

TEST REPORT

| SOM_221_2019 |

EXPERIMENTAL DETERMINATION OF THE BREAKING STRENGTH (EN ISO 10545-4) OF A MULTI-LAYER TILE NAMED "SICIS COLLECTION: VETRITE/GEMGLASS", OF THE FIRM "SICIS S.R.L.", RAVENNA (RA) - ITALY.

PLACE AND DATE OF ISSUE:	Faenza, 08/07/2019
COMPANY:	Sicis S.r.l.
ADDRESS:	Via Canala 85 – 48123 Ravenna (RA) Italy
TYPE OF PRODUCT:	Multi-layer tile for raised access floor
STANDARD APPLIED:	EN 10545-4
DATE OF RECEIPT IN LABORATORY:	31/05/2019
TESTS EXECUTED:	25/06/2019
TESTS EXECUTED BY:	CertiMaC, Faenza

NOTE: Results contained in the present test report are exclusively referred to the samples subjected to the tests described hereafter. Moreover, this report is for the exclusive use of the Customer, within the limits set by mandatory legislation and cannot be reproduced, totally or partially (in digital or paper form), without a written approval of the Laboratory.

Test executed	Written	Approved
<u>_Eng. Mattia Morganti_</u> 	<u>_Eng. Mattia Morganti_</u> 	<u>_Eng. Luca Laghi_</u> 
Revision -		Page 1 of 3

1 Test execution and results

This Test Report describes the determination of the breaking strength of a multi-layer tile for raised access floor, requested to CertiMaC Laboratory in Faenza by the Customer "Sicis S.r.l.", Ravenna (RA), Italy (Offer 19032/lab of 07/02/2019). Tests were performed on 7 samples (600 x 600 x 25 mm) (Figure 1), subjected standard condition (23°C and 50% r.h.) for 7 days.

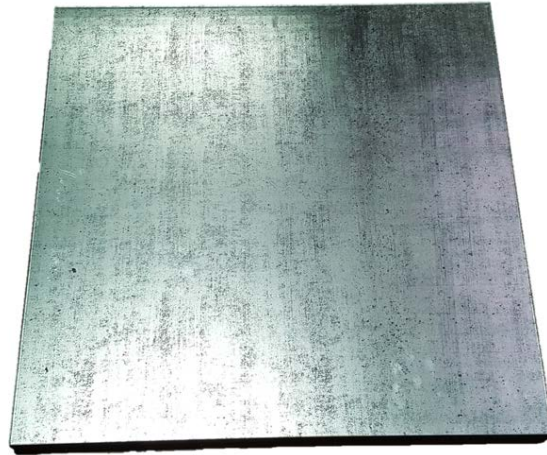


Figure 1. Tile for raised access floor

1.1 Breaking strength

The determination of the breaking strength was performed according to UNI EN 10545-4 standard (Figure 2 and Table 1). Failure modes are reported in Figure 3.

Sample	Span [mm]	Samples width [mm]	Thickness [mm]	Breaking load [N]	Breaking strength [N]	Modulus of rupture [N/mm ²]
1	580,0	600,00	24,98	14275	13799	33,2
2	580,0	600,00	25,03	15044	14543	34,8
3	580,0	600,00	24,96	14719	14228	34,3
4	580,0	600,00	25,09	13958	13493	32,2
5	580,0	600,00	24,91	15502	14986	36,2
6	580,0	600,00	24,97	14921	14423	34,7
7	580,0	600,00	24,93	14075	13606	32,8
Average				14642	14154	34,0
St.Dev.				564	545	1,4

Table 1. Results of the breaking strength test

Rev. --	Test Executed	Written	Approved	Page 2 of 3
	Eng. Mattia Morganti	_Eng. Mattia Morganti_	_Eng. Luca Laghi_	SOM_221_2019



Figure 2. Test lay-out



Figure 3. Example of tile fracture (front and back sides)

2 Conclusions

The product "Sicis Collection: Vetríte / Gemglass" shows the following results:

- Braking load: **14642 N**;
- Breaking strength: **14154 N**;
- Modulus of rupture: **34.0 MPa**.

3 Distribution list

ENEA	Archives	1 copy
CertiMaC	Archives	1 copy
Customer	Sicis S.r.l.	1 copy

Rev. --	Test Executed	Written	Approved	Page 3 of 3
	Eng. Mattia Morganti	_Eng. Mattia Morganti_	_Eng. Luca Laghi_	SOM_221_2019