SIMPLY SURFACES

DIMENSIONS			
Thickness		5.00 mm · t_{max} - t_{min} ≤ 0.50 mm	
Length		1219.2 mm · l_{max} - l_{min} ≤ 0.50 mm	
Width		181.1 ± 0.10 mm · w_{max} - w_{min} ≤ 0.20 mm	
TOLERANCE			
Squareness		EN 16511	≤ 0.20 mm
Straightness		EN 16511	≤ 0.30 mm / m
Flatness Crosswise		EN 16511	Concave: ≤ 0.15% · convex: ≤ 0.20%
Flatness Lengthwise		EN 16511	Concave: ≤ 0.50% · convex: ≤ 1.00%
Openings between Elements		EN 16511	Average: ≤ 0.15 mm · max: ≤ 0.20 mm
Height Difference between Elements		EN 16511	Average: ≤ 0.10 mm · max: ≤ 0.15 mm
TEST			
Abrasion Resistance Method B		EN 16511	≥ 3000 cycles
Impact Resistance		EN 16511	≥ 1200 mm
Micro Scratch Resistance		EN 16511	≤ MSR-A1
Stain Resistance	**Group 1 & 2**	EN 16511	Grade 5
	Group 3	EN 16511	Grade 4
Castor Chair Test		ISO 4918	No change in appearance after 25.000 cycles
Effect of Furniture Leg		EN 16511	No visible damage
Thickness Swelling		EN 16511	No swelling
Residual Indentation		EN 16511	≤ 0.20mm
Locking Strength		EN 16511	$f_{l0,2}$ ≥ 1 kN/m (length); $f_{s0,2}$ ≥ 1.5 kN/m (width)
Dimensional Stability		EN 16511	≤ 0.25 %
ENVIRONMENT			
Emission of Formaldehyde		CDPH	PASS
PHYSICAL BEHAVIOR			
Fire Behaviour		EN 13501-1	Bfl-s1
Slide Resistance		EN 13893	DS
Thermal Resistance		EN 12667	0.01 (m^2K)/W
Electrostatic Behaviour		EN 1815	Antistatic Floor Covering
SOUND ABSORPTION QUALITIES			
Calculated Impact Insulation Class		ASTM E492-09	IIC 62
Calculated Sound Transmission Class		ASTM E90-09	STC 60

The data sheet is updated regularly to meet new technological standards. This version replaces all previous versions as well as those which are undated.
SPC RIGID CORE Flooring of floating installation, Level of use according to EN 16511: Class 32
FOR FLOORING TO BE USED IN LIVING AREAS AND COMMERCIAL PREMISES

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CE

TRUSA MERMER SANAYİ VE TİCARET LİMİTED ŞİRKETİ
TURANKÖY MAH. TURANKÖY 7 SOK. NO:1
KESTEL / BURSA
TURKEY
21

TRUSTONE brand TS EN 14041:2004+AC:2005+AC:2006 Resilient, Textile and Laminate Floor Coverings - Manufactured for general use in buildings conforming to the main features
SPC Vinyl Flooring 4mm+1mm IXPE 0,55mm
18052021-DOP-01

Reaction to fire classification	**:** Bfl s 1
Pentachlorophenol	: NPD
Formaldehyde	: E1
Waterproof	: NPD
Slip Resistance	: DS
Static electrical charging	: NPD
Thermal resistance	: NPD

Test Report – Products
Testrapport - Producten

TÜVRheinland®

Test report no.: *Testrapport nr.:*	**89218997 001**	**Order No.:** *Opdracht nr.:*	218997	
Client Reference No.: *Klantreferentie nr.:*	N/A	**Order date:** *Opdrachtdatum:*	18.05.2021	
Client: *Klant:*	TRUSA MERMER SAN. TİC. LTD. STİ., Turanköy Mah. Turanköy 7. Sok No: 1, KESTEL/BURSA, Turkey			
Test item: *Testvoorwerp:*	SPC Vinyl Floor Covering			
Identification/ Type No.: *Benaming / Type nr.:*	TRU-STONE SPC-CLICK Vinylflooring 4+1mm IXPE 0,55mm			
Order content: *Inhoud opdracht:*	Determination of selected parameters			
Test specification: *Testomschrijving:*	ISO 8302:1991 / EN 12667:2001, EN 13893:2002, EN 1815:2016 The determination of the thermal resistance, slip resistance and the assessment of static electrical propensity, walking test.			

Date of sample receipt: *Ontvangstdatum monster:*	31.05.2021
Test sample No: *Testproefstuk nr.:*	MT21-218997.01
Testing period: *Testperiode:*	31.05.2021 - 29.06.2021
Place of testing: *Testlocatie:*	Westervoortsedijk 73, 6827 AV Arnhem
Testing laboratory: *Testlaboratorium:*	TÜV Rheinland Nederland B.V.
Test result*: *Testresultaat*:*	See Other

tested by: *getest door:*	X Ondertekend door: Michiel van de Vlekkert	**authorized by:** *geautoriseerd door:*	X Ondertekend door: Ellen Zwier
Date: 30.06.2021 *Datum:*		**Issue Date:** 30.06.2021 *Datum uitgave:*	
Position / *functie*:	jr. Engineer	**Position** / *functie*:	Technician

Others / *Andere*: See individual test results.

Condition of the test item at delivery: *Toestand van het test voorwerp bij ontvangst:* Test item complete and undamaged

* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
* *Legenda:*	*P(ass) = voldoet aan test omschrijving*	*F(ail) = voldoet niet aan test omschrijving*	*N/A = niet van toepassing*	*N/T = niet getest*

Test report no.: 89218997 001
Testrapport nr.:

Remarks
Opmerkingen

1	The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. For the influence of the measuring uncertainties on the results, reference is made to the validation of the respective methods. *De apparatuur welke tijdens de gespecificeerde testperiode is gebruikt, is gekalibreerd volgens ons kalibratieprogramma. De apparatuur voldoet aan de eisen welke zijn opgenomen in de relevante normen. De traceerbaarheid van de gebruikte testapparatuurs is gewaarborgd door naleving van de voorschriften in ons kwaliteitsmanagementsysteem. Gedetailleerde informatie over testomstandigheden, apparatuur en meetonzekerheid is beschikbaar in het testlaboratorium en kan op verzoek worden verstrekt. Voor de invloed van de meetonzekerheden op de resultaten wordt verwezen naar de validatie van de respectievelijke methode c.q. verrichting*
2	As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and is unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. *Zoals contractueel overeengekomen is dit document enkel digitaal ondertekend. TÜV Rheinland heeft niet geverifieerd en kan niet verifiëren welke wettelijke of andere vereisten van toepassing zijn op dit document. Een dergelijke verificatie valt onder de verantwoordelijkheid van de gebruiker van het document. Op verzoek van de opdrachtgever kan TÜV Rheinland de geldigheid van de digitale handtekening bevestigen door een apart document. Een dergelijk verzoek moet worden gericht aan onze verkoopafdeling. Voor een dergelijke extra service zal een milieutoeslag in rekening worden gebracht.*
3	Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report. Tests clauses marked with [a] are performed under ISO 17025 accreditation. Deviations of testing specification(s), test locations or customer requirements are listed in specific test clause in the report. No opinions or interpretation are included in this report. This test report consists of multiple pages and is only to be read is a whole. The number of pages can be seen in the header on the top right of each page, the report ends when the last page is reached. TÜV Rheinland Nederland B.V. is solely responsible for the content. *Test onderdelen welke met * zijn gemarkeerd zijn uitbesteed aan gekwalificeerde onderaannemers en zijn beschreven in het respectievelijke test onderdeel van dit rapport. Test onderdelen welke met [a] zijn gemarkeerd zijn onder ISO 17025 accreditatie uitgevoerd. Afwijkingen van testspecificatie(s), testlocaties of klant eisen zijn vermeld in het van toepassing zijnde onderdeel in het rapport. Er zijn geen opinies en interpretaties opgenomen binnen het rapport. Dit rapport bestaat uit meerdere pagina's en dient als geheel gelezen te worden. Het aantal pagina's is rechtsboven in de koptekst van dit rapport vermeld en eindigt wanneer de laatste pagina is bereikt. TÜV Rheinland Nederland is als enige verantwoordelijk voor de inhoud van het rapport.*
4	

Test report no.: 89218997 001
Testrapport nr.:

Product description
Product omschrijving

1	**Product details:** *Product details:*	Product name: TRU-STONE SPC-CLICK Vinylflooring 4+1mm IXPE 0,55 mm
2	**Other:** *Andere:*	Test sample(s), as well sample information, description, product details and intended usage was provided by customer.
3	**Test sample obtaining:** *Selectie van het proefstuk:*	Sending by customer Sampling by TÜV Rheinland Group others:

Figure 1: Picture of the received sample (surface)

Figure 2: Picture of the received sample (back)

Clause *Deel*	Requirements - Tests / *Vereisten - Tests*	Measuring results – Remarks *Meetresultaten – Opmerkingen*	Result *Resultaat*

1.1. Determination of thermal resistance (thermal conductivity)
ISO 8302:1991 and EN 12667:2001

Pre conditioning	23 ± 2ºC and 50 ± 5% relative humidity
Conditioning period	≥ 24 h
Description of used method	Guarded hotplate, a sample is placed between a cold and a warm plate. The cold and the warm plate are kept at constant temperature. The amount of energy needed to keep the temperature of the warm and cold plate constant is an indication for the heat transmission.
Requirements according to EN 14041:2004/AC:2005	Thermal conductivity and resistance values shall be calculated or measured. For floor coverings its common to expressed as the 23 °C value of, either: - Thermal resistance, R_{23}, in m²·K/W, or alternatively - Thermal conductivity, λ_{23}, in mW/m·K.

Test result(s)

Thermal resistance

Temperature		Temperature difference	Thermal resistance R in m² . K/W
R_{18}	18 ºC	10 K	0.034
R_{23}	23 ºC	10 K	0.034
R_{28}	28 ºC	10 K	0.033

Thermal conductivity

Temperature		Temperature difference	Thermal conductivity λ in mW/m.K
λ_{18}	18 ºC	10 K	148.38
λ_{23}	23 ºC	10 K	150.82
λ_{28}	28 ºC	10 K	152.99

Thermal resistance at 23°C, R_{23}, (m²·K/W) **0.034**

P ☐
F ☐
N/A ■
N/T ☐

Clause *Deel*	Requirements - Tests / *Vereisten - Tests*	Measuring results – Remarks *Meetresultaten – Opmerkingen*	Result *Resultaat*

1.2.	**Determination of dynamic coefficient of friction on dry floor surfaces** *EN 13893:2002*			
	Remark	This result can also be used for: TRU-STONE SPC-CLICK Vinylflooring 4+1mm IXPE 0,30mm		
	Test conditions	23 ± 2ºC and 50 ± 5% relative humidity		
	Conditioning period	≥ 24 days		
	Type of test location	Laboratory		
	Date of test	08.06.2021		
	Test conditions	Dry		
	Pre-treatment	None		
	Used slider	Leather/rubber combination		
	Requirements according to EN 14041:2004/AC:2005	≥ 0,30 µ		
	Test result(s)			
		Length direction	Width direction	
	Measurement 1 (µ)	0.44	0.47	P ■ F ☐ N/A ☐ N/T ☐
	Measurement 2 (µ)	0.42	0.44	
	Measurement 3 (µ)	0.41	0.42	
	Measurement 4 (µ)	0.41	0.38	
	Measurement 5 (µ)	0.39	0.37	
	Average measurement 3, 4 and 5 (µ)	**0.40**	**0.39**	

1.3.	**Assessment of static electrical propensity** *EN 1815:2016, method A*		
	Test conditions	23 ± 1ºC and 25 ± 2% relative humidity	
	Conditioning period	≥ 7 days	
	Sole material	Rubber	
	Installation system (top to bottom)	Test specimen Earthed metal plate	
	Requirement according EN 14041:2004/AC:2005	Antistatic floor coverings: ≤ 2.0 kV	
	Test result(s)		
	Measurement 1 (kV)	0.6	P ■ F ☐ N/A ☐ N/T ☐
	Measurement 2 (kV)	0.6	
	Measurement 3 (kV)	0.6	
	Average result (kV)	**0.6**	
	Assessment:	Antistatic	

EUROLAB® Laboratory Services

TEST / INSPECTION REPORT

EUROLAB LABORATORY SERVICES

TÜRCERT TEKNİK KONTROL VE BELGELENDİRME A.Ş.

UNITED ACCREDITATION FOUNDATION UAF

5190243IB02

2021160410

Test Result : B_{fl}, s1

Report No : 2021160410
Applicant : **TRUSA MERMER SAN. TİC. LTD. ŞTİ.**
Adress : Turanköy Mah. Turanköy 7. Sokak No:1/4 KESTEL/BURSA
Contact Person : Erol UZUNCA
Telephone : 05414478663
E-Mail : ctstone@trusa.net
Sample Accepted on : 16.03.2021
Report Date : 24.03.2021
Total Number of Pages : 6 (Pg)

Sample ID : **TRU-STONE / ROKPLANK SPC Rigid Core Vinyl Flooring (0,3mm/0,55mm)**

	TEST	METHOD	RESULT	
*	Fire classification of construction products and building elements-Part 1: Classification using test data from reaction to fire tests.	EN 13501-1	PASS	
			B_{fl}	s1

Results: Flame spread is not highly flammable, no melt droplets, smoke formation has been.

Seal

Customer Representative
Hasan KUTLU

Laboratory Manager
Hava Sarıaydın

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EUROLAB ® (TÜRCERT TEKNİK KONTROL VE BELGELENDİRME A.Ş.)

Environment

The requirements and standards apply to equipment intended for use in:

X	Residential (domestic) environment
X	Commercial and light-industrial environment
X	Industrial environment
X	Medical environment

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TS EN ISO 13501-1: Building products and structural elements, fire classification. Part 1: Classification by using data obtained from the behavior tests against fire

Scope

This standard covers the behavior of all building products, including products used in combination with structural elements, against flame.

Classes of reaction to fire performance for floorings (B_{fl})

Class	Test method	Classification criteria	Additional classification
B_{fl}	EN ISO 9239-1 [a] and	Critical flux [b] ≥ 8,0 kW/m2	Smoke production[c]
	EN ISO 11925-2 [d]: Exposure = 15 s	Fs ≤ 150 mm within 20 s	

[a] Test duration = 30 min.

[b] Critical flux is defined as the radiant flux at which the flame extinguishes or the radiant flux after a test period of 30 min, whichever is the lower (i.e. the flux corresponding with the furthest extent of spread of flame).

[c] **s1** = Smoke ≤ 750 % minutes;
s2 = not s1.

[d] Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack

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EN ISO 9239-1: Reaction to fire tests for floorings—Part 1: Determination of the burning behaviour using a radiant heat source

Scope

This part of ISO 9239 describes a method for evaluating the reaction to fire versus airflow and the propagation of flame in horizontally arranged floor coverings exposed to a heat flow gradient in a test chamber and ignited by a pilot flame. .

This test method applies to all floor coverings such as: textile floor coverings, cork, wood, rubber and plastic coverings as well as coverings. The results obtained with this test method show the fire behavior of the entire tested floor covering, including any carrier plate.

Procedure

At intervals of 10 minutes from the start of the test and when the flame is extinguished, the burning distances shall be measured as the distance rounded to the nearest 10 mm between the flame front and the sample zero line. All special observations should be recorded, such as flickering, melting, bubble formation, duration and location of the glow after the flame is extinguished, burning on the carrier plate.

Test Results

Sample	Furthest extent of spread of flame(mm)	Critical Heat Flux (CHF or HF-30) kW/m²	Comments and Observation
# 1	155	10.06	There were cracks on the surface in the direction of the flame source applied in the sample, but no flame was observed.
# 2	160	10.12	
# 3	165	10.14	
The mean value for the critical heat flux (CHF and/or HF-30) of the three specimens from the same orientation: 10.11 kW/m2			

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EN ISO 11925-2: Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test

Scope

This part of ISO 11925 specifies a method of test for determining the ignitability of products by direct small flame impingement under zero impressed irradiance using vertically oriented test specimens.

Procedure

There are two flame application times, either 15 seconds or 30 seconds. The starting time of the test depends on the application of the flame.

Conditioning

Temperature (^{0}C)	23 ± 2
Relative Humidity (%)	50 ± 5

Test Results

Ignition Position	Face Ignition and Edge ignition
Flame Application Time	15s

Expression of results	**Results**					
	Face Ignition			**Edge ignition**		
# Sample No	**#1**	**#2**	**#3**	**#4**	**#5**	**#6**
Whether ignition occurs (Yes/No)	No	No	No	Yes	Yes	Yes
Whether the flame tip reaches 150 mm above the flame application point, and the time at which this occurs (No/Time)	No	No	No	No	No	No
Whether ignition of the filter paper occurs (Yes/No)	No	No	No	No	No	No

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Classification of Air Duct based on fire behavior:

B_{fl}

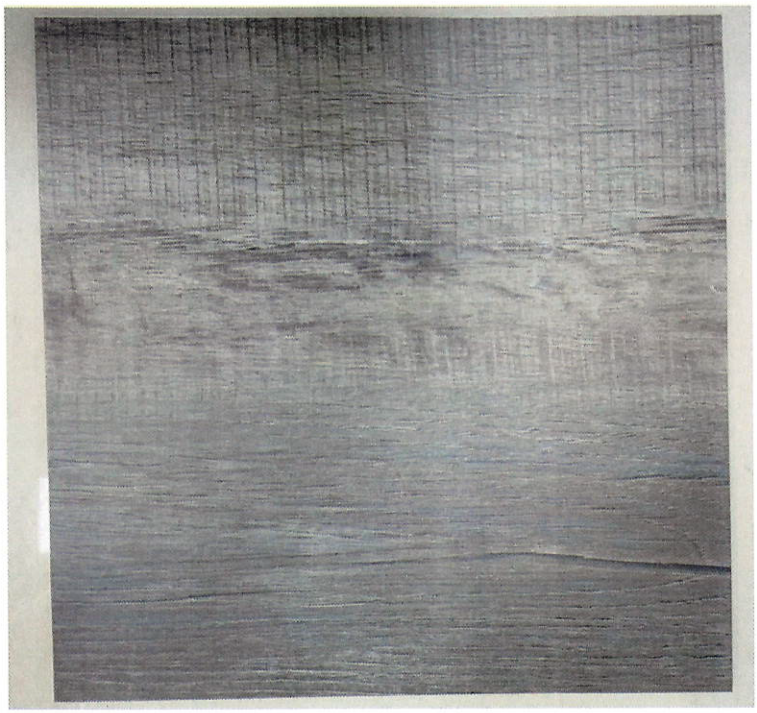
Additional classification for smoke formation:

s1

***Reaction to fire for* SPC Rigid Core Vingl Flooring**

Flammability Behavior	Smoke	
B_{fl}	s	1

SAMPLE IMAGE



****** End Of Report ******

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