



Cerrione, January 2021

CONTRIBUTION TO OBTAINING CREDITS FOR LEED CERTIFICATION OF BUILDINGS

Ceramica Vogue products contribute to obtaining credits for LEED BD&C v 4 (LEED Building Design & Construction) system in the thematic areas listed here below.

Product Classification: Glazed ceramic tiles, dry pressed with low water absorption ($0,5\% < E_b \leq 3\%$) Group B1b - M - GL EN 14411:2016 H appendix

MR Credit	Description	Production	Points																																																																					
Sustainable Site (SS)	Sustainable Site – Heat Island Reduction (non roof)	<p>The Ceramica Vogue products do not contribute to change the energy balance of the environments where installed. They don't produce any Urban Heat Island Effect, thanks to their very good physical properties. This encourages the external use of these products for both open and covered spaces.</p> <p>SRI (Solar Reflectance Index) 0,78 (Product Ref. Vogue System Interni Ghiaccio – White) Solar Reflectance index available for other plain colours</p> <p>The thermal conductivity λ of Ceramica Vogue Product Range is 1,311 Watt/m·°K (ASTM E 1530:2006 – Product Ref. Ceramica Vogue System Interni).</p> <p>For this reason Vogue System is particularly indicated for heating floors systems.</p>	1-2																																																																					
Materials & Resources (MR)	Building Product Disclosure and Optimization – Environmental Product Declaration	Industry-wide (generic) EPD available	1-2																																																																					
	Building Product Disclosure and Optimization – Sourcing of Raw Materials	<p>Ceramica Vogue products are manufactured using production cycles that guarantee excellence in terms of care and protection of the environment.</p> <p>Ceramica Vogue tiles are produced using non-metallic inorganic raw materials in a powdery state, such as clays, feldspar and sands. During the production, a sintering process occurs at high temperature (higher than 1000 °C) transforming powders into a solid ceramic object, partially crystalline and partially amorphous, with the chemical composition reported in the table below:</p> <p>Constituents: Product Composition Approx. Percent by Weight depending on finishing</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2"></th> <th colspan="2"></th> </tr> <tr> <th>Clay</th> <th>Clay</th> <th>ES2824</th> <th>20-25%</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Body</td> <td>Feldspar</td> <td>Feldspar</td> <td></td> <td>28-35%</td> </tr> <tr> <td></td> <td>Cooked Ground Waste (*)</td> <td></td> <td>5-15%</td> </tr> <tr> <td rowspan="2">Inert</td> <td>Sand</td> <td>VVR</td> <td>5-15%</td> </tr> <tr> <td>Clay Raw Waste (*)</td> <td>FCS4</td> <td>5-15%</td> </tr> <tr> <td>Water</td> <td>Recycled water</td> <td></td> <td>100%</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2"></th> <th colspan="2"></th> </tr> <tr> <th>Engobe</th> <th>Engobe</th> <th></th> <th>100%</th> </tr> </thead> <tbody> <tr> <td rowspan="9">Surface</td> <td rowspan="9">Glaze</td> <td>Frit</td> <td></td> <td>10-90%</td> </tr> <tr> <td>Glaze Compounds</td> <td></td> <td>100%</td> </tr> <tr> <td>Feldspar</td> <td></td> <td>30-40%</td> </tr> <tr> <td>Calcium Carbonate</td> <td>CaCO3</td> <td>10-20%</td> </tr> <tr> <td>Zirconium</td> <td>ZrO2</td> <td>5-10%</td> </tr> <tr> <td>Zinc Oxide</td> <td>ZnO2</td> <td>3-8%</td> </tr> <tr> <td>Alumina</td> <td>Al2O3</td> <td>6-10%</td> </tr> <tr> <td>Clay</td> <td></td> <td>5-10%</td> </tr> <tr> <td>Kaolin</td> <td>Al2Si2O5(OH)4</td> <td>5-10%</td> </tr> <tr> <td>Pigments</td> <td></td> <td>0-15%</td> </tr> </tbody> </table>						Clay	Clay	ES2824	20-25%	Body	Feldspar	Feldspar		28-35%		Cooked Ground Waste (*)		5-15%	Inert	Sand	VVR	5-15%	Clay Raw Waste (*)	FCS4	5-15%	Water	Recycled water		100%						Engobe	Engobe		100%	Surface	Glaze	Frit		10-90%	Glaze Compounds		100%	Feldspar		30-40%	Calcium Carbonate	CaCO3	10-20%	Zirconium	ZrO2	5-10%	Zinc Oxide	ZnO2	3-8%	Alumina	Al2O3	6-10%	Clay		5-10%	Kaolin	Al2Si2O5(OH)4	5-10%	Pigments		0-15%
	Clay	Clay	ES2824	20-25%																																																																				
Body	Feldspar	Feldspar		28-35%																																																																				
		Cooked Ground Waste (*)		5-15%																																																																				
	Inert	Sand	VVR	5-15%																																																																				
		Clay Raw Waste (*)	FCS4	5-15%																																																																				
Water	Recycled water		100%																																																																					
	Engobe	Engobe		100%																																																																				
Surface	Glaze	Frit		10-90%																																																																				
		Glaze Compounds		100%																																																																				
		Feldspar		30-40%																																																																				
		Calcium Carbonate	CaCO3	10-20%																																																																				
		Zirconium	ZrO2	5-10%																																																																				
		Zinc Oxide	ZnO2	3-8%																																																																				
		Alumina	Al2O3	6-10%																																																																				
		Clay		5-10%																																																																				
		Kaolin	Al2Si2O5(OH)4	5-10%																																																																				
Pigments		0-15%																																																																						

		<p>(*) Ceramica Vogue products are manufactured using recycled products as here below reported.</p> <p>Pre-Consumer Recycled Content Up to 30% (% per mass unit)</p> <p>Post-Consumer Recycled Content 0% (% per mass unit)</p> <p>Total Recycled Content Up to 30% (% per mass unit)</p>	
	Building Product Disclosure and Optimization – Sourcing of Raw Materials	<p>Production Plant: Ceramica Vogue - Via Papa Giovanni XXIII, 100 - Loc. Vergnasco 13882 Cerrione (BI) – Italy</p> <p>Raw Materials sourcing origin:</p> <ol style="list-style-type: none"> 1. 40% of Ceramica Vogue raw materials are quarried in a 100 miles radius. 2. 60% of Ceramica Vogue raw materials coming from a distance > 100 miles from the production plant 	1-2
	Construction and Demolition Waste Management - Reduction of total waste material	<p>The type of waste material expected to occur from the use of Ceramica Vogue tiles includes off cut materials and packaging. The packaging of Ceramica Vogue products is environmentally sustainable as it is totally recyclable.</p> <ul style="list-style-type: none"> • The Amount of non-hazardous waste (Cardboard box) expected per product unit based on mass is 6,05 kg/ton • Amount of non-hazardous waste (Cardboard box) that can be recycled/reused is 6,05kg/ton 	1-2
Low-Emitting Materials (IEQ)	Indoor Environmental Quality - Low-Emitting Materials	<p>Ceramica Vogue products do not emit any VOC (Volatile Organic Compounds). No traces of VOC have been reckoned from the qualified external laboratories that examined our materials</p> <p>Third Party Certification Available: UL 2818 – 2013 Gold Standards for Chemical Emissions for building Materials, Finishes and Furnishings.</p>	1-3

Best Regards

Ceramica Vogue



BELLEPPO | NEI STRALI