

ByggForm AS  
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NO-3470 Slemmestad  
Norge

## Non-combustibility according to EN ISO 1182

(2 appendices)

### Introduction

SP has by request of ByggForm AS performed fire tests according to EN ISO 1182. The purpose of the test is to form a basis for technical fire classification.

### Product

Product	Content	Thickness mm	Area weight kg/m <sup>2</sup>	Density kg/m <sup>3</sup>	Colour
Fibersementplate BF	Silica sand Cement Wood pulp	6	9.0	1500	Grey

### Manufacturer

Byggform AS, Slemmestad, Norway.

### Sampling

The sample was delivered by the client. It is not known to SP Fire Research if the product received is representative of the mean production characteristics.

The sample was received October 8 and November 6, 2015 at SP Fire Research.

### Test results

The test results are given in appendix 1.

The test results relate only to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

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**Note**

The accreditation referred to is valid for EN ISO 1182.

**SP Technical Research Institute of Sweden  
Fire Research - Fire Dynamics**

Performed by

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**Appendices**

1. Test results – “Fibersementplate BF”
2. Calibration results according to EN ISO 1182:2010

## Appendix 1

### Test results – EN ISO 1182:2010

#### Product

Product	Content	Thickness mm	Area weight kg/m <sup>2</sup>	Density kg/m <sup>3</sup>	Colour
Fibersementplate BF	Silica sand Cement Wood pulp	6	9.0	1500	Grey

#### Test results

The table below shows the maximum temperature rise relative to the final temperature recorded by the furnace thermocouple, duration of sustained flaming and mass loss.

Test specimen No.	Max. temperature rise Furnace (°C)	Duration of sustained flaming (s)	Mass loss (%)
1	32	0	19.7
2	51	15	19.4
3	29	0	20.3
4	51	0	19.5
5	51	11	19.7
Average	43	5.2	19.7

#### Measured data

Thickness 6.4 – 7.3 mm.

Density 1180 – 1270 kg/m<sup>3</sup>.

#### Conditioning

Temperature (60 ± 5) °C.

Time (20 – 24) h.

#### Date of test

November 18 – 19, 2015.

## Appendix 2

### Calibration results according to EN ISO 1182:2010

#### Calibration of furnace wall temperature according to EN ISO 1182:2010 part 7.3.1

The average deviation of the temperature on the three vertical axes from the average furnace wall temperature  $T_{\text{avg.dev.axis}}$  shall be less than 0.5 %.

SP,  $T_{\text{avg.dev.axis}} = 0.1 \%$ .

The average deviation of the temperature on the three levels from the average furnace wall temperature  $T_{\text{avg.dev.level}}$  shall be less than 1.5 %.

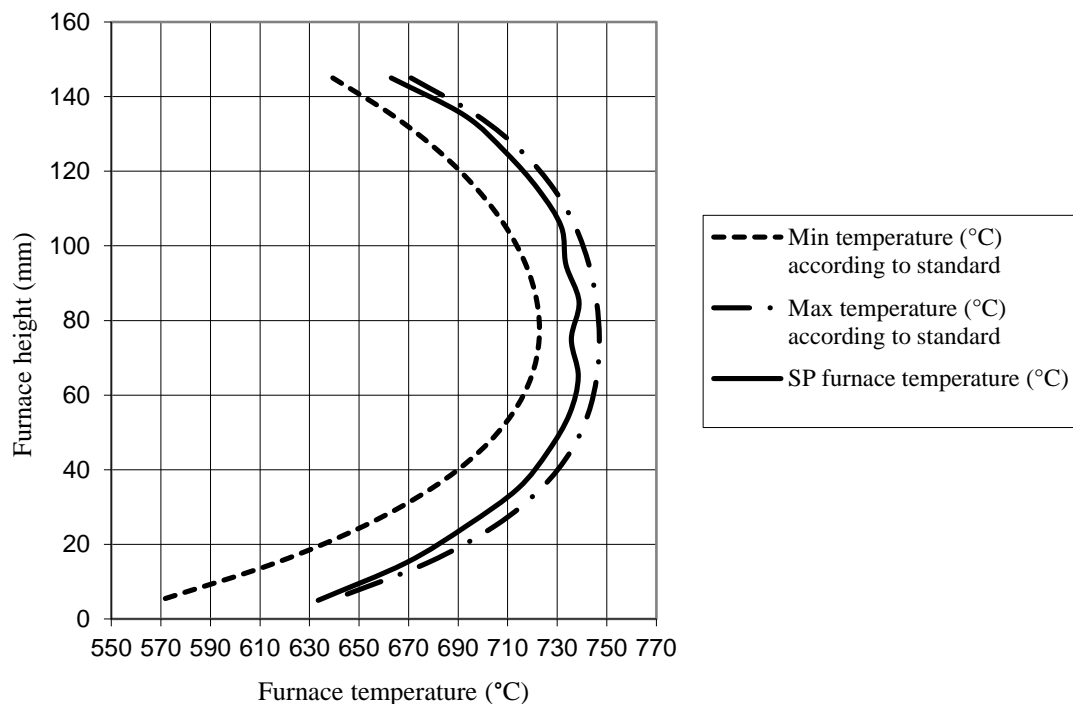
SP,  $T_{\text{avg.dev.level}} = 0.1 \%$ .

The average wall temperature at level (+30 mm)  $T_{\text{avg.level a}}$  is less than the average wall temperature at level (-30 mm),  $T_{\text{avg.level c}}$ .

SP,  $T_{\text{avg.level a}} = 835 \text{ }^{\circ}\text{C}$ .

SP,  $T_{\text{avg.level c}} = 837 \text{ }^{\circ}\text{C}$ .

#### Calibration of furnace temperature according to EN ISO 1182:2010 part 7.3.2



*Furnace temperature profile along its axis measured with Thermal sensor.*