

OPUS ROMANO BLENDS

1	DESCRIPTION
	Sintered glass enamel mosaic composed of randomly arranged square tesserae, with facial dimension of 12x12 mm (1/2" x 1/2"), and a thickness of 4 mm (5/32"), mounted on sheets of paper. Some blends contain tiles in both shiny and matt version; the Opus Romano Matt tiles are opaque and non-slip. The treatment is performed during the production process. The mosaic contains pre- and post-consumer recycled material: for further information, see section 9.

2	APPLICATIONS	
A	INTERIOR WALLS	Walls and ceilings in general, of any shape and size
B	FLOORS*	Floor coverings that are subject to severe pedestrian traffic over sustained periods with some scratching dirt (for example public areas such as shopping centres, airport concourses, hotel foyers). Blends with Opus Romano Matt are not recommended for high traffic walkways in public areas.
C	<ul style="list-style-type: none"> - EXTERNAL WALLS - SWIMMING POOLS - HUMID ENVIRONMENTS (shower, bio sauna, spa, etc.) 	All the colours are suitable for these environments, excluding White Gold mosaic (ORO 12.6). Blends with Opus Romano Matt tiles are particularly suitable for foreshore areas, lateral beaches and humid environments when being walked on barefoot.

* For blends with light colours of Opus Romano Matt (excluded from the list of standard colours), it is advised to use only as wall or ceiling tiling.

3	WEIGHTS AND MEASUREMENTS	
	Format	11.75x11.75 mm (± 0.15)
	Mounting	paper
	Sheet dimension	293x293mm
	Tiles per sheet	529
	Thickness	4 mm
	Joint	1.03 mm (± 0.15)
	Weight	7.5 kg/sqm
	Quantity/carton	1.29 sqm
	Sheets/carton	15

Note: dimensional and chromatic variation of Gold tiles is intrinsic to the production process which involves a number of manual steps and it is a distinctive feature of the product.

OPUS ROMANO – OPUS ROMANO MATT

4.a CARATTERISTICHE TECNICHE					
Description	Test	Established limits	Result		
			Opus Romano	Opus Romano Matt	
Water absorption	ISO 10545 - 3	$E \leq 0.5\%$	0	0	
Frost resistance	ISO 10545 - 12		resistant	resistant	
Colour resistance to fading	DIN 51094		resistant	resistant	
Resistance to chemical attack	ISO 10545 - 13		resistant	resistant	
Stain resistance	ISO 10545-14		resistant	resistant	
Resistance to thermal shocks	ANSI A 137.2-2012	+15 / +71°C	resistant	resistant	
Wear resistance (PEI)	ISO 10545 - 7	Class 0-5	Class 5	Class 3	
Resistance to temperature changes	ISO 10545 - 9	15°-145°C	resistant	resistant	
Slip resistance	DIN 51097	A(12°-18°) B(18°-24°) C(+24°)	A	A+B+C	
	DIN 51130	R9 - R13	-	R10	
	B.C.R Rep. CEC. 6/81	$0.40 \leq \mu < 0.74$ ≥ 0.74	-	0.86	
	ENV 12633:2006	Class 0-3 (Rd≥45)	-	Class 3 (55)	
	BS 7976	>36(low)	-	46-47 (wet)	

BELNDS IN OPUS ROMANO AND OPUS ROMANO MATT

4.b TECHNICAL CHARACTERISTICS		percentage of OPUS ROMANO MATT in mixture		
		25%	50%	75%
Slip resistance	DIN 51097	A 17°	A+B 21°	A+B+C 24°
	DIN 51130	R10	R10	R10

5	STRENGTHS
	<ul style="list-style-type: none"> - endless combination possibilities, to create personalized blends and decors - ease of cleaning - light weight and thinness allow for easy renovations - suitable for floor coverings that are subject to severe pedestrian traffic (standard, not Matt version) - pleasant to the touch - Opus Romano Matt is the ideal product for the floors of humid environments (saunas, pool beaches, etc.) when being walked on barefoot - the reduced format makes it suitable for tiling curved surfaces: convex surfaces, 30 mm radius - concave surfaces, 20 mm radius

6	INSTALLATION
A	<p>For proper installation, the substrate must be a perfectly smooth even surface, and must be cured, dry, sound and stable.</p> <ul style="list-style-type: none"> - Screed or plaster substrates: we recommend Bisazza Ad Hoc+Ultra* adhesive - Other types of substrates: we recommend Bisazza eGlue adhesive - For swimming pool installation, we recommend the Bisazza Pool Installation System (Ad Hoc+Ultra adhesive and Pool eGrout epoxy grout) - For installation on swimming pools with salt water or thermal spring water, use epoxy products only: we recommend the Bisazza Epoxy Pool Installation System (epoxy eGlue adhesive + Pool eGrout epoxy grout) and waterproofing with epoxy membrane - When laying, use a 3.5 mm toothed trowel. N.B. Attrition tends to wear out the trowel; it is crucial to maintain the proper thickness of the teeth for the entire installation period, restoring it with the flex tool, if necessary. - Thoroughly remove any traces of adhesive before grouting - For installation of all the Opus Romano decorations, Bisazza recommends always using the Epoxy Installation Kit (eGlue epoxy adhesive + Fillgel Plus epoxy grout); for swimming pool installation of these collections, use the Bisazza Epoxy Pool Installation System (eGlue epoxy adhesive + Pool eGrout epoxy grout). <p>Average consumption Bisazza Ad Hoc: 1.25 kg/sqm (two coats of skimming included) Average consumption Bisazza Ultra: 0.8 kg/sqm Average consumption Bisazza eGlue: 1.6 kg/sqm (please add 0.9 Kg/sqm for the skimming)</p> <p>* except for any specific standards or codes enforced by an individual country.</p>
B	<p>Grouting: For the best results and performance, use Bisazza Fillgel Plus. The grout colour will affect the final aesthetic appearance of the installed tiles; this is why, given the characteristics of Opus Romano mosaic tile, we do not recommend using Fillgel Plus 1104 neutro base. For pools and outdoor use, Bisazza recommends Pool eGrout epoxy grout.</p> <p>Average consumption Bisazza Fillgel Plus: 1.2 kg/sqm Average consumption Bisazza Pool eGrout: 1.1 kg/sqm</p> <p>For further information on installation procedures, consult the installation manual and product technical data sheets.</p>
7	MAINTENANCE
	<p>Use ordinary cleaning products for maintenance and cleaning of glass mosaic surfaces (except those containing hydrofluoric acid or phosphoric acid), being careful to rinse thoroughly with water. Alkaline detergents should be used carefully and rapidly rinsed out with water. Any cleaning product should not be used on heated or surfaces directly exposed to sunlight. Avoid using abrasive tools and high-pressure jets of water.</p>
8	WARNING
	<p>Before the application, all the materials should be stored in a dry place sheltered from rain and humidity. For information on use with fibreglass or steel swimming pools, contact Bisazza's technical office (installation.department@bisazza.com).</p>

9	TABLE OF CONTENTS OF RECYCLED MATERIAL OF COLORS OF THE COLLECTION, DESIGNED TO THE CALCULATION OF RATING FOR LEED CLASSIFICATION		
	Colour code	% Pre-consumption scrap float glass and sheet glass	% Post-consumption scrap bottles and ashtrays
	01	78	17
	02	79	20
	04*	79	20
	05	79	20
	07*	79	20
	09*	79	20
	11	78	19
	16	78	19
	19	79	19
	20*	79	19
	22	79	19
	34	79	19
	36	79	20
	39	79	20
	40*	79	20
	42*	79	20
	44	79	20
	45	79	20
	47*	79	19
	48*	79	19
	53*	79	20
	54*	79	20
	55	79	19
	57	79	19
	60*	79	19
	62	79	19
	74*	79	20
	75	79	20
	76	79	19
	77	79	19
	78	79	20
	81*	79	20
	82*	79	20
	84	79	20
	85	79	20
	87*	79	20
	88*	79	20
	91	79	20

	96*	79	19
	98	79	19
	99	79	19
	103	79	19
	104	79	19
	106	79	19
	110	79	20
	111	79	20
	113*	79	20
	116	79	20
	117*	79	20
	118*	79	20
	128*	79	20
	130*	79	20
	131*	79	20
	133*	79	20

* value valid also for the MATT version.