 903.70.040, 903.70.041, 903.70.120, 903.70.121, 903.70.124, 903.70.125
(EHK-HL18) 903.70.042, 903.70.043, 903.70.126, 903.70.127, 903.70.122, 903.70.123
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have been tested in accordance with:

BS EN 1906:2010 (Building Hardware – Lever Handles and Knob Furniture)

By Exova Warringtonfire [A UKAS accredited Testing Laboratory (No. 0621) and EC Notified Body number 1104]

At Key Industrial Park, Fernside Rd., Willenhall. West Midlands. WV13 3YA. Results and comments as detailed below:

All results contained in this assessment report were taken from report number WIL319902 B

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Author: A Fairfield Issue Date: 20/11/2013





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Clause No.	Description	Compliance
5	Requirements at Grade 2	
5.2	Check of Spindle and Fastening Elements	No
5.5	Free play	Yes
5.5.2	Safety requirements	Yes
5.6	Free angular movement or misalignment	Yes
5.7	Torque of return mechanism	Yes
5.8	Durability of mechanism	Yes
5.9	Repeat of Axial strength of lock furniture and fixing	Yes
5.10	Repeat of Free play measurement	Yes
5.11	Repeat of Free angular movement or misalignment	Yes
5.12	Repeat of Torque of return mechanism	Yes
5.13	Axial strength for safety furniture(optional)	NT
5.3	Rotational Torque strength	Yes
5.14	Corrosion Resistance	Yes
8	Marking	No
C.2	Requirements for lock furniture for use on fire doors	Yes

No inferences can be made regarding performance against other requirements of this standard

Tests marked "NA" are not applicable to the type of device under test. Tests marked "NT" cannot be applied to the type of device under test

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Author: A Fairfield Issue Date: 20/11/2013

Client: Hafele GMBH & Co KG Issue No.: 4





AUTHORISATION

Assessment performed by: Alan Fairfield – Test Engineer

Report issued by: Alan Fairfield - Test Engineer

Signed

Date 20th August 2013

For and on behalf of Exova Warringtonfire

Report authorised by: Ian Keeling - Business Unit Manager

Signed To Keels

Date 20th August 2013

For and on behalf of Exova Warringtonfire

Report issued: 20th August 2013



NOTE.

Tests marked "Not UKAS Accredited" are not covered by the Laboratory UKAS accreditation schedule.

Tests marked NT were not tested

Tests marked NA are not applicable to the product on test.

The laboratory has tested the product supplied by the client as sampled in accordance with their own requirements

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Exova Warringtonfire is an EC Notified Body Number 1104

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Author: A Fairfield Issue Date: 20/11/2013

Client: Hafele GMBH & Co KG Issue No.: 4





Annex C Suitable for Use on fire door assemblies:

Tested in a door assembly which satisfies criteria of EN 1634 – 1

Test report No.195595 iss 3

Dated 23/07/2010

Result - Details

Suitability of this product for use on fire doors is verified in fire test report number 195595 iss 3.

Classification achieved.

Category	Durability	Door	Fire	Safety	Corrosion	Security	Туре	of
of use		mass	resistance		resistance		operation	
1 - 4	6 or 7		0, A,B,C,D	0 or 1	0 - 4	0 - 4	A, B, or U	
2	6	-	В	0	3	0	В	

Clause 8 marking

Product and or literature, packing etc Should be marked with:

Manufacturer's name or Trade mark. HAFELE

Product model identification 903.92.117

Classification according to clause 4 No

Standard number No

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Author: A Fairfield Issue Date: 20/11/2013

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The year and week of manufacture – may be in coded form No

UNCERTAINTY OF MEASUREMENT

Clause 6.1 of the standard specifies the following tolerances on values:

Mass in KG ± 2% LENGTH IN MM ± 2%

Force in N ± 2% Torque in Nm ± 2% time in secs ± 5%

The uncertainty of measurements calculated for a confidence level of 95% throughout these tests are within the limits of these tolerances.

OBSERVATIONS AND COMMENTS

(include details of all opinions and interpretations given in this report)

All results contained in this report were assessed from report number WIL319902 B, Which is based on testing the 903.02.117 model, which in our opinion is the most onerous model in the range. It is therefore our opinion that these results are also valid for the models contained in this report.

The samples supplied successfully passed all mechanical testing that was undertaken with no visible problems.

The samples supplied failed the clause 5.2 as no door thicknesses were stated.

The samples also failed the marking requirements of clause 8 as the classification code, and the number of this standard were not shown

- END OF REPORT -

Revision History

Issue No :	Re - Issue Date :			
Revised By:	Approved By:			
Reason for Revision:				
Issue No :	Re - Issue Date :			
Revised By:	Approved By:			
Reason for Revision:				

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Client: Hafele GMBH & Co KG Issue No:

