



Technical Characteristic KAI/KOS

ODU
16.07.05(7/0)

Model "Gres SP"
Internal code: 7700; 7701
Type Porcelain Tiles, Unglazed,
Group BIa, Nominal size 333x333x7.0 mm

Characteristics Group BIa, Annex G	Tolerance EN 14411:2016, %	Tolerance EN14411:2016, mm	Request values	Measured in KAI laboratory		Testing method
1. Length/width, mm	±0.6/max±2mm	±2.00	333x333	1K	330.6x330.6	EN ISO 10545-2
				2K	331.8x331.8	
				3K	333.0x333.0	
				4K	334.2x334.2	
				5K	335.4x335.4	
2. Thickness, mm	±5/max±0.5mm	±0.35	7.0±0.35 mm	6.9 – 7.1 mm		EN ISO 10545-2
3. Straightness of sides, mm	±0.5/max±1.5mm	±1.50	±1.30 mm	-0.43 – +0.52 mm		EN ISO 10545-2
4. Rectangularity, mm	±0.5/max±2mm	±1.67	±1.40 mm	-0.49 – +0.24mm		EN ISO 10545-2
5. Centre curvature, mm	±0.5/max±2mm	±2.00	±1.50 mm	-0.09 – +0.27 mm		EN ISO 10545-2
6. Edge curvature, mm	±0.5/max±2mm	±1.67	±1.40 mm	+0.01 – +0.47 mm		EN ISO 10545-2
7. Warpage, mm	±0.5/max±2mm	±2.00	±1.50 mm	-0.41 – +0.34 mm		EN ISO 10545-2
8. Water absorption, %	≤0,5% Individual ≤0,6%	≤0,5% Individual ≤0,6%	≤0,5%	0.04 – 0.09 %		EN ISO 10545-3
9. Modulus of rupture, N/mm ²	≥35N/mm ² individual≥32N/mm ²	≥35N/mm ² individual≥32N/mm ²	≥35N/mm ²	Average: 59 N/mm ²		EN ISO 10545-4
10. Breaking strength, N	≥ 700N	≥ 700N	≥ 700N	Average:1318 N		EN ISO 10545-4
11. Determination of deep abrasion for unglazed tiles	≤ 175 mm ³	≤ 175 mm ³	≤ 175 mm ³	143 mm ³		EN ISO 10545-6
12. Thermal shock resistance	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Resistant		EN ISO 10545-9
13. Resistance for household chemicals and swimming pool salts	Min class B	Min class B	Min class B	UA		EN ISO 10545-13
14. Resistance to the low concentration acids and alkalis	Declared value	Declared value	Declared value	ULA		EN ISO 10545-13
15. Resistance to the high concentration acids and alkalis	Declared value	Declared value	Declared value	UHA		EN ISO 10545-13
16. Stain resistance	Declared value	Declared value	Min class 3	class 5		EN ISO 10545-14
17. Frost resistance	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Resistant		EN ISO 10545-12

18. Slipperiness	Declared value	Declared value	Declared value	PTV 36+ Dry PTV 25-35 Wet	BS 7976
19. Slipperiness	Declared value	Declared value	Declared value	R10	DIN 51130
20. MOHS	Declared value	Declared value	Declared value	8	EN 101:1991

Date: 06.12.2021

QC:





Technical Characteristic KAI/KOS

ODU
16.07.05(7/0)

Model "Gres SP"
Internal code: 7810; 9347
Type Porcelain Tiles, Unglazed,
Group BIa, Nominal size 333x333x8.0 mm

Characteristics Group BIa, Annex G	Tolerance EN 14411:2016, %	Tolerance EN14411:2016,mm	Request values	Measured in KAI laboratory	Testing method										
1. Length/width, mm	±0.6/max±2mm	±2.00	333x333	<table border="1"> <tr><td>1K</td><td>330.6x330.6</td></tr> <tr><td>2K</td><td>331.8x331.8</td></tr> <tr><td>3K</td><td>333.0x333.0</td></tr> <tr><td>4K</td><td>334.2x334.2</td></tr> <tr><td>5K</td><td>335.4x335.4</td></tr> </table>	1K	330.6x330.6	2K	331.8x331.8	3K	333.0x333.0	4K	334.2x334.2	5K	335.4x335.4	EN ISO 10545-2
1K	330.6x330.6														
2K	331.8x331.8														
3K	333.0x333.0														
4K	334.2x334.2														
5K	335.4x335.4														
2. Thickness, mm	±5/max±0.5mm	±0.40	8.0±0.40 mm	7.9 – 8.2 mm	EN ISO 10545-2										
3. Straightness of sides,mm	±0.5/max±1.5mm	±1.50	±1.30 mm	-0.19 – +0.25 mm	EN ISO 10545-2										
4. Rectangularity, mm	±0.5/max±2mm	±1.67	±1.40 mm	-0.18 – +0.34 mm	EN ISO 10545-2										
5. Centre curvature, mm	±0.5/max±2mm	±2.00	±1.50 mm	-0.11 – +0.77 mm	EN ISO 10545-2										
6. Edge curvature, mm	±0.5/max±2mm	±1.67	±1.40 mm	-0.16 – +0.35 mm	EN ISO 10545-2										
7. Warpage, mm	±0.5/max±2mm	±2.00	±1.50 mm	-0.49 – +0.47 mm	EN ISO 10545-2										
8. Water absorption, %	≤0,5% Individual ≤0,6%	≤0,5% Individual ≤0,6%	≤0,5%	0.06 – 0.15 %	EN ISO 10545-3										
9. Modulus of rupture, N/mm ²	≥35N/mm ² individual≥32N/mm ²	≥35N/mm ² individual≥32N/mm ²	≥35N/mm ²	Average: 61 N/mm ²	EN ISO 10545-4										
10. Breaking strength, N	≥ 1300N	≥ 1300N	≥ 1300N	Average:1778 N	EN ISO 10545-4										
11. Determination of deep abrasion for unglazed tiles	declared by producer	declared by producer	≤ 175 mm ³	143 mm ³	EN ISO 10545-6										
12. Thermal shock resistance	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Resistant	EN ISO 10545-9										
13. Resistance for household chemicals and swimming pool salts	Min class B	Min class B	Min class B	UA	EN ISO 10545-13										
14. Resistance to the low concentration acids and alkalis	Declared value	Declared value	Declared value	ULA	EN ISO 10545-13										
15. Resistance to the high concentration acids and alkalis	Declared value	Declared value	Declared value	UHA	EN ISO 10545-13										
16. Stain resistance	Declared value	Declared value	Min class 3	class 5	EN ISO 10545-14										

17. Frost resistance	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Resistant	EN ISO 10545-12
18. Slipperiness	Declared value	Declared value	Declared value	PTV 36+ Dry PTV 25-35 Wet	BS 7976
19. Slipperiness	Declared value	Declared value	Declared value	R10	DIN 51130
20. MOHS	Declared value	Declared value	Declared value	8	EN 101:1991

Date: 06.12.2021





Technical Characteristic KAI/KOS

ODU
16.07.05(7/0)

Model "Gres SP"
Internal code: 6228
Type Porcelain Tiles, Unglazed,
Group BIa, Nominal size 333x333x12 mm

Characteristics Group BIa, Annex G	Tolerance EN 14411:2016, %	Tolerance EN14411: 2016,mm	Request values	Measured in KAI laboratory	Testing method										
1. Length/width, mm	±0.6/max±2mm	±2.00	333x333	<table border="1"> <tr><td>1K</td><td>330.6x330.6</td></tr> <tr><td>2K</td><td>331.8x331.8</td></tr> <tr><td>3K</td><td>333.0x333.0</td></tr> <tr><td>4K</td><td>334.2x334.2</td></tr> <tr><td>5K</td><td>335.4x335.4</td></tr> </table>	1K	330.6x330.6	2K	331.8x331.8	3K	333.0x333.0	4K	334.2x334.2	5K	335.4x335.4	EN ISO 10545-2
1K	330.6x330.6														
2K	331.8x331.8														
3K	333.0x333.0														
4K	334.2x334.2														
5K	335.4x335.4														
2. Thickness, mm	±5/max±0.5mm	±0.50	12.0±0.50 mm	11.8 – 12.2 mm	EN ISO 10545-2										
3. Straightness of sides, mm	±0.5/max±1.5mm	±1.50	±1.30 mm	-0.17 ÷ +0.33 mm	EN ISO 10545-2										
4. Rectangularity, mm	±0.5/max±2mm	±1.67	±1.40 mm	-0.53 ÷ +0.74 mm	EN ISO 10545-2										
5. Centre curvature, mm	±0.5/max±2mm	±2.00	±1.50 mm	-0.57 ÷ +0.40 mm	EN ISO 10545-2										
6. Edge curvature, mm	±0.5/max±2mm	±1.67	±1.40 mm	-0.44 ÷ +0.60 mm	EN ISO 10545-2										
7. Warpage, mm	±0.5/max±2mm	±2.00	±1.50 mm	-0.69 ÷ +0.71 mm	EN ISO 10545-2										
8. Water absorption, %	≤0,5% Individual ≤0,6%	≤0,5% Individual ≤0,6%	≤0,5%	0.01 - 0.06 %	EN ISO 10545-3										
9. Modulus of rupture, N/mm ²	≥35N/mm ² individual≥32N/mm ²	≥35N/mm ² individual≥32N/mm ²	≥35N/mm ²	Average: 56 N/mm ²	EN ISO 10545-4										
10. Breaking strength, N	≥ 1300N	≥ 1300N	≥ 1300N	Average: 4400 N	EN ISO 10545-4										
11. Determination of deep abrasion for unglazed tiles	≤ 175 mm ³	≤ 175 mm ³	≤ 175 mm ³	Average: 143 mm ³	EN ISO 10545-6										
12. Thermal shock resistance	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Resistant	EN ISO 10545-9										
13. Resistance for household chemicals and swimming pool salts	Min class B	Min class B	Min class B	UA	EN ISO 10545-13										
14. Resistance to the low concentration acids and alkalis	Declared value	Declared value	Declared value	ULA	EN ISO 10545-13										
15. Resistance to the high concentration acids and alkalis	Declared value	Declared value	Declared value	UHA	EN ISO 10545-13										

16. Stain resistance	Declared value	Declared value	Min class 3	class 5	EN ISO 10545-14
17. Frost resistance	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Pass according to EN ISO 10545-1	Resistant	EN ISO 10545-12
18. Slipperiness	Declared value	Declared value	Declared value	PTV 36+ Dry PTV 25-35 Wet	BS 7976
19. Slipperiness	Declared value	Declared value	Declared value	R10	DIN 51130:2010
20. MOHS	Declared value	Declared value	Declared value	9	EN 101:1991

Date: 06.12.2021

