

## TEST REPORT

No. 420002382-2018

### Test laboratory

Department 2

Thermal protection - plastics, elastomers and similar products – chemical analysis

### Client

TDH GmbH  
Billstraße 226  
20539 Hamburg

Date of order: 11.12.2012  
Receipt of sample(s): 12.12.2012  
Date of the sampling: ---  
Date of test: 12.12.2012  
05.02.2013

Manufacture plant: TDH GmbH  
Im Auwelt 45  
Bunker 177 & 145  
47624 Kevelaer-Twisteden

### Commissioned task

Determination of maximum service temperature according to EN 14706

### Description of the specimen / quantity of samples / designation of samples

Mortar consisting of mineral lightweight fillers and additives of organic fibers and inorganic / organic hybrid binders

4 specimens with dimensions of 200 mm x 200 x 30 mm,

4 specimens with dimensions of 200 mm x 200 x 70 mm

designation by customer: „Vatral® 150/650“

### Description of sampling

The sample material was delivered by the client.

### Description of the test / underlying test method

Determination of maximum service temperature according to EN 14706:2012

### Test results

The various test results will be found in the annex to this test report.

Dortmund, 12 September 2018

By order



Dipl.-Ing. (FH) Sonntag  
Deputy Head of the department



The results of the tests are based exclusively on the samples/test specimen specified above.  
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This test report comprises 1 page and 1 annex

**Maximum service temperature according to DIN EN 14706**

<b>Material designation:</b>	Vatral® 150/650	<b>Factory:</b>	Kevelaer-Twisteden
<b>Manufacturer:</b>	TDH GmbH	<b>Batch No.:</b>	K1121119/01
<b>Product type:</b>	Mortar 2)	<b>Packaging:</b>	carton
<b>Form of the product:</b>	plates	<b>Nominal dimension:</b>	200 x 200 mm
<b>Nominal bulk density:</b>	150 kg/m <sup>3</sup>	<b>Aver. density:</b>	133,5 kg/m <sup>3</sup>
<b>Date of sampling:</b>	not official	<b>Permissible</b>	
<b>location of sampling:</b>	--	<b>thickness reduction 1) :</b>	5 %
<b>Preparation:</b>	--	<b>Deviation:</b>	none
<b>Dimension:</b>	198 x 198 mm	<b>Quantity of specimens:</b>	3
<b>Heating rate:</b>	300 °C/h	<b>Date of the test:</b>	20.01.2013
<b>Comment:</b>	1) according to the customer in accordance with the limit for mineral wool	<b>Installation thickness:</b>	30 mm + 70 mm

2) consisting of mineral lightweight fillers and additives of organic fibers and inorganic / organic hybrid binders

**Test results and -conditions**

Initially test temperature: 20 °C Initial pressure: 500 Pa  
 Aver. test temperature: 914 °C

Sample No.	S <sub>0</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	W <sub>1</sub>	W <sub>2</sub>
1	104,47	103,71	100,10	103,72	198	198	199	199
2	98,58	97,71	94,40	95,18	198	198	198	198
3	100,34	99,19	94,86	95,54	198	199	198	198
Av.	101,13	100,20	96,45	98,15	198	198	198	198

$\Delta\epsilon_d$ : 3,74 %       $\Delta\epsilon_i$ : 0,17 %       $\Delta\epsilon_b$ : 0,00 %

