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Evaluation Report of

ETA 19/0764
of 09/09/2020

Technical Assessment Body issuing the ETA:
Technical and Test Institute for Construction Prague

Trade name of the construction product Interior dividing partition kits SIS CLARUS

Product family to which the construction product belongs Product area code: 21 Internal partition kits

Holder of Assessment Stavební Interierové Systémy s.r.o.
Business park Letňany
Toužimská 889 – Hala D1, 199 00 Praha 9
Czech Republic
www.sis-systemy.cz

This Evaluation Report contains 8 pages

INTRODUCTION

This Evaluation Report describes the methods and results to assess the fitness of use for the intended use of the interior dividing partition kits introduced by Stavební Interierové Systémy s.r.o., in accordance with CPR Basic Requirements for construction works as specified in EAD 210005-00-0505 Internal partition kits for use as non-loadbearing walls.

A DESCRIPTION OF THE SYSTEM, INTENDED USE AND INTENDED WORKING LIFE

The interior dividing partition kits of the systems SIS CLARUS are described in Clause 1 of the European Technical Assessment (ETA). As described in Clause 2.1 of the ETA, this kit is intended to be used as non-load bearing walls mainly for residential buildings, offices and public buildings, with an average air temperature in the range from 5 °C to 35 °C and an average daily air relative humidity in the range from 20 % RH to 75 % RH (maximum air relative humidity only exceeding 85 % RH for short periods of time) are based on an assumed working life of 25 years as minimum.

B TESTS ON THE PRODUCT

The tests were carried out by Technical and Test Institute for Construction Prague (TTIC). The tests reports referred to the list attached in part C in this document is available at TTIC.

B.1 Mechanical resistance and stability (BWR 1)

See section 3.1 of the ETA.

B.2 Safety in case of fire (BWR 2)

B.2.1 Reaction to fire

No performance assessed.

B.2.2 Fire resistance

No performance assessed.

B.3 Hygiene, health and environment (BWR 3)

B.3.1 Content, emission and/or release of dangerous substances

No performance assessed.

B.3.2 Water vapour permeability

No performance assessed.

B.4 Safety in use (BWR4)

B.4.1 Sill height

No performance assessed.

B.4.2 Resistance to damage and functional failure from horizontal loads

The resistance to damage and functional failure from horizontal loads was tested in accordance with Cl. 2.2.6 of the EAD 210005-00-0505. The classification was carried out through reference to EAD 210005-00-0505 use categories. The use categories are given in the Tables 1 and 2. (Test reports No. 060-048291 and 060-050369).

The test specimens were constructed in accordance with Annexes A and B of the EAD 210005-00-0505.

Tab. 1: Resistance to damage from horizontal loads

Panel type	Resistance to damage from soft body impact load (50 kg bag)	Resistance to damage from hard body impact load (1 kg steel ball)
CLARUS A1-1*	IVa 400 Nm	IV 10 Nm
CLARUS A2-1**	IVb 500 Nm	IV 10 Nm
Other configuration	NPA	NPA

* The use category is valid for CLARUS A1-2, CLARUS A1-3, CLARUS A1-3-1 and CLARUS A1-1-3-2 too.

** The use category is valid for CLARUS A2-2 and CALRUS A2-3 too.

Tab. 2: Resistance to functional failure from horizontal loads

Panel type	Resistance to functional failure from soft body impact load (50 kg bag)	Resistance to functional failure from hard body impact load (0,5 kg steel ball)
CLARUS A1-1*	IV 120 Nm	IV 6 Nm
CLARUS A2-1**	IV 120 Nm	IV 6 Nm
Other configuration	NPA	NPA

* The use category is valid for CLARUS A1-2, CLARUS A1-3, CLARUS A1-3-1 and CLARUS A1-1-3-2 too.

** The use category is valid for CLARUS A2-2 and CALRUS A2-3 too.

Picture of test specimens, which were tested:

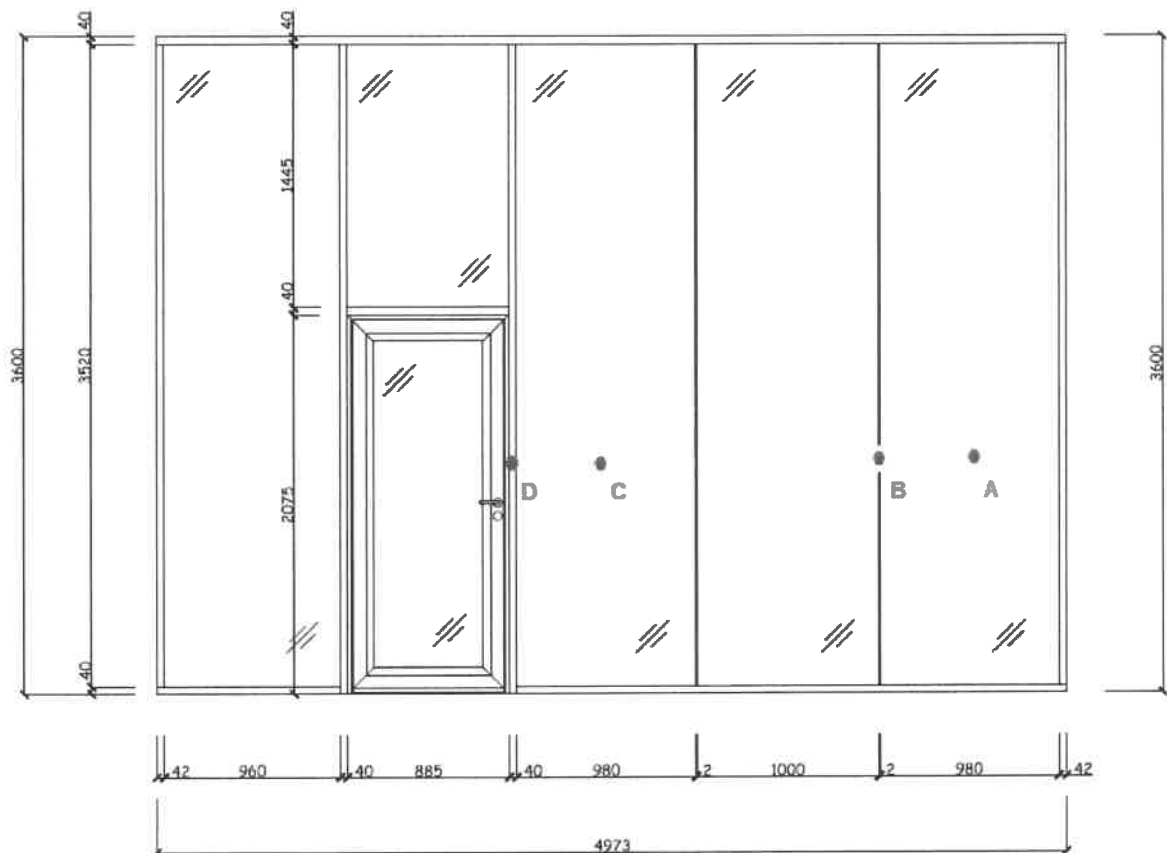


Figure 1: Test specimen – CLARUS – A1

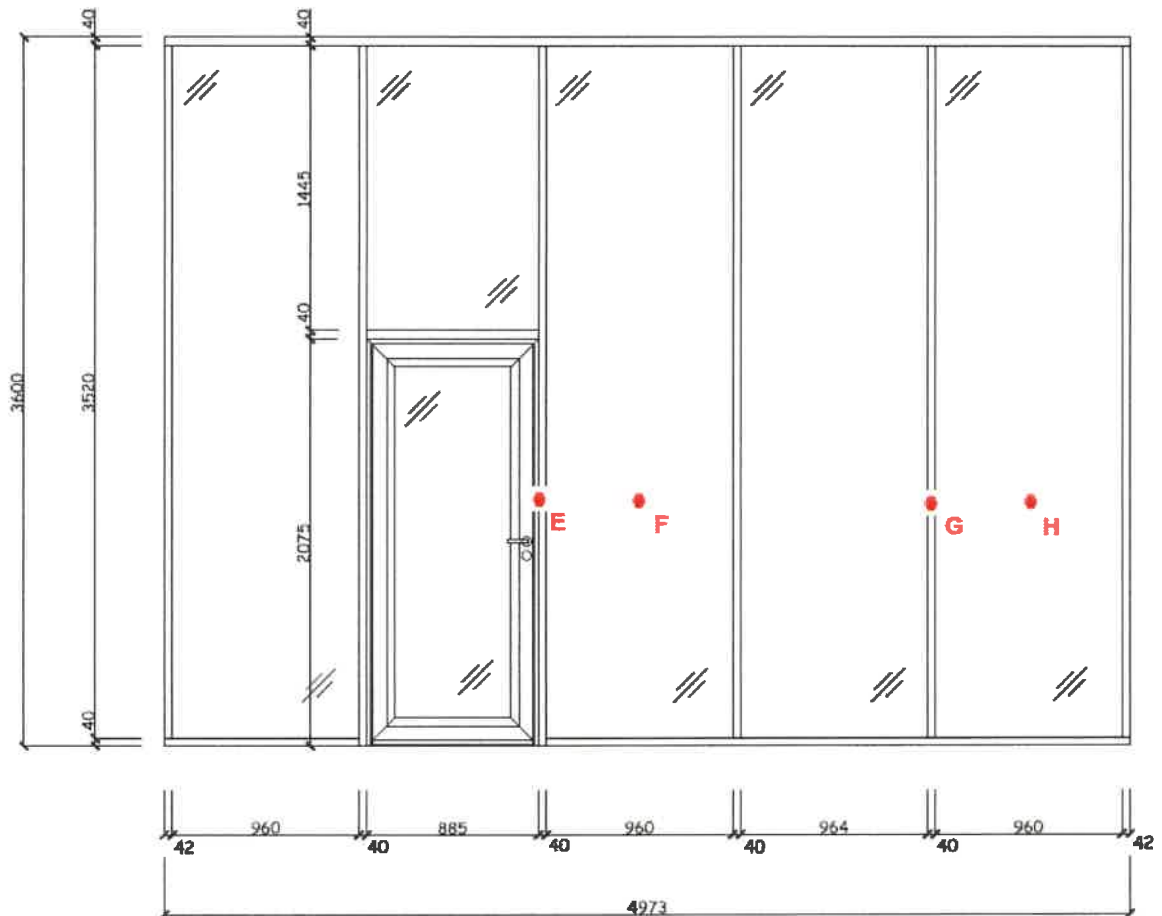


Figure 2: Test specimen – CLARUS – A2

B.4.3 Resistance to damage and functional failure from eccentric vertical loads
No performance assessed.

B.4.4 Resistance to horizontal linear static load
No performance assessed.

B.4.5 Resistance to functional failure from point loads parallel or perpendicular to the surface
No performance assessed.

B.4.6 Rigidity of partitions to be used as a substrate for ceramic tiling
No performance assessed

B.4.7 Safety against personal injuries by contact
See section 3.4.2 of the ETA.

B.4.8 Resistance to deterioration
No performance assessed

B.5 Protection against noise (BWR 5)

B.5.1 Airborne sound insulation

The airborne sound insulation was tested in accordance with Cl. 2.2.13 of the EAD 210005-00-0505 with reference to the following standards: EN ISO 10140-2, EN ISO 717-1. The

reached values for the weighted airborne sound insulation R_w are given in the Tables 3 and 4.

Tab. 3: Airborne sound insulation R_w (C; C_{tr}) of interior dividing partition kits SIS CLARUS

Measurement of airborne sound insulation	R_w (C; C_{tr}) [dB]	Test Report
CLARUS A1-1: 1x VSG 44.1 + 1x Stratophone 44.2, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (970x3068x80) mm	45 (-1; -4)	040-061609
CLARUS A1-2: 1x VSG 44.1 + 1x ESG 8 mm, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (970x3068x80) mm	43 (-1; -4)	040-061609
CLARUS A1-3-1: 1x ESG 10 mm + 1x VSG 55.1, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (1360x1540x80) mm	44 (-2; -3)	040-061099
CLARUS A1-3-2: 1x ESG 10 mm + 1x Stratophone 55.2, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (1360x1540x80) mm	45 (-2; -4)	040-061099
CLARUS A1-3-3: 1x VSG 55.1 + 1x Stratophone 55.2, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (1360x1540x80) mm	46 (-1; -3)	040-061099
CLARUS A1-P: wooden particular board laminated, thickness 12, thermal insulation URSA 40 mm, frame is made of Al profiles, dimensions of partition kit: (1360x1540x80) mm	45 (-3; -8)	040-061099
CLARUS A2-1: 1x VSG 44.1 + 1x VSG 33.1, frame is made of Al profiles, dimensions of partition kit: (970x3068x80) mm	43 (-1; -4)	040-061609
CLARUS A2-2: 1x VSG 44.1 + 1x Stratophone 44.2, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (970x2120x80) mm	45 (-1; -4)	040-052529
CLARUS A2-3: 1x Stratophone 33.2 + 1x Stratophone 44.2, frame is made of Al profiles, dimensions of partition kit: (1360x1540x80) mm	49 (-1; -6)	040-056101
CLARUS S1-1: 1x ESG 10 mm, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (1360x1540) mm, thickness 20 mm (frame) and 10 mm (glass)	34 (-1; -2)	040-061099
CLARUS S1-2: 1x VSG 55.1, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (1360x1540) mm, thickness 20 mm (frame) and 10 mm (glass)	35 (0; -2)	040-061099
CLARUS S1-3: 1x Stratophone 55.2 (VSG 55.2), connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (970x3068) mm, thickness 20 mm (frame) and 10,2 mm (glass)	37 (-1; -3)	040-061609
CLARUS S1-3: 1x Stratophone 55.2, connection of glasses by 3M double-sided adhesive tape, frame is made of Al profiles, dimensions of partition kit: (1360x1540) mm, thickness 20 mm (frame) and 10 mm (glass)	37 (-1; -3)	040-061099
CLARUS S2-1: 1x Stratophone 44.2, frame is made of Al profiles, dimensions of partition kit: (1360x1540x80) mm	36 (-1; -3)	040-061099

Tab. 4: Airborne sound insulation R_w (C; C_{tr}) of door CLARUS

Measurement of airborne sound insulation	R_w (C; C_{tr}) [dB]	Test Report
Door, type CLARUS DPKO – solid, composition according to Annex A of ETA	38 (-1; -4)	040-061608
Door, type CLARUS DP3 – solid, composition according to Annex A of ETA	31 (-1; -1)	040-060622
Door, type CLARUS DP4 – solid, composition according to Annex A of ETA	35 (-1; -2)	040-060622
Door, type CLARUS DP5 – solid, composition according to Annex A of ETA	38 (-1; -4)	040-060622
Door, type CLARUS D1 – glazed, composition according to Annex A of ETA	33 (-1; -2)	040-058225
Door, type CLARUS D1A – glazed, composition according to Annex A of ETA	37 (-1; -3)	040-061608
Door, type CLARUS D2 – glazed, composition according to Annex A of ETA	35 (-1; -3)	040-058225
Door, type CLARUS D2A – glazed, composition according to Annex A of ETA	37 (-1; -4)	040-058225
Door, type CLARUS D3A – glazed, composition according to Annex A of ETA	34 (-1; -3)	040-060622
Door, type CLARUS D3B – glazed, composition according to Annex A of ETA	36 (-1; -3)	040-060622
Door, type CLARUS D3C – glazed, composition according to Annex A of ETA	30 (-1; -3)	040-060622
Door, type CLARUS D3E – glazed, composition according to Annex A of ETA	38 (-2; -4)	040-061608
Door, type CLARUS D3F – glazed, composition according to Annex A of ETA	35 (-1; -3)	040-060622
Door, type CLARUS DS1 – glazed, composition according to Annex A of ETA	30 (-1; -2)	040-059478
Door, type CLARUS DS1A – glazed, composition according to Annex A of ETA	32 (-1; -2)	040-059478

B.5.2 Sound absorption

No performance assessed.

B.6 Energy economy and heat retention (BWR 6)

No performance assessed.

B.6.1 Thermal resistance

No performance assessed.

B.6.2 Thermal inertia

No performance assessed.

B.7 Sustainable use of natural resources (BWR 7)

No performance assessed.

C LIST OF TEST REPORTS

Test Report No. 060-048291 Impact resistance CLARUS, type A1 and A2. Issued by TTIC Prague – branch Brno, Hněvkovského 77, 617 00 Brno, dated 18/01/2019

Test Report No. 060-050369 Impact resistance CLARUS, type A1 and A2. Issued by TTIC Prague – branch Brno, Hněvkovského 77, 617 00 Brno, dated 16/04/2020

Test Report No. 040-0522529 Airborne sound insulation CLARUS, type A2-3. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 27/09/2017

Test Report No. 040-056101 Airborne sound insulation CLARUS, type A2-2. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 8/8/2016

Test Report No. 040-058225 Airborne sound insulation CLARUS, type D1, D2 and D2A. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 15/06/2018

Test Report No. 040-059478 Airborne sound insulation CLARUS, type DS1 and DS1A. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 24/10/2018

Test Report No. 040-060622 Airborne sound insulation CLARUS, type DP3, DP4, DP5, D3A, D3B, D3C, D3E and D3F. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 7/5/2019

Test Report No. 040-061099 Airborne sound insulation CLARUS, type A1-3-1, A1-3-2, A1-3-3, A1-P, S1-1, S1-2, S1-3 and S2-1. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 31/5/2019

Test Report No. 040-061608 Airborne sound insulation CLARUS, type DPKO, D1A and D3E. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 29/7/2019

Test Report No. 040-061609 Airborne sound insulation CLARUS, type A1-1, A1-2, A2-1 and S1-3. Issued by TTIC Prague – branch Teplice, Tolského 447, 415 03 Teplice, dated 29/7/2019

D LIST OF REFERENCES

EAD 210005-00-0505 Internal partition kits for use as non-loadbearing walls

EN ISO 10140-2:2010 Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation

EN ISO 717-1:2013 Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation