

SMART STONE

SMART STONE

SMART STONE

SMART STONE



Instytut Techniki Budowlanej

GROUP OF TESTING LABORATORIES
accredited by Polish Center for Accreditationaccreditation certificate
N° AB 023

AB 023

Page 1 / 2

FIRE RESEARCH DEPARTMENT

FIRE RESEARCH LABORATORY

TEST REPORT N° LZP02-1267/17/Z00NZIP

This report has been released in 3 copies, the customer received 2 and 1 remained in the ITB.

Client:

Flex Decor Elastic Stone Importer of elastic stone with trade
Decoration Ltd. name SMART STONE

Client address:

Alonim St 14/53
4256514 Netanya
Israel

INFORMATION ABOUT PRODUCT

Manufacturer (name and address):

do not concern

Name and address of factory:

do not concern

Product:

Elastic stone with trade name SMART STONE

Technical specification:

do not concern

Information about product, intended
use, and the number of the
applicable system of assessment and
verification of constancy of
performance

do not concern

Unique identification code of the
product-type:

do not concern

Information about test item

Test item:

name, description, condition, identification

Elastic stone with trade name SMART STONE. Product is used for
finishing internal and external walls and ceilings.

Product parameters declared by Client:

Surface mass: 2,5 – 3,5 kg/m²

Thickness: 2,0 – 3,5 cm

Product parameters assessed by laboratory:

Thickness of tested product: c.a. 3,5 cm

Product accepted for testing: 22.06.2017

Product was sampled by the Client

Receipt protocol: LZP-1267/17/Z00NZIP

Sampling protocol: Client does not deliver sampling protocol

PZ 7LB 18 Handling of test samples

Date of receipt /sampling:

Receipt /sampling procedure

Receipt procedure:

Information about tests:

Test commencement date:

05.07.2017

Test completion date:

05.07.2017

TEST METHOD:

PN-EN 13823+A1:2014 Badania reakcji na ogień wyrobów budowlanych - Wyroby budowlane, z wyłączeniem
podłogowych, poddane oddziaływaniu termicznemu pojedynczego płonącego przedmiotu.

DEVIATIONS FROM PN-EN 13823+A1:2014

Did not appear

FIRE RESEARCH LABORATORY

Pionki | Przemysłowa 2, 26-670 Pionki | tel. + 48 48 31 21 600 | fax + 48 48 31 21 601

00-611 Warsaw | Filtrów 1 | tel. +4822 825 04 71 | fax +4822 825 52 86 | Director tel. +4822 825 28 85 | +4822 825 13 03 | fax +4822 825 77 30 |

02-656 Warsaw | Ksawerów 21 | tel. +4822 843 14 71 | fax +4822 843 29 31 | Regon: 000063650 | VAT: PL5250009358 | BPH S.A. |

Al. Jerozolimskie 27 | 00-508 Warsaw | IBAN: PL87106000760000321000160236 | SWIFT: BPHKPLPK | www.itb.pl | instytut@itb.pl

egolf member

SMART STONE

SMART STONE

SMART STONE

SMART STONE

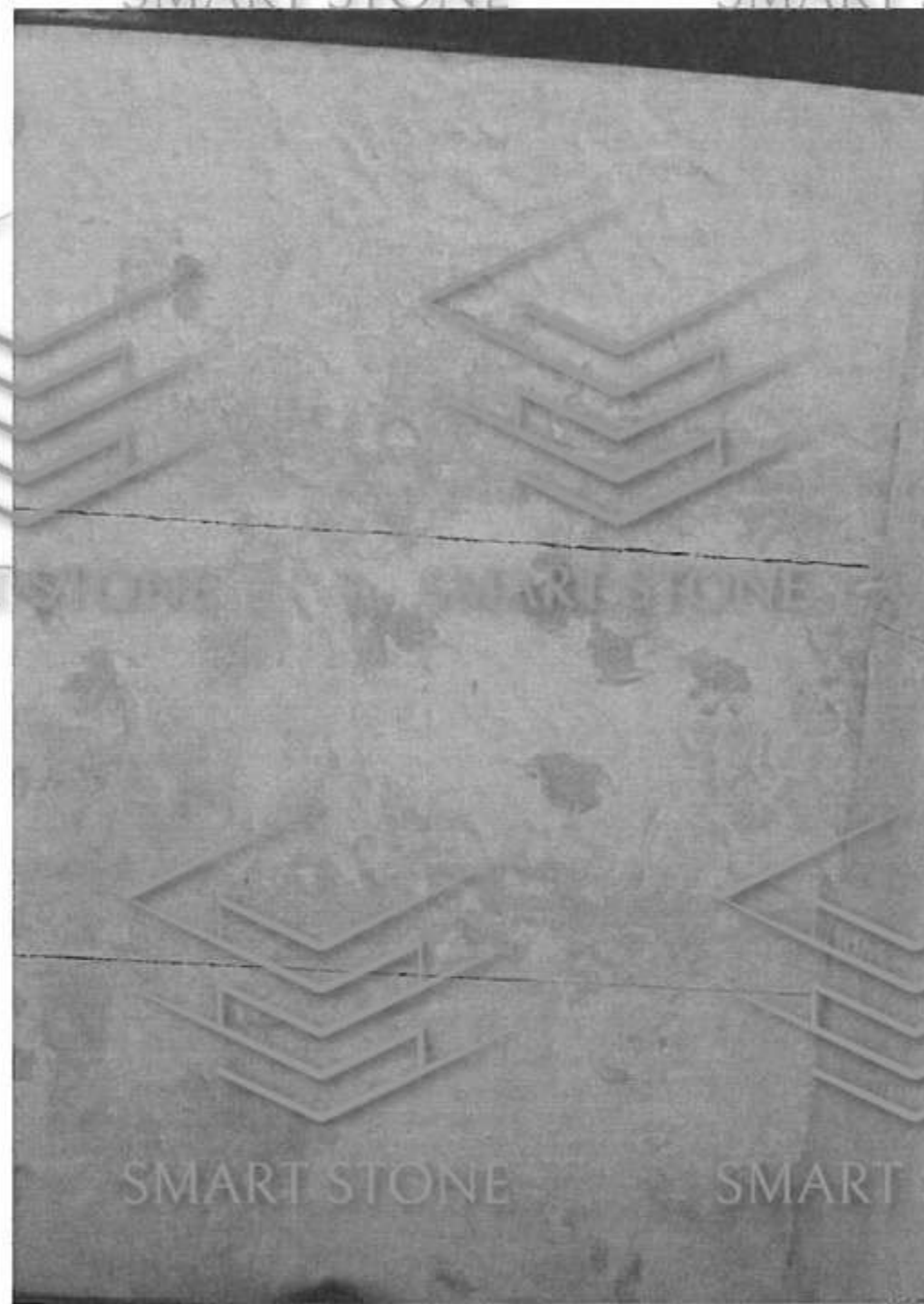


Photo.1 Total view of the exposed surface of the long wing

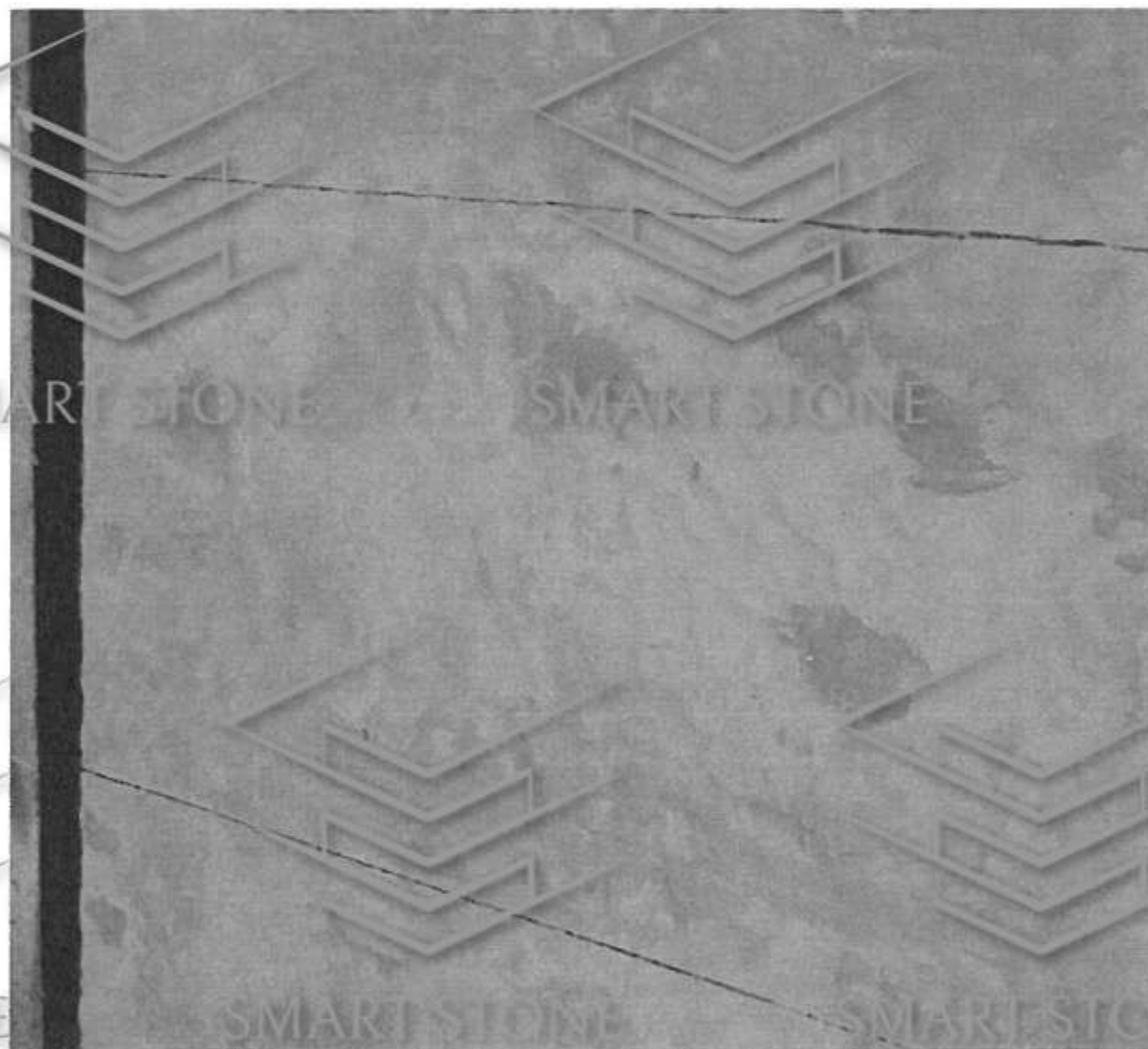


Photo.2 Close-up of the vertical outer edge of the long wing at a height of 500 mm above the floor of the trolley

CONDITIONING:

Time of conditioning: since 22.06.2017 to 05.07.2017

Conditioning parameters: temperature: $23 \pm 2^\circ\text{C}$, relative humidity: $50 \pm 5\%$

Conditioning method: to constant mass

PREPARATION OF SPECIMENS (substrate, mounting and fixing methods):

Client delivered for testing the specimens of product SMART STONE. Specimens were prepared by Client in accordance with PN-EN 13823+A1:2014. Product tested on calcium-silicate board acc. to EN 13238.

TEST CONDITIONS:

Parameter / Unit	Specimen 1	Specimen 2	Specimen 3
Duct flow [m^3/s]	0,583 – 0,653	0,611 – 0,641	0,210 – 0,748
Ambient temperature [$^\circ\text{C}$]	25,69	26,38	26,82
Ambient pressure [kPa]	99,977	99,971	99,956
Relative humidity [%]	40,3	38,2	37,9

TEST RESULTS:

Parameter / Unit	Specimen 1	Specimen 2	Specimen 3	Average
FIGRA _{0,2 MJ} [W/s]	0,0	0,0	59,6	19,9
FIGRA _{0,4 MJ} [W/s]	0,0	0,0	59,6	19,9
THR _{600 s} [MJ]	0,2	0,3	1,5	0,7
SMOGRA [m^2/s^2]	0,0	0,0	2,0	0,7
TSP _{600 s} [m^2]	34,3	38,6	44,3	39,1

OBSERVATIONS:

Recorded events	Specimen 1	Specimen 2	Specimen 3
LFS till edge [m]	0,20	0,20	0,20
Flaming droplets/particles ≥ 10 s (+/-)	-	-	-
Flaming droplets/particles ≤ 10 s (+/-)	-	-	-
Surface flash (+/-)	+	+	+
Falling of specimens parts (+/-)	-	-	-
Smoke not entering hood (+/-)	-	-	-
Mutual fixing of banking board fails (+/-)	-	-	-
Distortion / collapse (+/-)	-	-	-
Early termination of test* (+/-)	-	-	-

VISUAL OBSERVATIONS:

* The cause of early termination of test (excessive HRR, excessive temperature, burner substantially disturbed/choked, failure of apparatus)

APPENDIX:

Photos of test specimen before test, graphs of classification parameters, calculation of uncertainty

STATEMENT:

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

Responsible for the test:

Bartłomiej K. Papis Ph. D. Eng.

Person authorized report:

Andrzej Kolbrecki Ph. D. Eng.

Warsaw, 14.07.2017

Testing Laboratory declares that test results relate only to the object under test. Test Report should not be reproduced without a written permission of Testing Laboratory in any other form than as a whole.

Test Report is not substitute for documents required for placing on the market and making available of construction products

Head of Fire Research Department:

Paweł Sulik Ph. D. Eng.

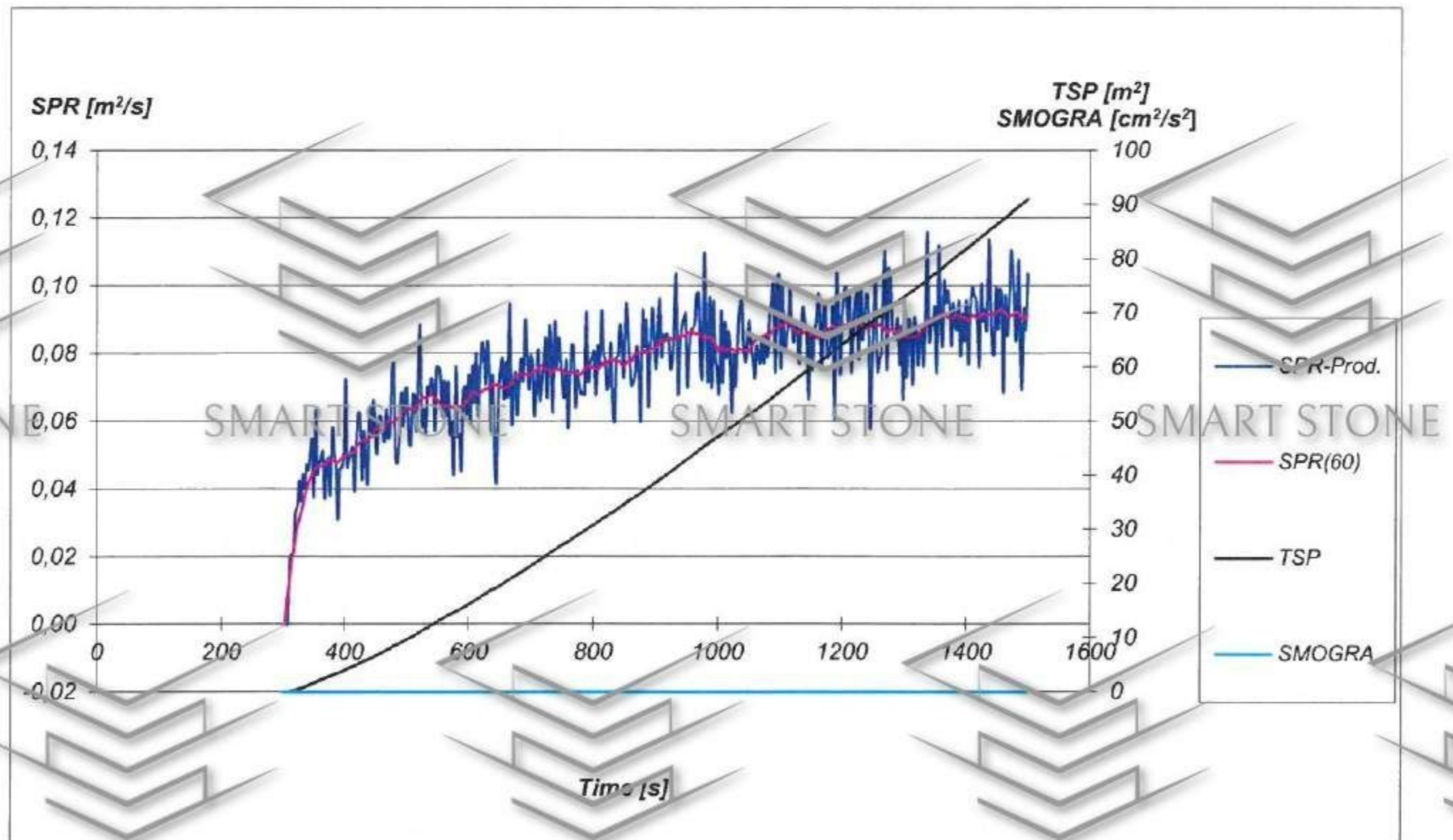
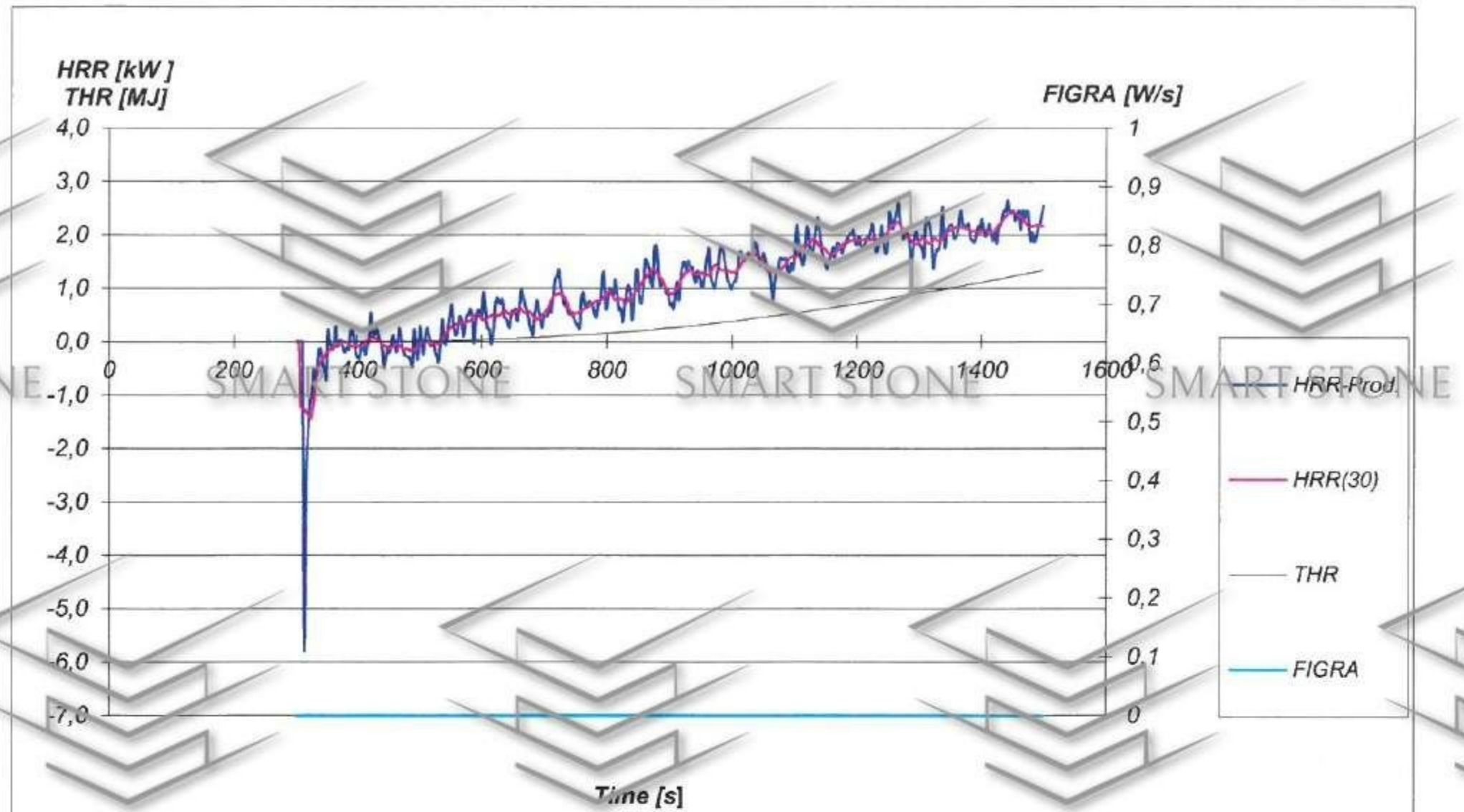
End of test report no. LZP02-1267/17/Z00NZP

SMART STONE

SMART STONE

SMART STONE

SMART STONE

Graphs of classification parameters for specimen № 2

SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

Calculation of uncertainty

			U	k		$\bar{x} - U$	$\bar{x} + U$
<i>Specimen 1</i>							
<i>FIGRA_{0,2MJ}</i>	0	±	0,0	2		0,0	0,0
<i>FIGRA_{0,4MJ}</i>	0	±	0,0	2		0,0	0,0
<i>THR_{600s}</i>	0,2	±	0,138	2		0,062	0,338
<i>SMOGRA</i>	0	±	0,000	2		0,00	0,00
<i>TSP_{600s}</i>	34,3	±	1,026	2		33,27	35,33
<i>Specimen 2</i>							
<i>FIGRA_{0,2MJ}</i>	0	±	0,0	2		0,0	0,0
<i>FIGRA_{0,4MJ}</i>	0	±	0,0	2		0,0	0,0
<i>THR_{600s}</i>	0,3	±	0,136	2		0,164	0,436
<i>SMOGRA</i>	0	±	0,000	2		0,00	0,00
<i>TSP_{600s}</i>	38,6	±	1,053	2		37,55	39,65
<i>Specimen 3</i>							
<i>FIGRA_{0,2MJ}</i>	59,6	±	4,2	2		55,4	63,8
<i>FIGRA_{0,4MJ}</i>	59,6	±	4,2	2		55,4	63,8
<i>THR_{600s}</i>	1,5	±	0,147	2		1,353	1,647
<i>SMOGRA</i>	2	±	0,109	2		1,89	2,11
<i>TSP_{600s}</i>	44,3	±	1,063	2		43,24	45,36
<i>Average value</i>							
<i>FIGRA_{0,2MJ}</i>	19,9	±	69,8	2		-49,9	89,7
<i>FIGRA_{0,4MJ}</i>	19,9	±	69,8	2		-49,9	89,7
<i>THR_{600s}</i>	0,7	±	1,470	2		-0,770	2,170
<i>SMOGRA</i>	0,7	±	2,341	2		-1,64	3,04
<i>TSP_{600s}</i>	39,1	±	10,195	2		28,91	49,29

ART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

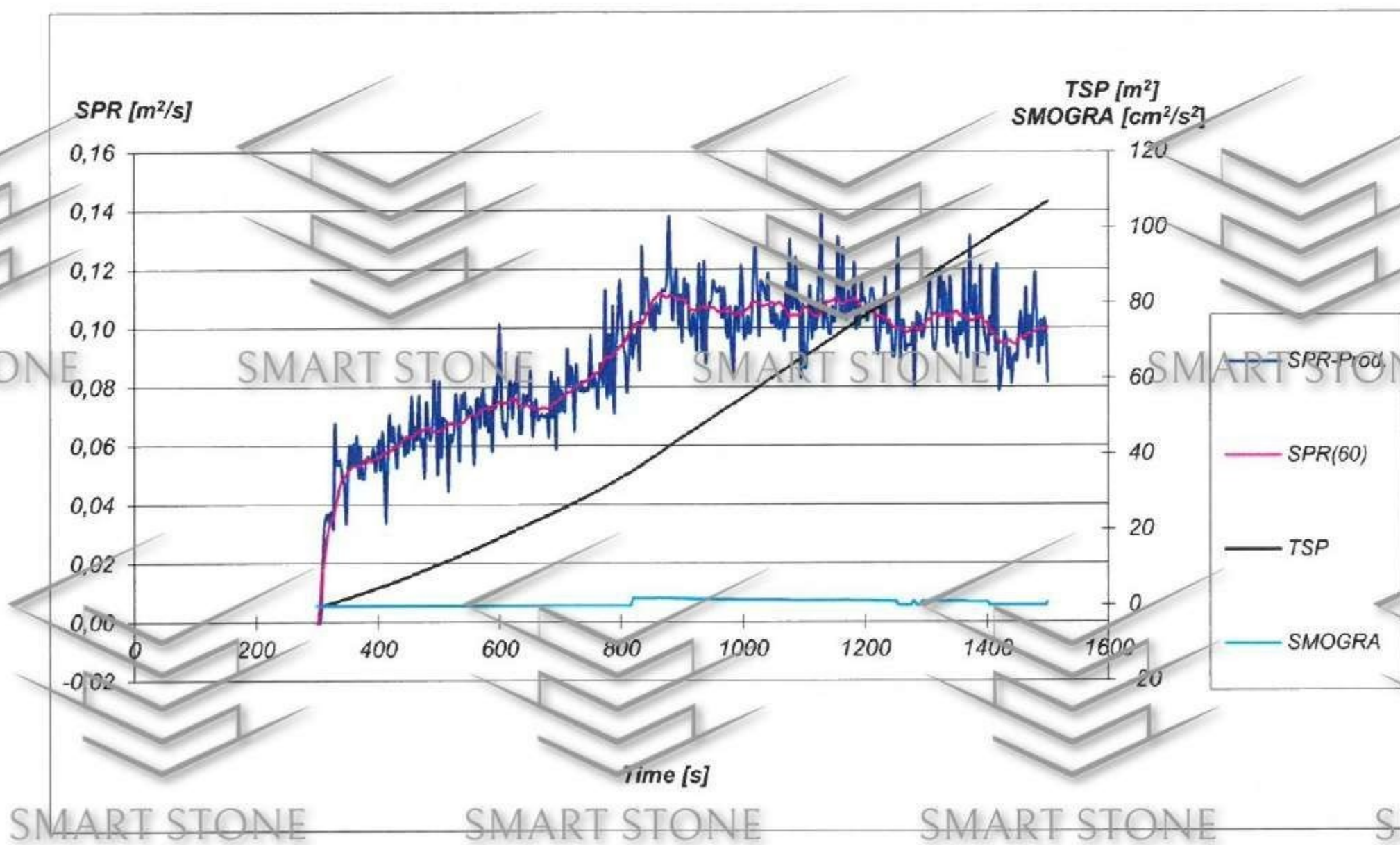
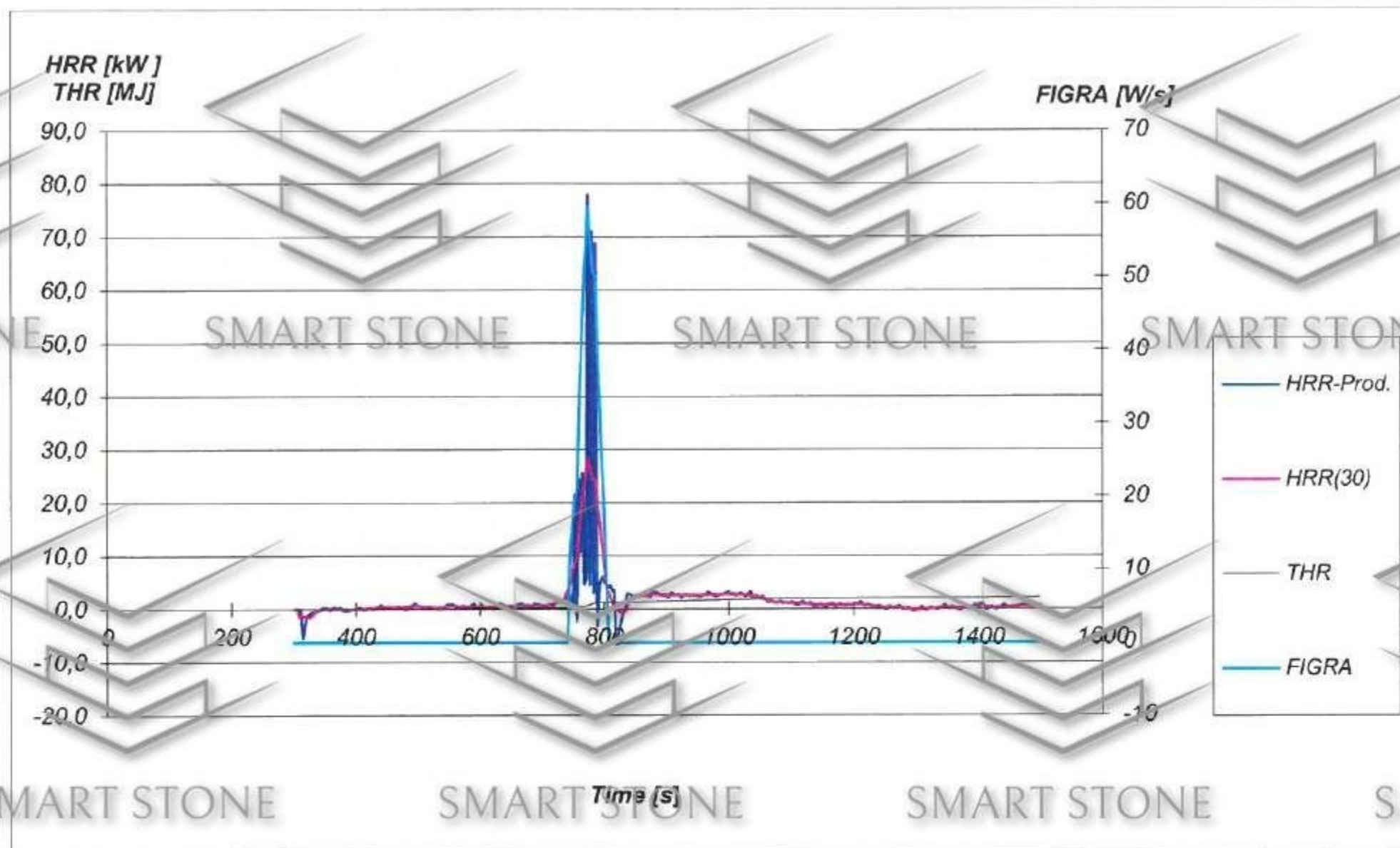
SMART STONE

SMART STONE

SMART STONE

SMART STONE

SMART STONE

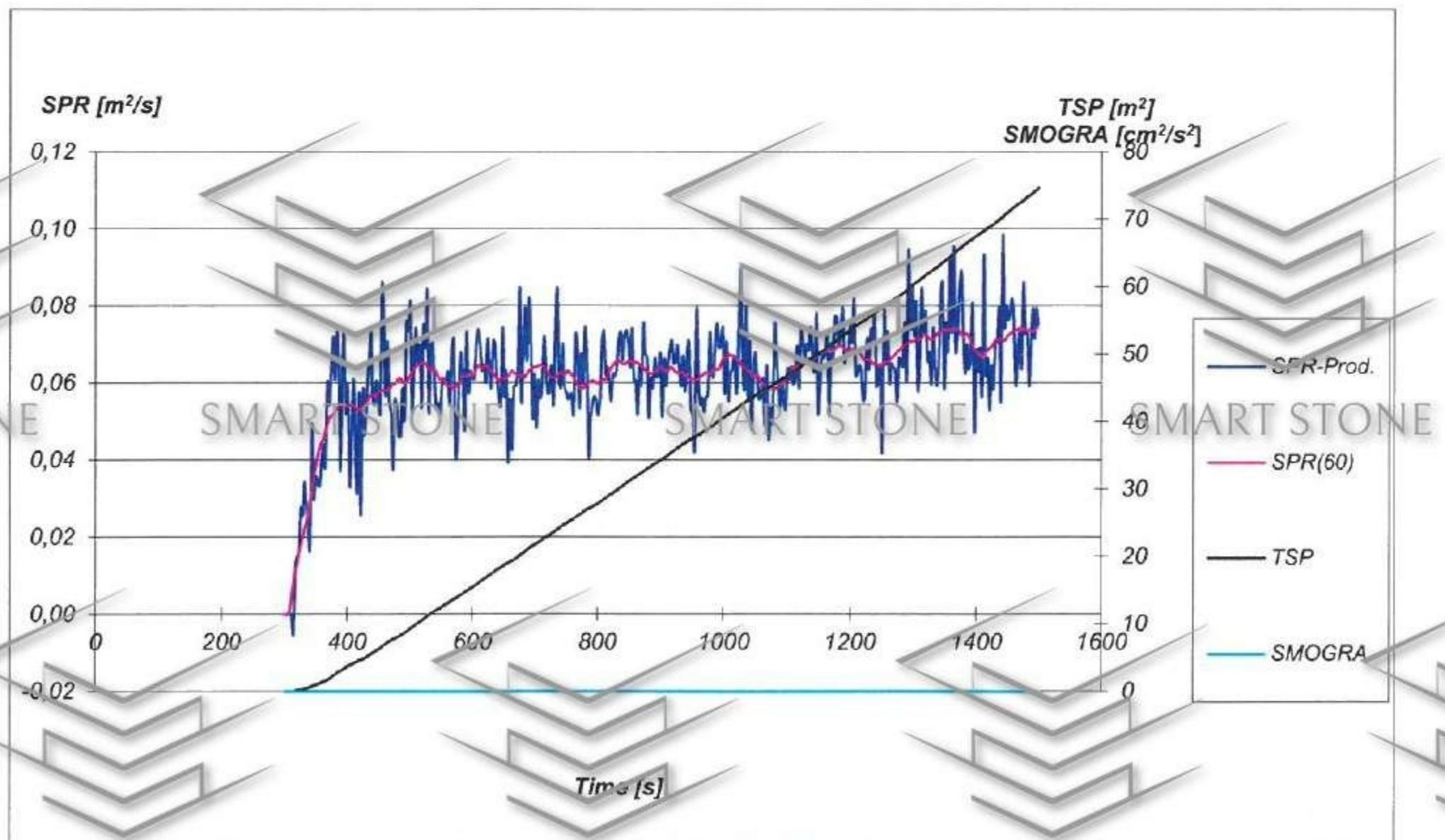
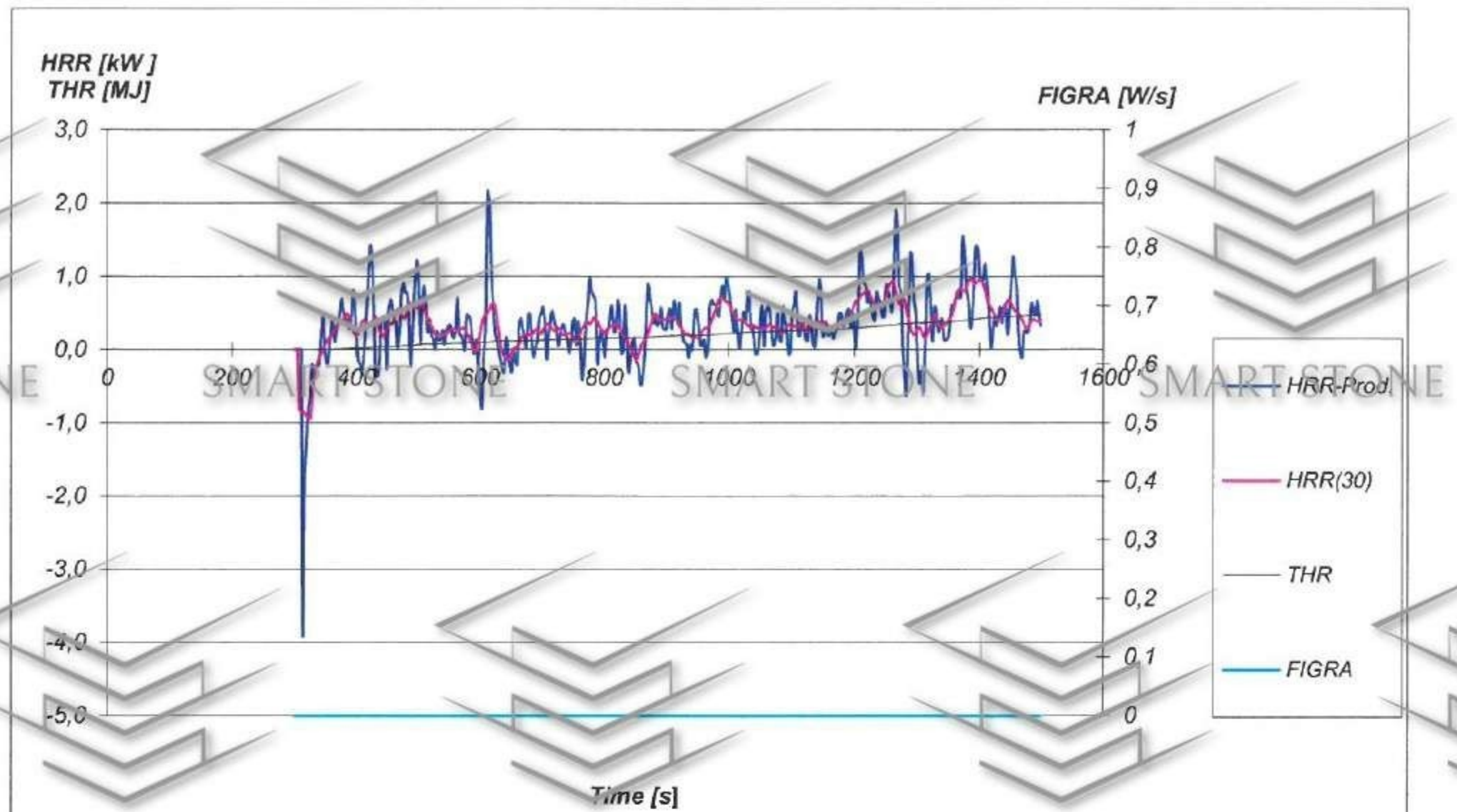
Graphs of classification parameters for specimen № 3

SMART STONE

SMART STONE

SMART STONE

SMART STONE

Graphs of classification parameters for specimen № 1

SMART STONE

SMART STONE

SMART STONE

SMART STONE