

TECHNICAL ASSESSMENT 2021-A-005A

based on an analysis of test results

SPONSOR

SAINT-GOBAIN EUROCOUSTIC
Tour Saint-Gobain
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SUBJECT

Evaluation of the stability in case of fire according to the Belgian Standard NBN 713.020 (edition 1968) of a lowered ceiling.

Evaluation of the fire resistance according to the European Standard EN 13501-2:2016 of a floor/ceiling construction.

This document has been drawn up as part of an analysis of test results as described in the RD of 13/06/2007, modifying the RD of 07/07/1994.

1. TEST REPORTS

1.1. Reports

Name of the laboratory	Number of the test report	Date of the test report	Owner of the test report	Test standard
WFRGent nv	16083A	11/10/2013	Saint-Gobain Eurocoustic	NBN 713.020 (1968)
	16083B	16/09/2013		EN 1363-1:1999 EN 1365-2:1999

1.2. Description of the tested elements

Test report No. 16083A gives the description and the results of a orientating fire resistance test carried out according to the Belgian Standard NBN 713.020 (edition 1968) on a suspended ceiling (dimensions: approx. 6000 x 3000 mm), composed of a metal framework (current commercial name according to your declarations: **Quick Lock Hook-On**; c/c distance main supporting profiles: 600 mm; c/c distance transversal profiles: 2400 mm) and self-supporting straight ceiling tiles of the **Eurocoustic Tonga A** type (thickness: 22 mm; modular dimensions: 2400 x 600 mm; density: approx. 110 kg/m³). The suspended ceiling has been applied underneath a non-loadbearing aerated concrete floor.

Test report No. 16083B gives the description and the results of a fire resistance test carried out according to the European Standards EN 1363-1:1999 and EN 1365-2:1999 on a non-loadbearing aerated concrete floor (dimensions: approx. 6000 x 3300 mm; thickness: 150 mm; density: approx. 650 kg/m³; span: 3000 mm), protected from below by means of a suspended ceiling, composed as described in test report No. 16083A.

2. RESULTS

The results obtained during the above-mentioned tests are given in the table below:

Test report No.	16083 A & B
Type of Quick Lock framework	Hook-on
C/c distance main supporting profiles	600 mm
Thickness of the ceiling tiles	22 mm
Dimensions of the ceiling tiles	2400 x 600 mm
Stone wool insulation	-
Floor composition	aerated concrete
Plenum height	378 mm
Characteristic temperature in the plenum after 30 minutes	approx. 355 °C
Criteria	Time in minutes
Suspended ceiling (according to the criteria in the reference documents stated in § 3)	
Falling of the 1 st ceiling element	31
Stability of the ceiling	COMPLIANT
Floor/ceiling construction (according to the criteria of the European standard EN 13501-2:2016)	
Thermal insulation (I)	≥ 34
Integrity (E)	≥ 34
Stability (R)	≥ 34
Test duration	34

3. REFERENCE DOCUMENTS

NBN 713.020 (edition 1968).

Document 1392 SN “Stabiliteit bij brand van verlaagde plafonds”, approved by the Hoge Raad voor Beveiliging tegen Brand en Ontploffing during their meeting on 15 September 2011. This document interprets the specific criteria for the stability in case of fire of a suspended ceiling where these are open to interpretation in the Belgian Standard NBN 713.020 (edition 1968).

4. FIELD OF APPLICATION

The present technical assessment contains only an overview of the examined test reports.

The field of application based on these test reports is described in the classification report and/or the technical assessments with the same reference number as the present technical assessment.

5. CONDITIONS FOR THE USE OF THE PRESENT CLASSIFICATION REPORT

This technical assessment cannot be combined with another classification report and/or technical assessment, except when mentioned explicitly.

The sponsor has the right to use the above-referenced tests reports.

This document is the original version of this technical assessment and is issued in English.

This technical assessment may be used only literally and completely for publications. For publications of certain texts, in which this classification report is mentioned, the permission of ISIB must be obtained in advance.

The present technical assessment contains 4 pages.

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