


**This certificate of compliance validates the following**

<b>TEST REPORT NUMBER:</b>	<b>3503/282/08<sup>1)</sup></b>	<b>CERTIFICATE NUMBER:</b>	<b>UAE-035/15</b>
<b>DATE OF ISSUE:</b>	<b>2009-06-03</b>	<b>DATE OF ISSUE:</b>	<b>2015-06-30</b>
<b>DATE OF EXPIRY:</b>	<b>N/A</b>	<b>DATE OF EXPIRY:</b>	<b>2020-06-29</b>

<sup>1)</sup> see also additional test reports and documents on the back of this document

<b>NAME OF FACTORY/ MANUFACTURER:</b>	<b>Zapp-Zimmermann GmbH</b>	<b>NAME OF THE BRAND:</b>	<b>Fire Protection Block ZZ 230</b>	<b>CERTIFICATION MARK:</b>
<b>FACTORY ADDRESS/REGION:</b>	<b>Marconistr. 7 - 9 D-50769 Köln Germany Tel: ++49(0)221-97061-0 Fax: ++49(0)221-97061-929 Email: <a href="mailto:info@z-z.de">info@z-z.de</a></b>	<b>MODEL/NO:</b>	<b>-</b>	
		<b>LOGO ON THE PRODUCT:</b>		

**DESCRIPTION OF THE PRODUCT:** Mixed penetration seal of pre-shaped blocks, an intumescent material and a filling for gaps to be used to shut openings made for cables and/or pipes in flexible and rigid walls and rigid ceilings as well as in shaft constructions in order to maintain the fire-resistance of the wall or the ceiling where they are penetrated.

**TEST STANDARD:** EN 1366-3; EN 1363-1  
**TEST DESCRIPTION:** The test was carried out in accordance with EN 1366-3 and EN 1363-1 on wall/ceiling constructions with installations as cable trays, cables, cable-bundles and pipes where the gaps were filled with the mixed penetration seal. The performance parameters were integrity as well as insulation. The testing time was more than 120 min.

**SPECIFICATION OF TEST SPECIMEN:** The installations (cable trays, cables, pipes etc.) were placed in the recesses of the mixed penetration seal. Additional loads were used for the cable trays. According to the test standard attention was paid to the number and positions of the installations as well as to their distances among themselves and to the reveals.

TEST RESULT:	MAINTENANCE OF FUNCTION	INTERPRETATION	RESULT
	INTEGRITY FOR 120 MIN	SUCCESSFUL	PASS
	INSULATION FOR 120 MIN	SUCCESSFUL	PASS

**NAME OF TEST FACILITY:** MPA Braunschweig  
**TEST FACILITY ADDRESS/REGION:** Beethovenstr. 52, D-38106 Braunschweig  
Tel: ++49(0) 531 391 5400, Fax: ++49(0) 531 391 5900  
Email: [info@mpa.tu-bs.de](mailto:info@mpa.tu-bs.de), Website: [www.mpa.tu-bs.de](http://www.mpa.tu-bs.de)  
**PRODUCT APPLICATION GUIDELINE (END USE):** The penetration seal must be used according to the provisions in the manufacturer's manual. The minimal thickness for walls is 100 mm and for ceilings 150 mm.

**SIGNED BY:** Dr.-Ing. W. Hinrichs  
Head of certification



The above certificate is valid only when installed in accordance with the 'Product Application Guideline (End Use)'. To verify the validity of the product please log into our website, click on 'others' and then on 'certificates'. You will find a list of manufacturers and a certificate with the number as given above.

ACCREDITED BY: DAKKS  
AS PER: ISO/IEC 17065  
VALIDITY: 1<sup>st</sup> NOVEMBER 2017  
REFERENCE NUMBER: D-ZE-11267-01-00

DAKKS  
ISO/IEC 17025  
18<sup>th</sup> MARCH 2017  
D-PL-11267-03-00

**THE LIST OF ACCREDITED TESTS (FIRE AND LIFE SAFETY PRODUCTS ONLY)**

TEST STANDARD	TITLE
EN 1363-1	Fire resistance tests – Part 1: General Requirements
EN 1366-3	Fire resistance tests for service installations – Part 3: Penetration seals
DIN 4102-9	Fire behaviour of building materials and elements; seals for cable penetrations; concepts, requirements and testing

Additional test reports of MPA Braunschweig and other documents for the mixed penetration seal 'Fire Protection Block ZZ 230'

- No. 3237/3623 of 2005-12-01
- No. 3927/0723 of 2003-10-17
- No. 3295/0711 of 2001-07-11
- No. 3346/8829 of 2000-05-18
- No. 3945/9458 of 1998-12-11
- No. 3738/380/10 of 2011-02-01
- No. 3022/353/08 of 2008-05-23
- No. 3333/207/09 of 2009-07-29



National and EU approvals

- No. Z-19.15-1182 of 2014-02-14
- No. ETA-10/0431 of 2013-06-25