

TECHNICAL SHEET PSO CMTO TERRE GRIS PLATA 45X45 EXT 2.03

Quality assurance								
EVALUATED CHARACTERISTICS	TEST	NORM ISO 13006 REQUIREMENTS	RESULT	CONCLUSION				
	METHOD	(BIIb)	ALCOPT	CONCLUSION				
	DIMENSION	IS AND SURFACE QUALIT	ΥY					
* · · · · · · · · · · · · · · · · · · ·				T				
* Length and Width, mm			(%) (mm)					
Manufacturing Size: 451.0 mm	ISO 10545-2							
Average Size: 451.5 mm		± 0.6%; ± 2.0mm	0.11 0.50	Comply				
* Thickness, mm								
Manufacturing: 7.5 mm								
Average result: 7.7 mm	ISO 10545-2	± 5.0%; ± 0.5mm	2.67 0.20	Comply				
* Straightness of sides, %	ISO 10545-2	± 0.5%; ± 1.5mm	0.09 0.40	Comply				
* Rectangularity, %	ISO 10545-2	± 0.5%; ± 2.0mm	-0.11 -0.50	Comply				
* Surface flatness								
Edge curvature, %		± 0.5%; ± 2.0mm	0.18 0.00 0.80 0.00	Comply				
Centre curvature, %	ISO 10545-2	± 0.5%; ± 2.0mm	0.25 0.00 1.60 0.00	Comply				
Warpage, %	ISO 10545-2	± 0.5%; ± 2.0mm	0.13 -0.02 0.80 -0.10	Comply				
		A minimum of 95 % of the tiles are						
		to be free from visible defects which						
* Surface quality, %	ISO 10545-2	can impair the appearance of a	98.1%	Comply				
		major area of tiles						
				<u> </u>				
	PHY	SICAL PROPERTIES		-				
* Water absorption (E_v), %	ISO 10545-3	6 % < E _v ≤ 10 %	6.8	Comply				
		Individual maximum 11 %	7.2	Comply				
* Breaking strength, N	ISO 10545-4							
(Thickness ≥ 7.5 mm)		Not less than 800	1033	Comply				
* Modulus of rupture, N/mm ²	ISO 10545-4	Minimum 18	30	Comply				
		Individual minimum 16	28	Comply				
* Abrasion resistance - CU	ISO 10545-7	Report abrasion class and cycles	Class 3					
		passed	Cycles 750	-				
* Crazing resistance	ISO 10545-11	Required	No crazing	Comply				
	СЦЕ	MICAL PROPERTIES		<u> </u>				
		IICAL FROFERITES		T				
* Resistance to staining								
- Green Oxide	ISO 10545-14	Minimum class 3	Class 5	Comply				
- lodo	ISO 10545-14	Minimum class 3	Class 5	Comply				
- Olive oil	ISO 10545-14	Minimum class 3	Class 5	Comply				
* Resistance to low concentrations of acids								
and alkalis								
- 3% Hydrochloric Acid (V / V)		Manufacturer is to state	LB	-				
- Potassium hydroxide, 30 g / I		classification	LA	-				
* Resistance to high concentrations of acids	ISO 10545-13							
and alkalis								
- 18% Hydrochloric Acid (V / V)			НВ	-				
- Potassium hydroxide, 100 g / l		Test method available	НА	-				
* Resistance to household chemicals and								
swimming pool salts								
- Ammonium Chloride 100 g / l			А	Comply				
 Sodium hypochlorite, 20 mg / l 	ISO 10545-13	Minimum B	A	Comply				
				Comply				
Requirements verified as indicated i								
		cs and marking", Annex k (normative	e), I ADIE K,1.					
Dry-pressed ceramic tiles $6 \% < E_v$		the inevitable verietiens trained of -	romic firing processor					
i ne weight, tone and dimensions ar		f the inevitable variations typical of ce	eramic ining processes.					
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César Prado R.	Marlene Chauca R.				



TECHNICAL SHEET PSO CMTO TERRE GRIS PLATA 30X60 EXT 1.62

Quality assurance		1					
EVALUATED CHARACTERISTICS	TEST METHOD		IORM ISO 13006 REQUIREMENTS (BIIb)	RESULT		CONCLUSION	
	DIMENSION	IS AND	SURFACE QUALITY	ľ		-	
* Length and Width, mm				(%)	(mm)		
Manufacturing length: 600.0 mm	100 40545 0						
Average length: 599.1 mm	ISO 10545-2		± 0.6%; ± 2.0mm	nm -0.15 -0.90			
Manufacturing width: 300.0 mm	100 105 15 0						
Average width: 299.2 mm	ISO 10545-2		± 0.6%; ± 2.0mm	-0.27	-0.80	Comply	
* Thickness, mm							
Manufacturing: 9.0 mm							
Average result: 9.2 mm	ISO 10545-2		± 5.0%; ± 0.5mm	2.22	0.20	Comply	
* Straightness of sides, %	ISO 10545-2		± 0.5%; ± 1.5mm	0.08	0.50	Comply	
* Rectangularity, %	ISO 10545-2		± 0.5%; ± 2.0mm	-0.10	-0.60	Comply	
* Surface flatness							
Edge curvature, %							
Length:	ISO 10545-2		± 0.5%; ± 2.0mm	0.17 0.00		Comply	
Width:	100 40545 0		± 0.5%; ± 2.0mm	0.03 -0.10		Comply	
Centre curvature, %	ISO 10545-2		± 0.5%; ± 2.0mm	0.21 0.00		Comply	
Warpage, %	ISO 10545-2		± 0.5%; ± 2.0mm	0.03 -0.03	0.20 -0.20	Comply	
* Surface quality, %	ISO 10545-2	to be free	um of 95 % of the tiles are e from visible defects which pair the appearance of a major area of tiles	9	Comply		
	PHY	SICAL	PROPERTIES			1	
* Water absorption (E_v), %	ISO 10545-3		$6 \% < E_v \le 10 \%$	7.1 7.3		Comply	
		Indi	vidual maximum 11 %			Comply	
* Breaking strength, N (Thickness ≥ 7.5 mm)	ISO 10545-4		Not less than 800	1	Comply		
* Modulus of rupture, N/mm ²	ISO 10545-4		Minimum 18		Comply		
		In	dividual minimum 16		Comply		
* Abrasion resistance - CU	ISO 10545-7	Report	abrasion class and cycles passed	Class	-		
* Crazing resistance	ISO 10545-11		Required	Cycle No	Comply		
	СЧЕ	MICAL	PROPERTIES			l	
			I KOI EKIIES				
* Resistance to staining							
- Green Oxide	ISO 10545-14	Minimum class 3 Class			Comply		
- lodo	ISO 10545-14	Minimum class 3 Class 5			Comply		
- Olive oil	ISO 10545-14		Minimum class 3 Class 5		Comply		
* Resistance to low concentrations of acids							
and alkalis					LB		
- 3% Hydrochloric Acid (V / V)		Manufacturer is to state classification			LB	-	
 Potassium hydroxide, 30 g / I * Resistance to high concentrations of acids 	ISO 10545-13		olabolitoation		LD	-	
and alkalis	100 10040 10						
 18% Hydrochloric Acid (V / V) 			– нв		-		
 Potassium hydroxide, 100 g / l 		T	est method available		НВ	-	
* Resistance to household chemicals and							
swimming pool salts							
- Ammonium Chloride 100 g / I					A	Comply	
- Sodium hypochlorite, 20 mg / I	ISO 10545-13		Minimum B		A	Comply	
Requirements verified as indicated in "Ceramic Tiles - Definitions, Classific Dry-pressed ceramic tiles 6 % < E_v The weight, tone and dimensions are	ation, Characteristi 10 % Group Bll _b	cs and ma	arking", Annex k (normative),		esses.	I	
DATE OF ISSUE	DATE OF ISSUE Wednesday, October 05, 2022						
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TECHNICAL SHEET PSO RLSO TERRE GRIS 45X45 EXT 2.03

	TEST		NORM ISO 13006 REQUIREMENTS		D DC			CONCLUSIO	
EVALUATED CHARACTERISTICS	METHOD	-			RESULT				
	DIMENSION		BIIb) FACE QUALITY	7					
	DIMENSION	IS AND SUR	FACE QUALIT					1	
* Length and Width, mm				(%))	(mr	n)		
Manufacturing Size: 451.0 mm	ISO 10545-2								
Average Size: 452.5 mm	130 10343-2	± 0.6%	6%; ± 2.0mm 0.33 1.50			0	Comply		
* Thickness, mm									
Manufacturing: 7.5 mm									
Average result: 7.5 mm	ISO 10545-2	± 5.0%	5; ± 0.5mm	0.00 0.00			Comply		
* Straightness of sides, %	ISO 10545-2	± 0.5%	5; ± 1.5mm	0.09	9	0.4	0	Comply	
* Rectangularity, %	ISO 10545-2	± 0.5%	5; ± 2.0mm	0.16	6	0.7	0	Comply	
* Surface flatness									
Edge curvature, %		± 0.5%	5; ± 2.0mm	0.13	0.00	0.60	0.00	Comply	
Centre curvature, %	ISO 10545-2	± 0.5%	5; ± 2.0mm	0.20	0.00	1.30	0.00	Comply	
Warpage, %	ISO 10545-2	± 0.5%	5; ± 2.0mm	0.09	0.00	0.60	0.00	Comply	
		A minimum of 9	95 % of the tiles are						
* Outfairs and lite 0/	ISO 10545-2		visible defects which		07 5	0/		Comply	
* Surface quality, %	130 10545-2		impair the appearance of a		97.5%				
		major a	area of tiles						
	PHY	SICAL PROF	PERTIES					I	
		1							
* Water absorption (E_v), %	ISO 10545-3		6 % < E _v ≤ 10 %		7.2			Comply	
	100 40545 4	Individual r	maximum 11 %	7.3			Comply		
 Breaking strength, N (Thickness ≥ 7.5 mm) 	ISO 10545-4	Not les	s than 800	1024			Comply		
* Modulus of rupture, N/mm ²	ISO 10545-4	Mini	mum 18	30			Comply		
Modulus of rupture, N/mm	100 10040 4		l minimum 16	28			Comply		
* Abrasion resistance - CU	ISO 10545-7		on class and cycles	Class 3 Cycles 1500		comply			
			assed			-			
* Crazing resistance	ISO 10545-11	Re	equired	No crazing			Comply		
	OUD								
	CHE	MICAL PROI	PERTIES					I	
* Resistance to staining									
- Green Oxide	ISO 10545-14	Minim	um class 3	Class 5		Comply			
- lodo	ISO 10545-14	Minim	um class 3	Class 5			Comply		
- Olive oil	ISO 10545-14	Minim	um class 3	Class 5		Comply			
* Resistance to low concentrations of acids									
and alkalis									
- 3% Hydrochloric Acid (V / V)		Manufact	urer is to state	LB		-			
- Potassium hydroxide, 30 g / I		clas	sification		LA	١		-	
* Resistance to high concentrations of acids	ISO 10545-13								
and alkalis									
 18% Hydrochloric Acid (V / V) 		Test met	hod available		HE	3		-	
 Potassium hydroxide, 100 g / l 		restinet			HA	4		-	
* Resistance to household chemicals and									
swimming pool salts									
 Ammonium Chloride 100 g / I 	ISO 10545-13	Min	imum B		A			Comply	
- Sodium hypochlorite, 20 mg / I				А			Comply		
Requirements verified as indicated in "Ceramic Tiles - Definitions, Classific Dry-pressed ceramic tiles 6 % < $E_v \le$	ation, Characteristi			, Table k,1.					
The weight, tone and dimensions are	subject to some of	the inevitable va	riations typical of cer	amic firing p	process	ses.			
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TECHNICAL SHEET PSO CMTO TERRE GRIS 30X60 EXT 1.62

EVALUATED CHARACTERISTICS	TEST METHOD		IORM ISO 13006 REQUIREMENTS (BIIb)	MENTS RESULT		CONCLUSION		
	DIMENSION	IS AND	SURFACE QUALITY	(
* Length and Width, mm				(%)	(m	nm)		
Manufacturing length: 600.0 mm	100 40545 0							
Average length: 599.4 mm	ISO 10545-2	± 0.6%; ± 2.0mm -0.11 -0.65			Comply			
Manufacturing width: 300.0 mm	ISO 10545-2							
Average width: 299.4 mm	130 10343-2		± 0.6%; ± 2.0mm	-0.21	-0	.63	Comply	
* Thickness, mm								
Manufacturing: 9.0 mm								
Average result: 9.1 mm	ISO 10545-2		± 5.0%; ± 0.5mm	1.11		.10	Comply	
* Straightness of sides, %	ISO 10545-2		± 0.5%; ± 1.5mm	0.07		40	Comply	
* Rectangularity, %	ISO 10545-2		± 0.5%; ± 2.0mm	-0.12	-0	.70	Comply	
* Surface flatness								
Edge curvature, % Length:			± 0.5%; ± 2.0mm	0.13 0	.00 0.80	0.00	Comply	
Width:	ISO 10545-2		± 0.5%; ± 2.0mm		.00 0.00).10 0.10	-0.30	Comply	
Centre curvature, %	ISO 10545-2		± 0.5%; ± 2.0mm		.00 0.90	0.00	Comply	
Warpage, %	ISO 10545-2		± 0.5%; ± 2.0mm		0.03 0.20	-0.20	Comply	
······································		A mini-	um of 95 % of the tiles are					
* Surface quality, %	ISO 10545-2	to be free can im	or 95 % of the tiles are from visible defects which pair the appearance of a major area of tiles	98.5%			Comply	
	DIN	OLCAL 1						
	PHY	SICAL	PROPERTIES				1	
* Water absorption (E_v), %	ISO 10545-3		$6 \% < E_v \le 10 \%$	6.9			Comply	
		Indi	vidual maximum 11 %		7.0		Comply	
* Breaking strength, N	ISO 10545-4		Not less than 800	1412			Comply	
(Thickness ≥ 7.5 mm) [*] Modulus of rupture, N/mm ²	ISO 10545-4		Minimum 18	28			Comply	
Modulus of rupture, N/mm	100 10040 4	In	dividual minimum 16	20			Comply	
* Abrasion resistance - CU	ISO 10545-7		abrasion class and cycles	Class 2			Comply	
			passed	Cycles 600		-		
* Crazing resistance	ISO 10545-11		Required	No crazing			Comply	
	CUF	MICAL	PROPERTIES				l	
			I KOI EKIIES					
* Resistance to staining								
- Green Oxide	ISO 10545-14	Minimum class 3			lass 5		Comply	
- lodo	ISO 10545-14	Minimum class 3		Class 5			Comply	
- Olive oil	ISO 10545-14	Minimum class 3 Class 5			Comply			
* Resistance to low concentrations of acids								
and alkalis				IR				
- 3% Hydrochloric Acid (V / V)		Manufacturer is to state classification			LB LA		-	
 Potassium hydroxide, 30 g / I * Resistance to high concentrations of acids 	ISO 10545-13		Sidoomodion		LA		-	
and alkalis	100 10040-10							
- 18% Hydrochloric Acid (V / V)					HB		-	
 Potassium hydroxide, 100 g / I 		T	est method available		HA		-	
* Resistance to household chemicals and								
swimming pool salts								
 Ammonium Chloride 100 g / I 	100 107				А		Comply	
- Sodium hypochlorite, 20 mg / I	ISO 10545-13		Minimum B	А			Comply	
Requirements verified as indicated in "Ceramic Tiles - Definitions, Classific Dry-pressed ceramic tiles 6 % < $E_v \le$ The weight, tone and dimensions are	ation, Characteristi 10 % Group BII _b	cs and ma	arking", Annex k (normative),		rocesses.			
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