

**OPERA 15 - OPERA 25**

1	DESCRIPTION
	A transparent glass mosaic, consisting of 15x15 mm and 25x25 mm, square tiles, 6 mm thick (+/- 1 mm), mounted on paper.

2	APPLICATIONS	
A	INTERIOR WALLS	Walls and ceilings in general, of any shape and size, for residential and public buildings
B	INTERIOR FLOORING	light traffic (residential bathrooms)
C	<ul style="list-style-type: none"> <li>- EXTERIOR WALLS</li> <li>- SWIMMING POOLS</li> <li>- HIGH-HUMIDITY AREAS (shower, Turkish bath, bio sauna, etc.)</li> </ul>	<p>OPERA 15, OPERA 15 MATT, OPERA 25, OPERA 25 MATT: Suitable for all listed uses.</p> <p><b>OPERA 15 GLOSS is not suitable for tiling thermal pools in general, and especially not those with sulphur waters.</b></p> <p>Suitable for all the other environments listed.</p>

3	WEIGHTS AND MEASUREMENTS		
		OPERA 15	OPERA 25
	Size	15x15 mm	25x25 mm
	Mounting	paper	paper
	Sheet dimensions	322x322 mm	317x317 mm
	Number of tiles/sheet	400	144
	Thickness	6 mm (+/- 1 mm)	6 mm (+/- 1 mm)
	Joint	~1.2 mm	~1.57 mm
	Weight	8 kg/sqm	11.64 kg/sqm
	Quantity/carton	1.55 sqm	1.50 sqm
	Sheets/carton	15	15

4	TECHNICAL CHARACTERISTICS			
	Description	Test	Established limits	Result
OP 25	Water absorption	ISO 10545 - 3	E ≤ 0.5	< 0.5
OP 15	Resistance to chemical attack	ISO 10545 - 13		resistant*
OP 25M	Frost resistance	ISO 10545 - 12		resistant
OP 15M	Resistance to thermal shock	ANSI A 137.2-2012	+15/+71°C	resistant
OP 25M OP 15M	Slip resistance	DIN 51097	A(12°-18°) B(18°-24°) C(+24°)	A+B+C
		DIN 51130	R9 - R13	R11
OP 25M	Slip resistance	BS 7976	>36 (low)	47-45 (wet)

\*Test not available for Opera 15 Matt

<b>5</b>	<b>STRENGTHS</b>
	<ul style="list-style-type: none"> <li>- easy to clean surface</li> <li>- colour brightness</li> <li>- transparency of the glass</li> <li>- reduced size makes it suitable for tiling curved surfaces                             <ul style="list-style-type: none"> <li>OPERA 25: convex surfaces, 30 mm radius - concave surfaces, 50 mm radius</li> <li>OPERA 15: convex surfaces, 20 mm radius - concave surfaces, 30 mm radius</li> </ul> </li> </ul>

<b>6</b>	<b>INSTALLATION</b>
<b>A</b>	<p>For proper installation, the substrate must be a perfectly smooth, even, white surface, and must be cured, dry, sound and stable.</p> <ul style="list-style-type: none"> <li>- For installation, we recommend using epoxy-based products: Bisazza Epoxy Installation Kit (eGlue epoxy adhesive + Fillgel Plus epoxy grout)</li> <li>- For pool installation, we recommend the Bisazza Epoxy Pool Installation System (eGlue epoxy adhesive and Pool eGrout epoxy grout), and waterproofing the substrate with specific products</li> <li>- When laying, use a 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.</li> <li>- Thoroughly remove any traces of adhesive before grouting</li> </ul> <p>Average consumption Bisazza eGlue: 2.4 kg/sqm (OPERA 25 - OPERA 15) - please add 0.9 kg/sqm for skimming</p>
<b>B</b>	<p><b>Grouting</b> For the best results and performance, use Bisazza Fillgel Plus. The grout colour will affect the final aesthetic appearance of the installed tile. <b>Fillgel 1104 neutro base</b> is a colourless and semi-transparent grout and must be applied with special care. Because it is colourless, some yellowing occurs when exposed to sunlight (UV radiation), which becomes more noticeable with time. This is why Fillgel 1104 neutro base <u>cannot be used</u> for exterior applications or in outdoor pools; for this type of use, we recommend Bisazza Pool eGrout, an epoxy grout specifically formulated for swimming pools.</p> <p>Average consumption Bisazza Fillgel Plus: 1.6 kg/sqm (OPERA 25) - 2.4 kg/sqm (OPERA 15) Average consumption Bisazza Pool eGrout: 1.5 kg/sqm (OPERA 25) - 2.2 kg/sqm (OPERA 15)</p> <p><b>For further information on installation procedures, consult the installation manual and product technical data sheets.</b></p>

<b>7</b>	<b>MAINTENANCE</b>
	<p>Use ordinary cleaning products (except those containing hydrofluoric acid or phosphoric acid), for maintenance and cleaning of glass mosaic surfaces, taking care to rinse thoroughly with water. Alkaline detergents should be used cautiously and quickly rinsed off with water. Cleaning products should never be used on hot surfaces or those directly exposed to sunlight. Avoid using abrasive tools and high-pressure water jets (pressure washing).</p>

<b>8</b>	<b>WARNINGS</b>
	<p>The colour of the mosaic tiles is never perfectly uniform or even. Slight chipping in some tiles (about 10%) is a characteristic feature of the product. Also, please note: it is impossible to guarantee that tile colours in subsequent orders will be identical. Because of the transparency of the Opera tile base glass, they can only be mounted on paper: they are not available on mesh. Prior to installation, all 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: <a href="mailto:installation.department@bisazza.com">installation.department@bisazza.com</a></p>