



# SICIS

What makes  
unique our  
glass mosaic

over  years  
of production

more than  
  
colors

  
tesserae  
shapes

  
finishes



# SICIS®

In **1988** we brought back the mosaic from the limbo of history to the modern era.

**We have given it a name (SICIS), a shape** (tessera size 15x15mm), **a life** (The SICIS Collections), **a material** (glass, marble, steel, Murano Smalto, Glimmer, Waterglass, Firefly, Iridium, Crystal, Diamonds, Clover, Tephra, Natural) **and a future.**

**We built our house** (Factory) **in Italy and created an art industry.**

**The largest in the world.**

We introduced it to the world of design and everyone was fascinated by our product. It has been and is used worldwide in important projects of all kinds.

Who, not knowing SICIS, used imitations was disappointed by the results. Many try to copy us, many let the customers believe that mosaic is only a small tile. It is not.

This document aims to provide some information to SICIS customers, how our product is made, our mosaic, how it is supplied, what it allows to do and why it is unique and exclusive.

# SICIS®



**SICIS produces entirely in Italy**, in the Ravenna area, all the collections of **Murano glass tiles**.

Following the ancient method, the tesserae are composed of silicon and minerals melted at very high temperatures and **it is the content itself that determines their quality and the first substantial difference** with all the rest of the products on the market.

SICIS is the only company in the world to put a proportion of 70% of precious minerals, while the other manufacturers use exactly the opposite parameter.

**The supply of minerals qualifies their excellent characteristics, strength, brightness, iridescence, transparency, coloring.**





# SICIS®

## our identity

### **Our format 15x15mm**

In 1988, glass mosaic was known in the 20x20mm format.

SICIS produces a unique mosaic, with different and precious materials. To make itself immediately recognizable in the market, therefore it creates an unedited format that identifies the company. This avoids being confused and being able to immediately highlight the originality of its tesserae.

# SICIS®

## Unique tiles for a unique product

**The other important difference is the tessera itself.**

SICIS, starting from the study of traditional techniques, has developed and patented an **industrial production system that allows to create its tesserae as in the tradition**, each different from the other. **Each tile is unique**, not planar, to allow the vibration of the light, and with some unique marks as in past. In all other productions

on an industrial scale, the tesserae are all the same, opaque in color, rough on the surface. The others' tiles are therefore not mosaic but simple tiles, completely losing the intrinsic meaning, the charm of the mosaic, the art.

SICIS entire mosaic chain is the result of a wise and rigorous development and experimentation activity, avant-garde and pride of the Italian industry, in total harmony with the artisan dynamics that dictate the guidelines.



our  
**Mosaic**

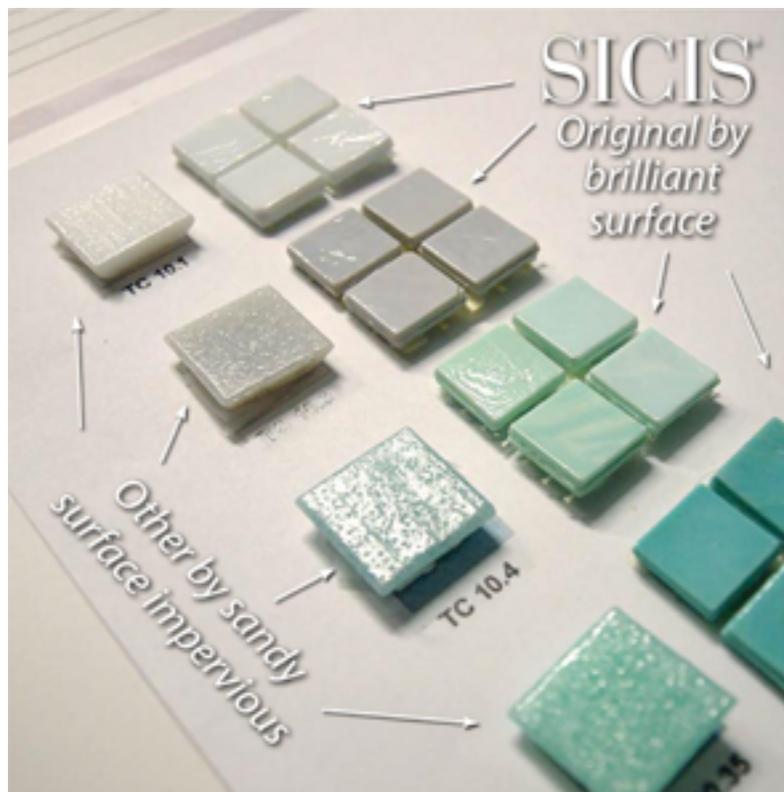
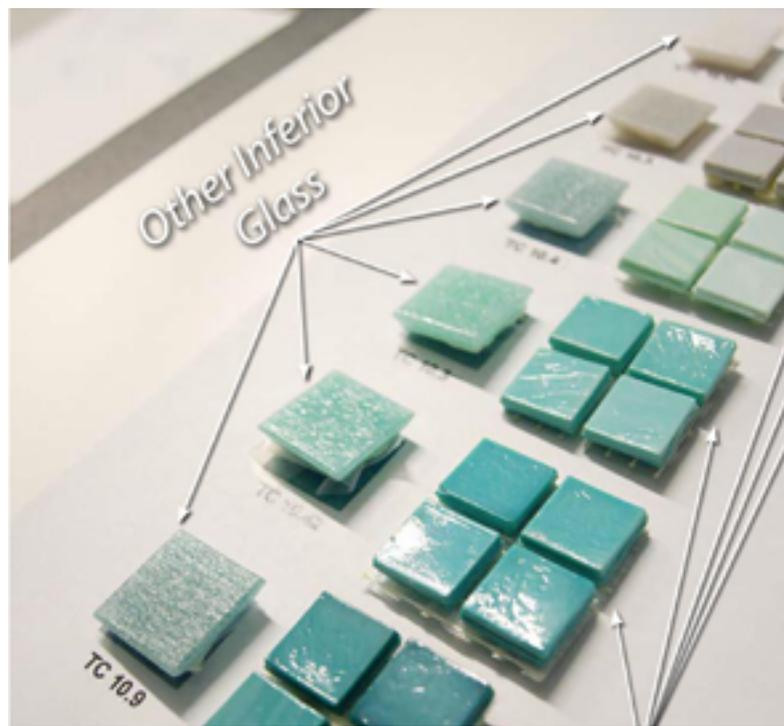
# SICIS®

## Original smalto

### Compared to lower quality glass mosaics

SICIS mosaic, compared to lower quality glass mosaics, has:

- smaller tesserae
- smoother and brighter surface
- fuller colors
- greater resistance



Fake SICIS

# SICIS®

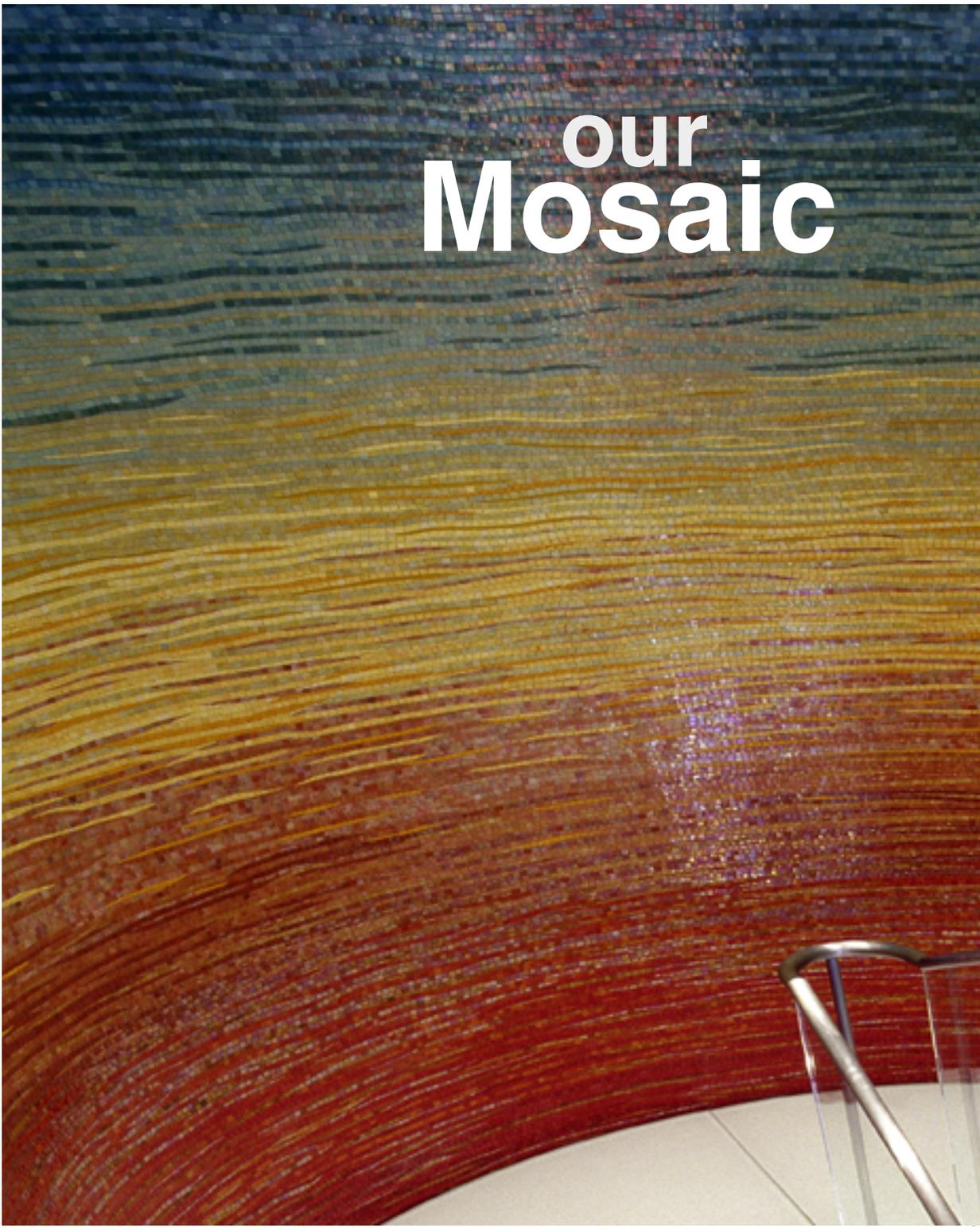
## The material

More than **400 possible colors** are forged from the Ravenna production department thanks to the quantity and quality of these minerals.

The essence of pure matter, the naturalness of the process often creates influences even on the precise shade of a color, generating different shades of the same color, due to climate, temperature, and other environmental factors.

The company has also developed new methodologies for creating the mosaic in marble, stones and metals from the most precious ones, such as gold, platinum, silver and other metals, such as steel, tesserae with traditional and unusual shapes.

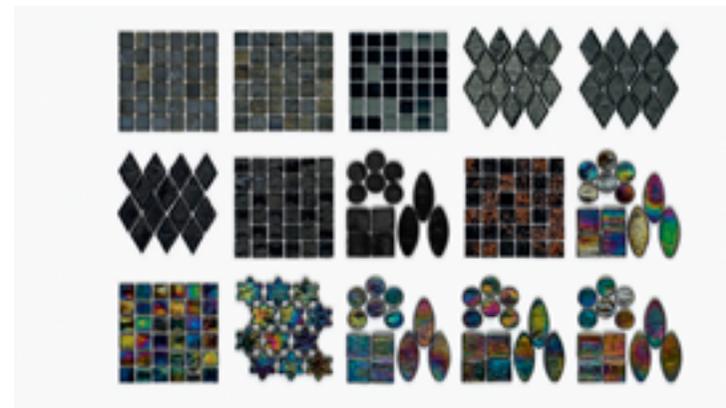
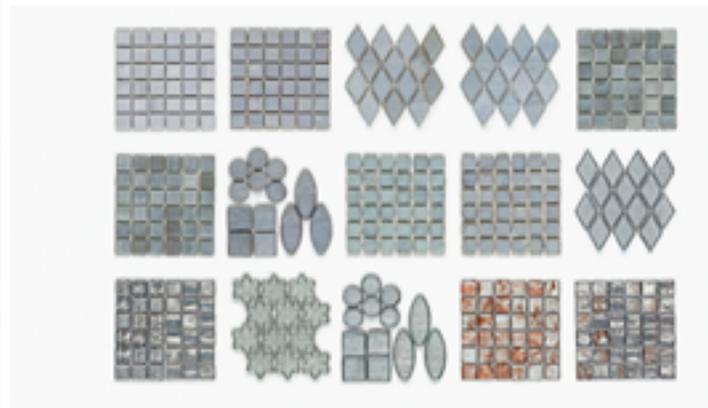
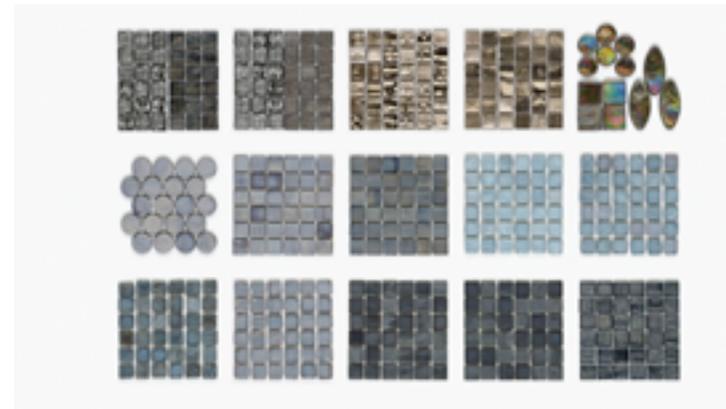
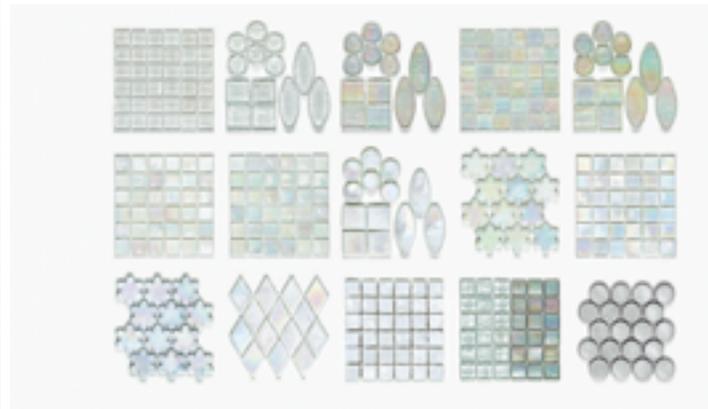
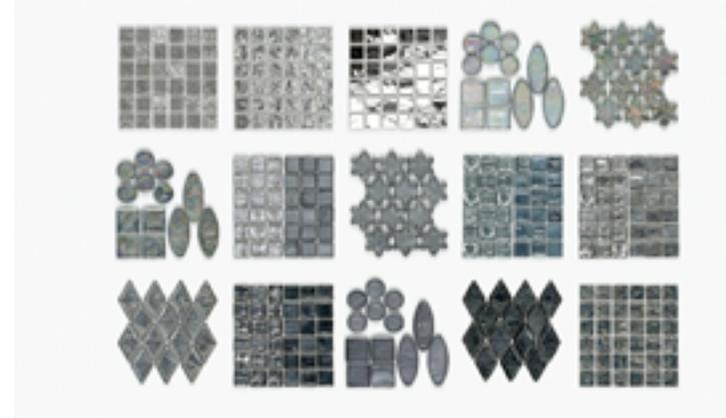
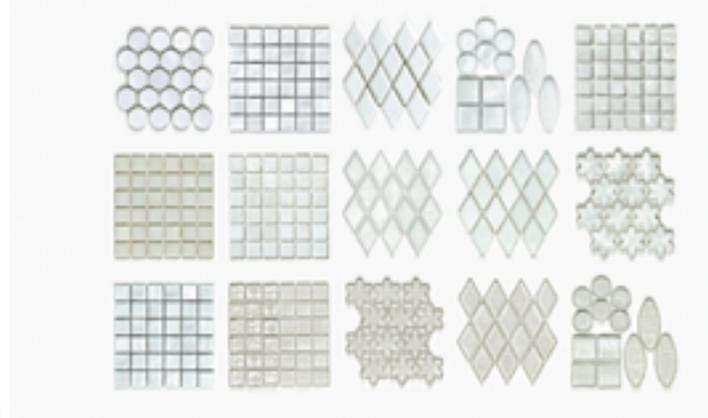
These mosaics will be told and explained in separate communications.



our  
**Mosaic**

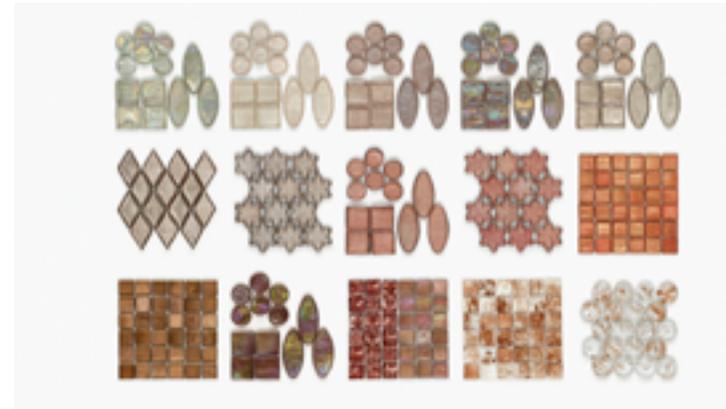
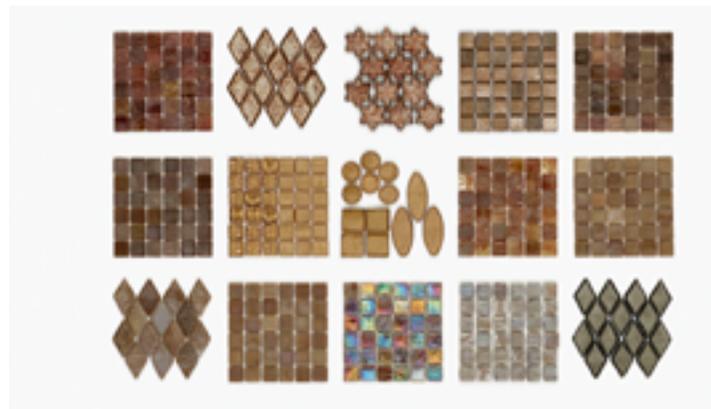
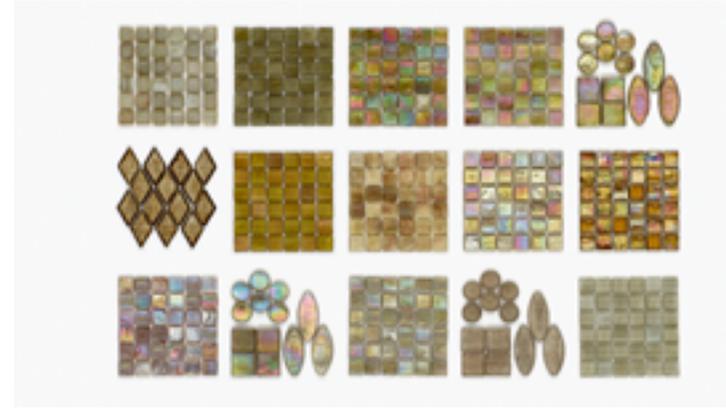
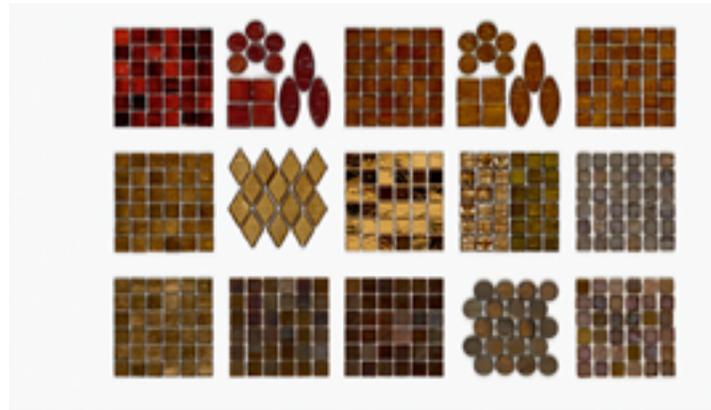
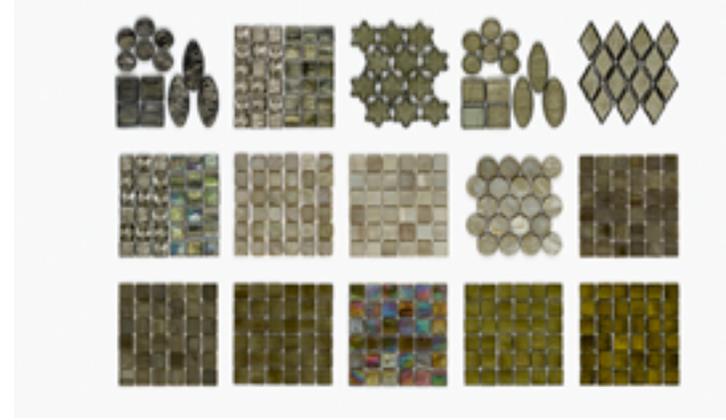
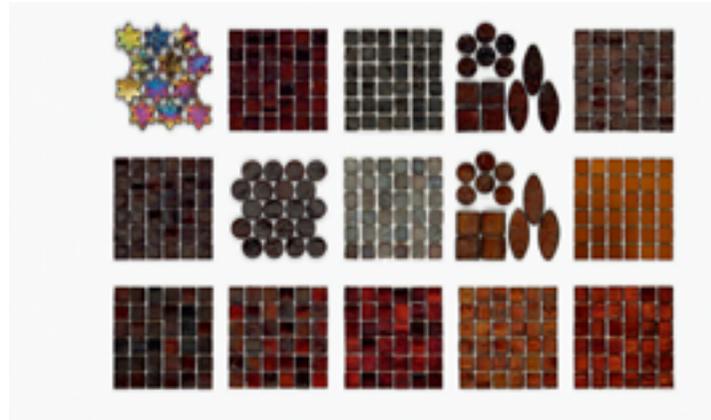
# SICIS® Colors

Neutral tones: from glacial whites to the darker blacks.



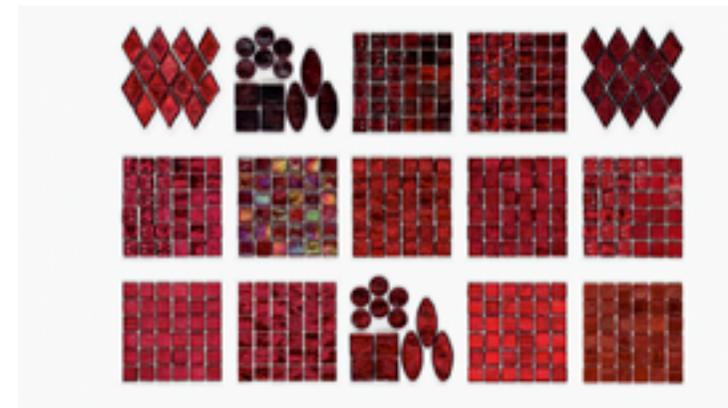
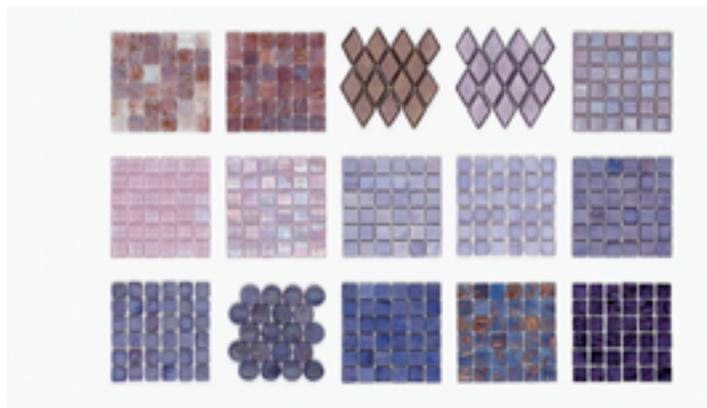
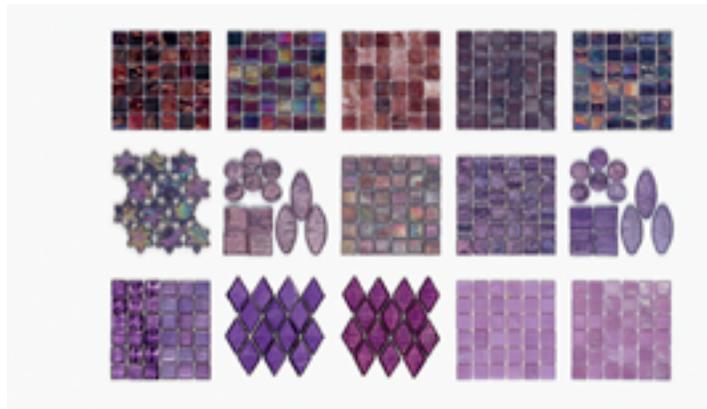
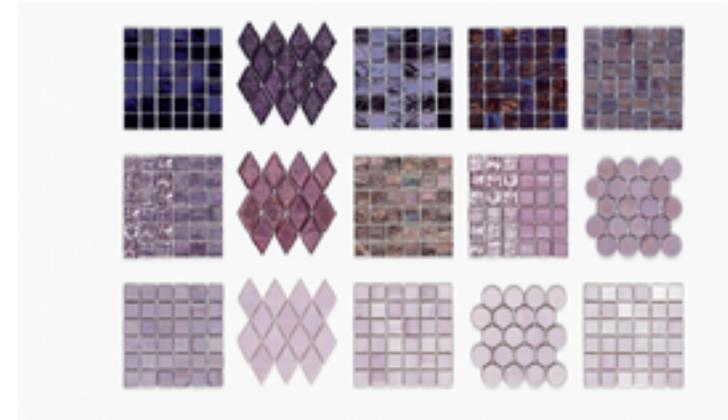
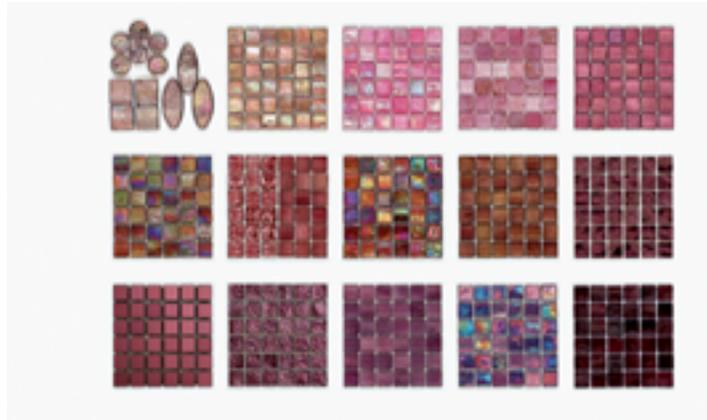
# SICIS® Colors

Warm earth tones: brown, bronze, beige and copper.



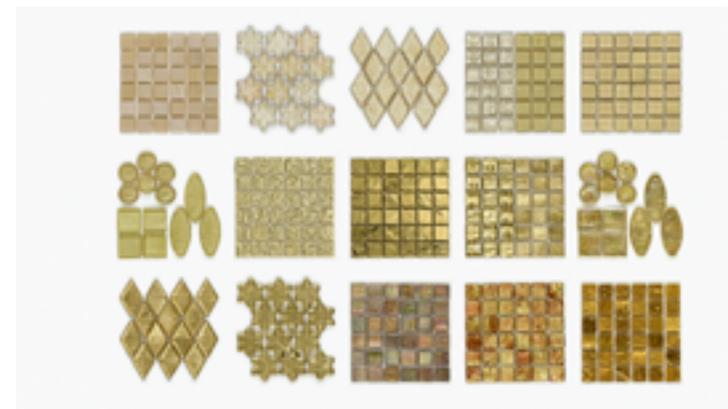
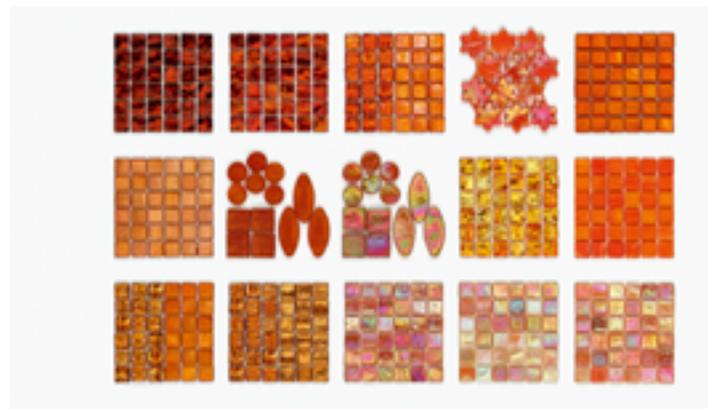
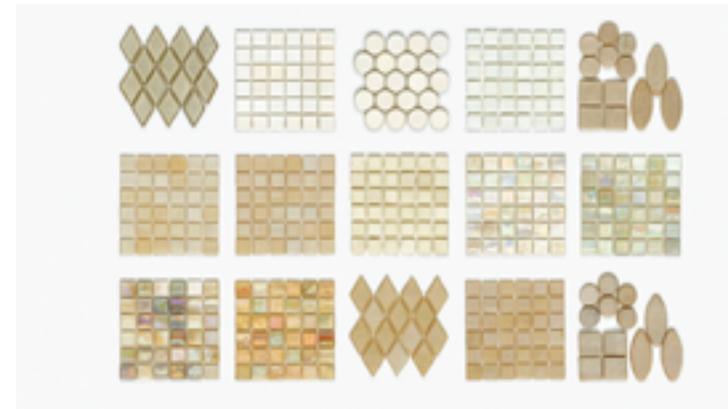
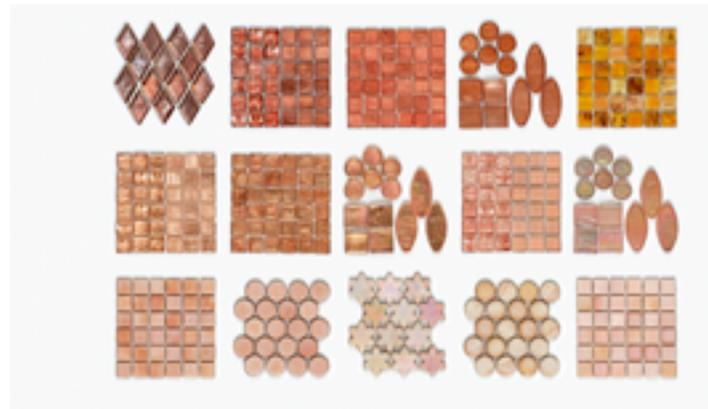
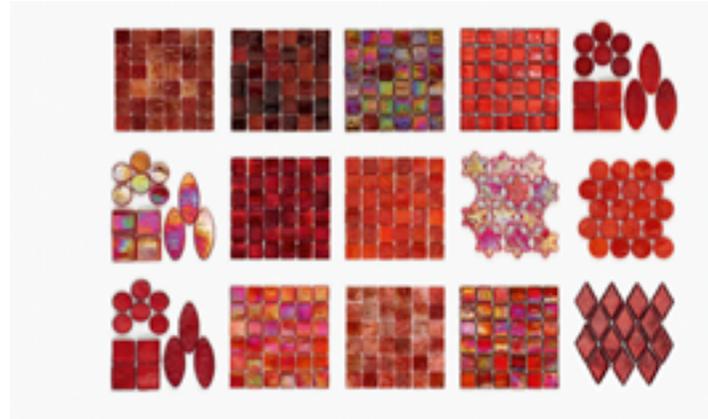
# SICIS® Colors

From lilium rose up to intense violet, light up like silks and fine velvets.



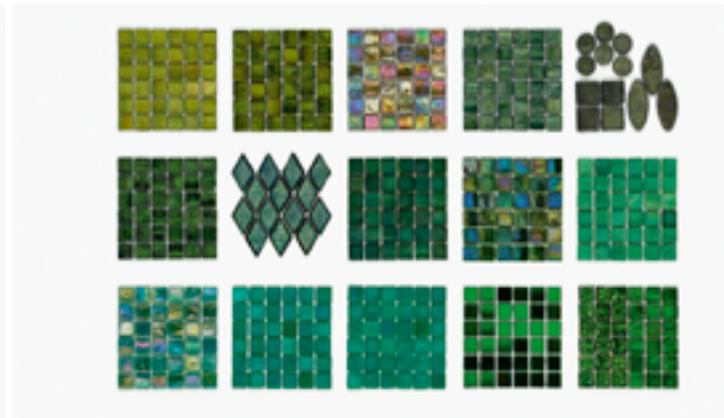
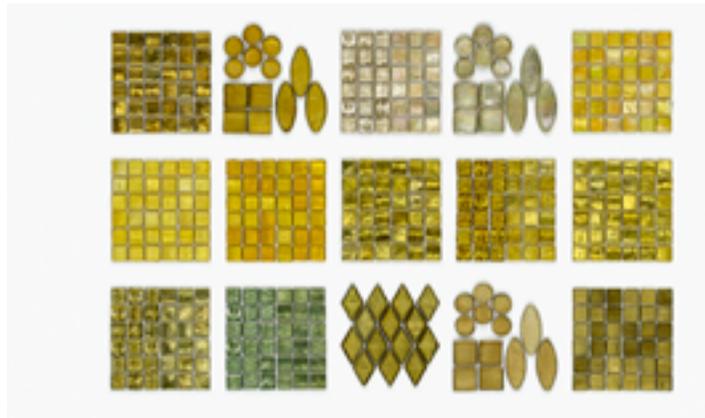
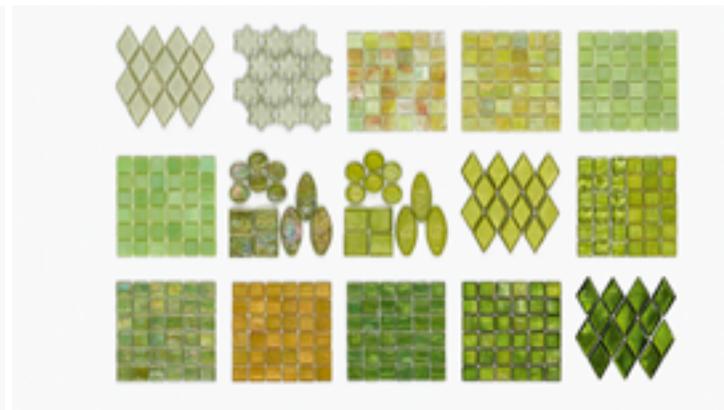
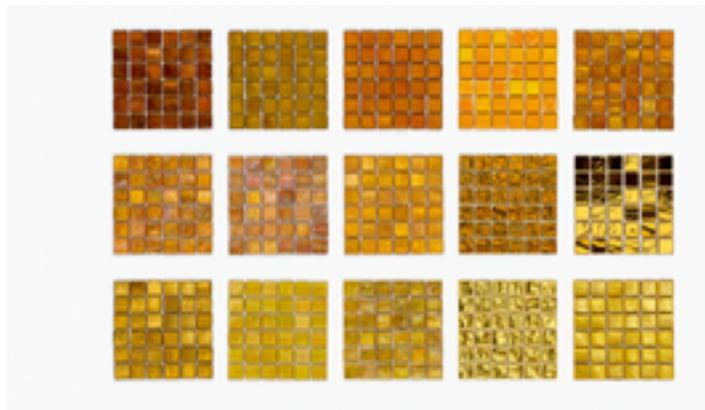
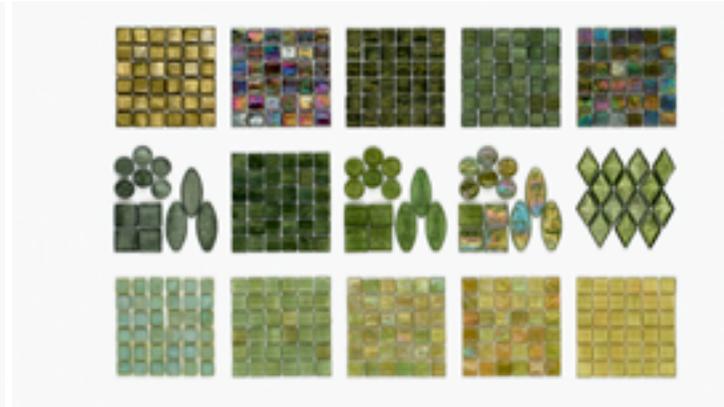
# SICIS® Colors

Bright reds fade to orange hues and reach gold tones.



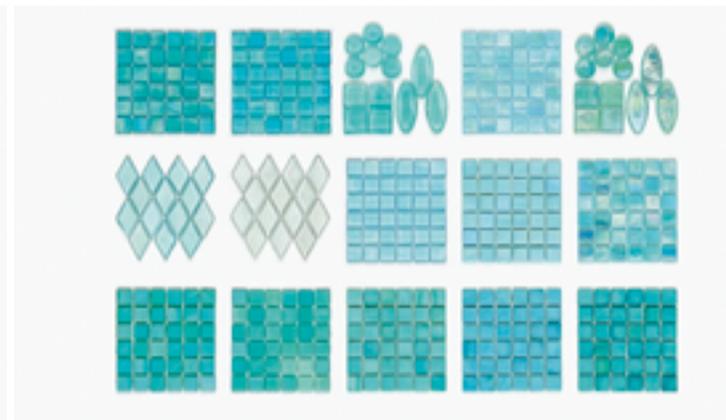
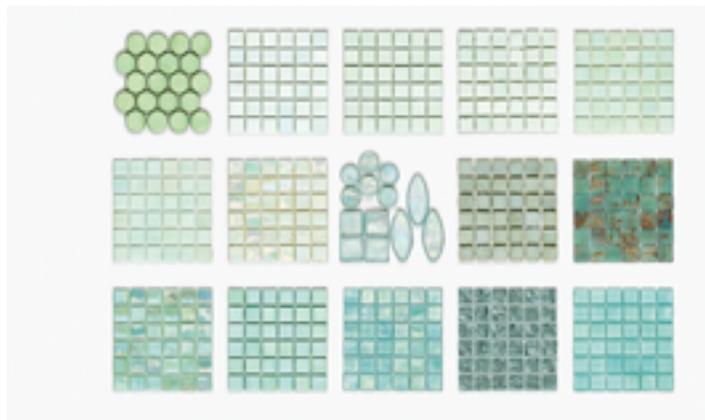
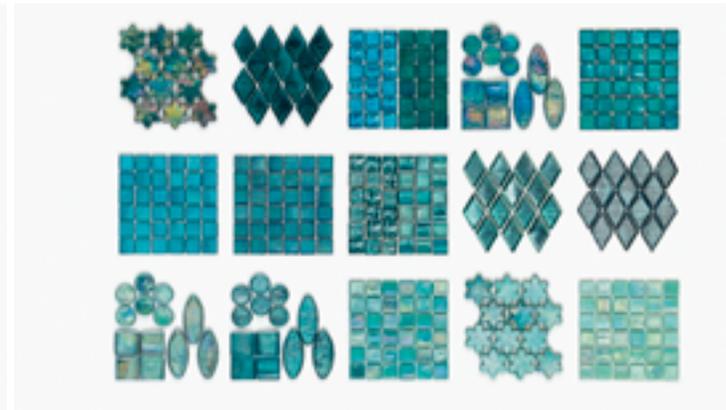
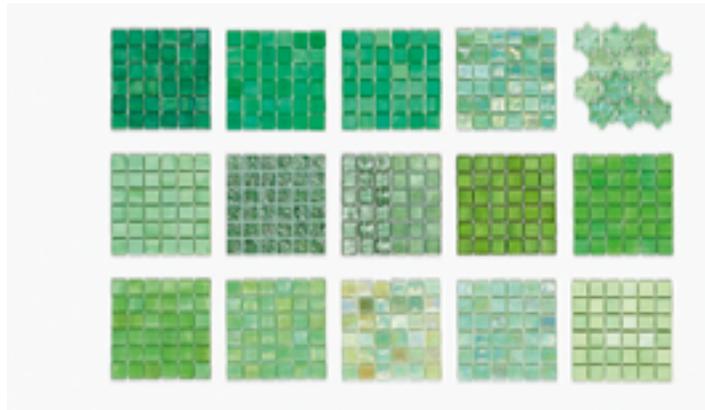
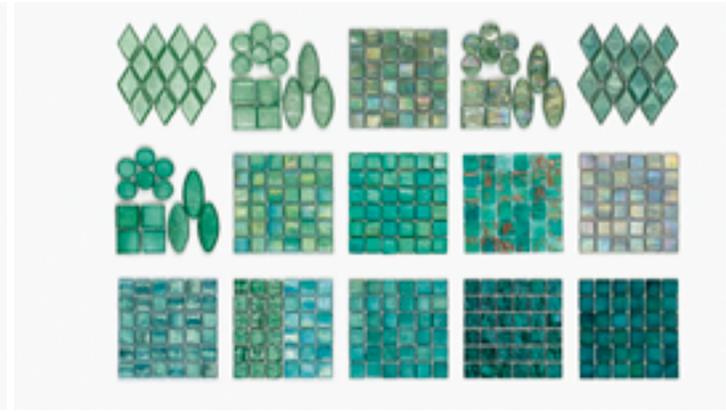
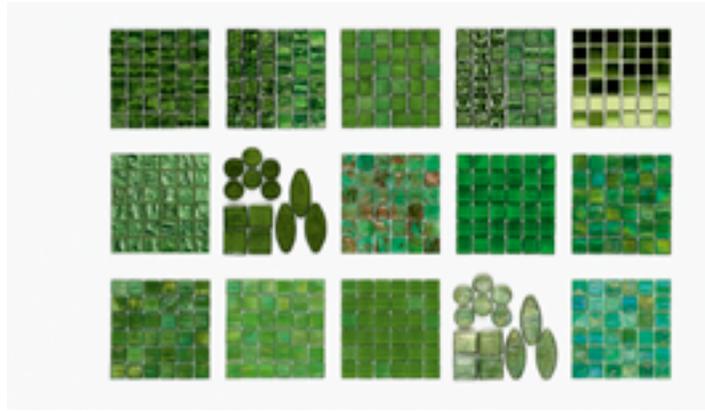
# SICIS® Colors

Intense yellows like sunbeams, fade to soft tones and start again towards emerald greens.



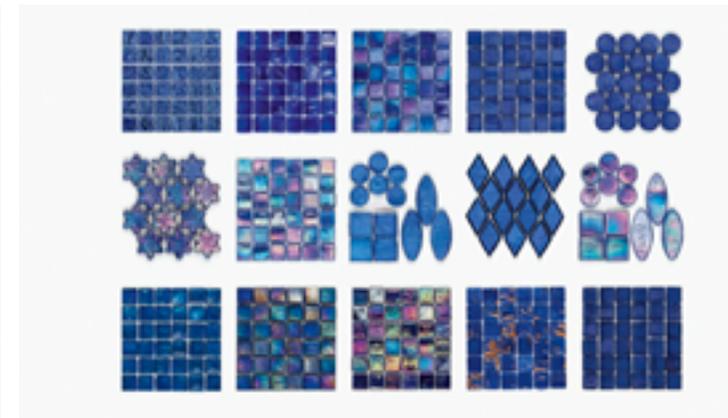
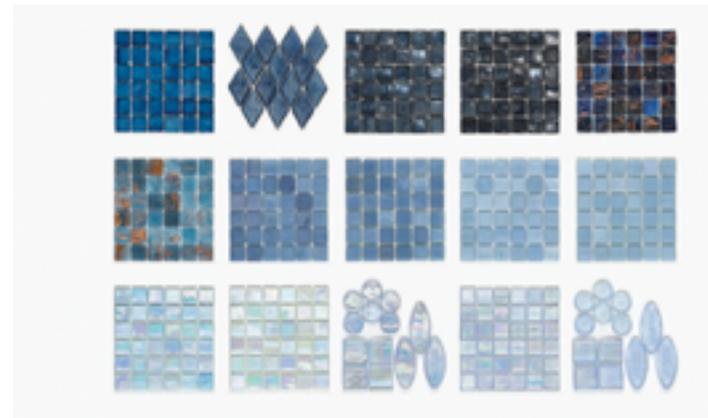
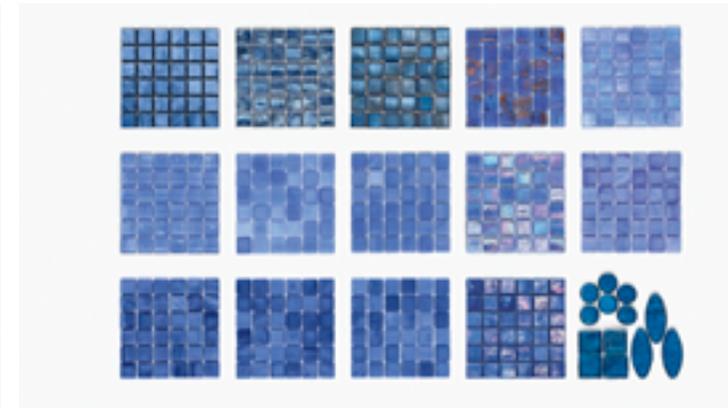
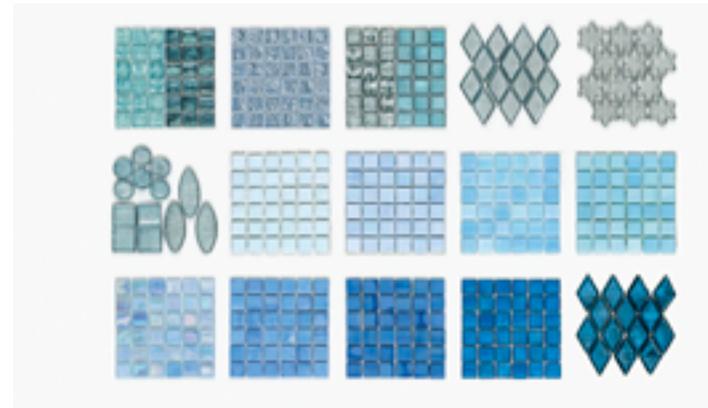
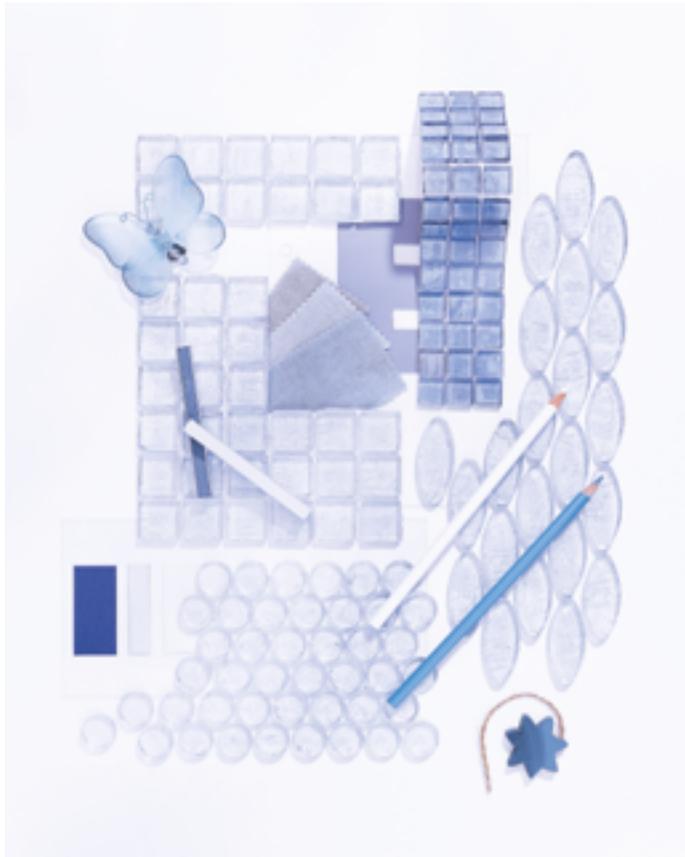
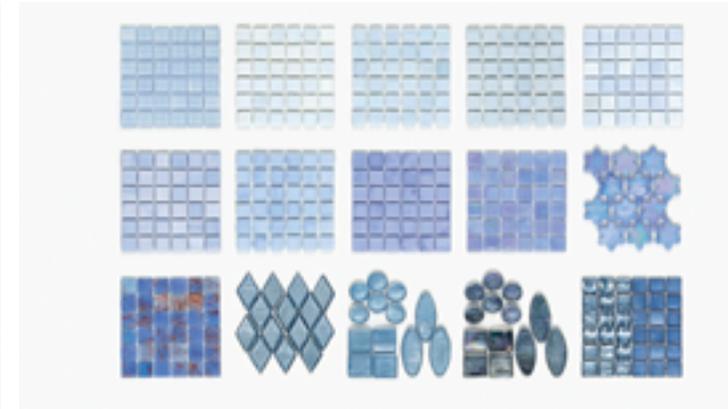
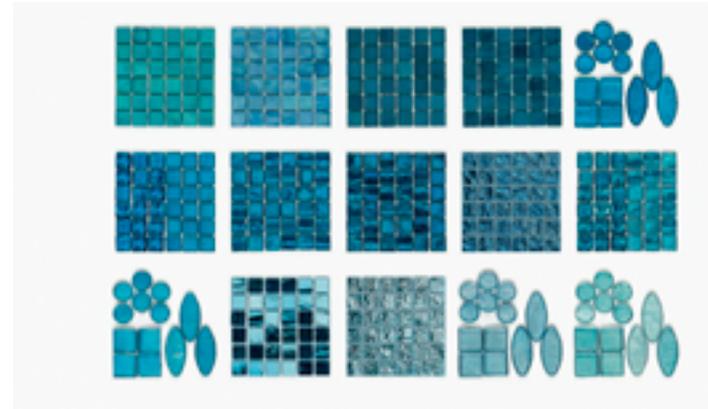
# SICIS® Colors

The colors of nature par excellence, green in all its shades.



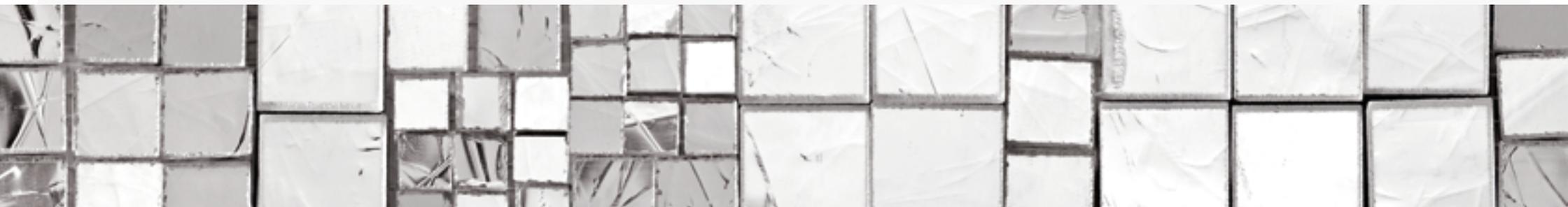
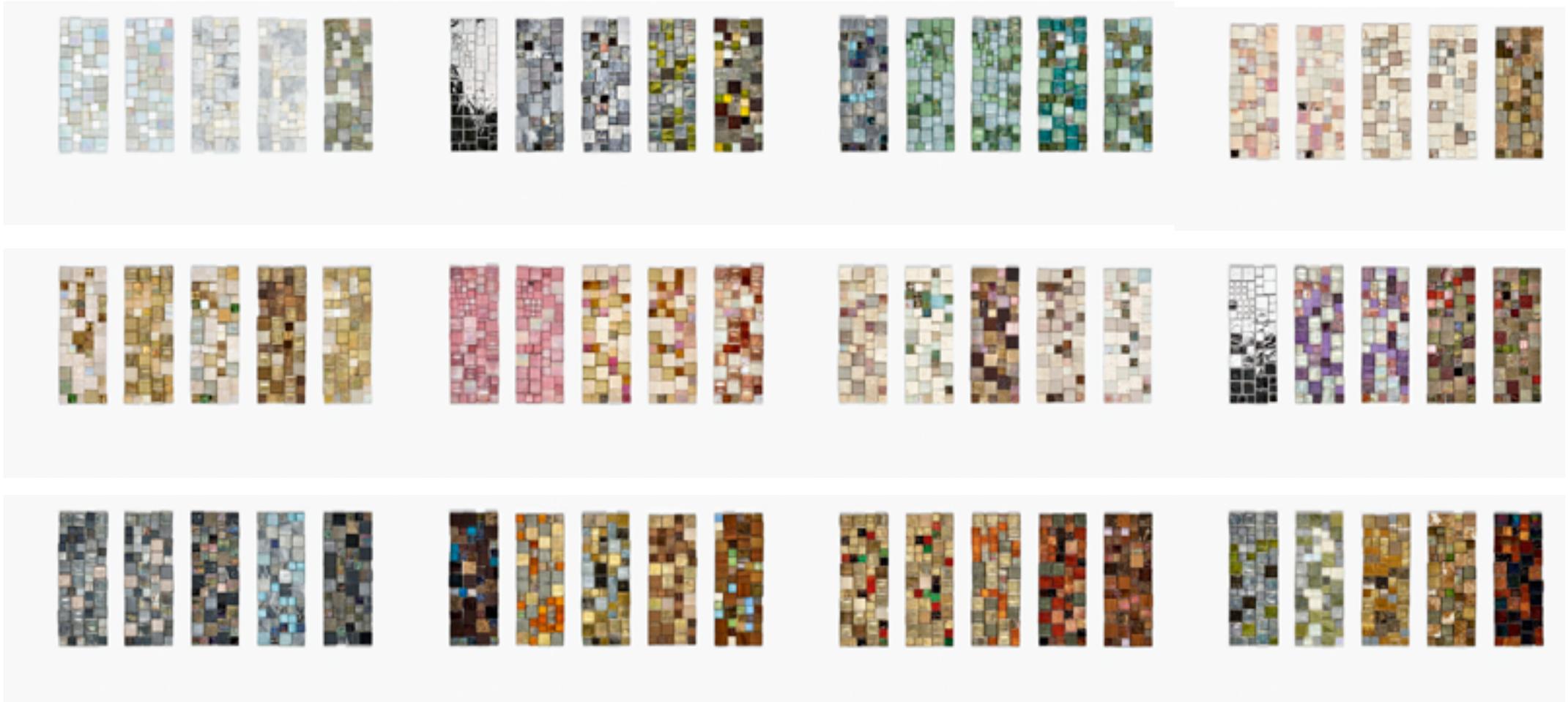
# SICIS® Colors

The transparency of the sky, the clouds, down to the deep sea. You get lost in a journey made of air and water.



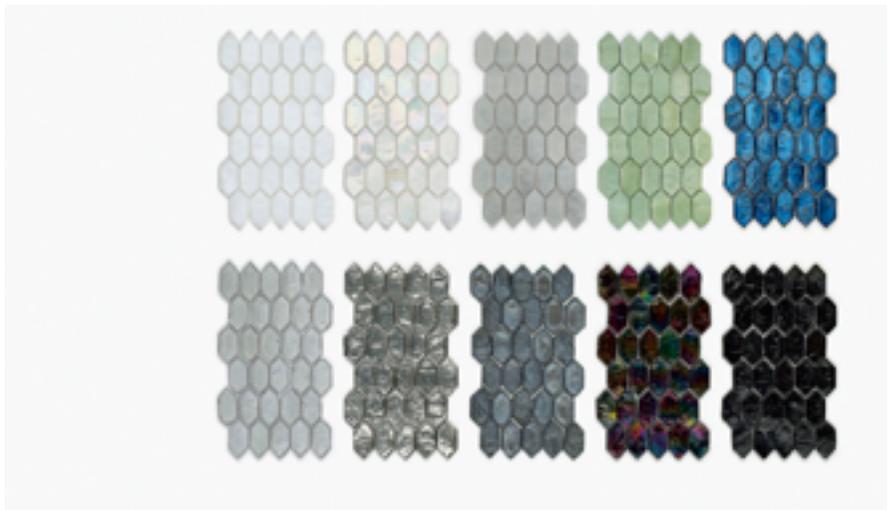
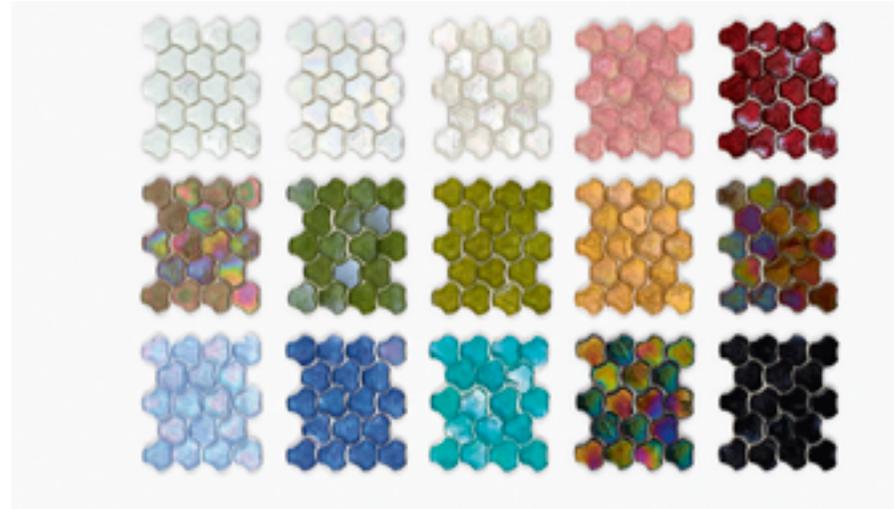
# SICIS® Colors

The boards of three-dimensional tiles.



# SICIS® Colors

Many colors for unique and inimitable formats.



# 8 Shapes / 8 Formats

SICIS®



**SQUARE**  
*QUADRATO*

mm 15 x 15 - (5/8" x 5/8")  
mm 10 x 10 - (3/8" x 3/8")  
mm 20 x 20 - (3/4" x 3/4")  
mm 23 x 23 - (7/8" x 7/8")



**ROUND**  
*TONDO*

Diam. mm 20  
(Diam. 6/8")



**IRREGULAR**  
*IRREGOLARE*

mm 15 x 15  
(5/8" x 5/8")



**OVAL**  
*OVALE*

mm 51,5 x 21  
(2' x 7/8")



**LOZENGE**  
*LOSANGA*

mm 31 x 15  
(1 1/4" x 5/8")



**FLOWER**  
*FIORE*

Diam. MAX mm. 30  
(Diam. MAX 1 1/8")



**ROMBOIDAL**  
*ROMBO*

mm 23 x 40  
(7/8" x 1 5/8")



**CLOVER**  
*TRIFOGLIO*

Diam MAX mm. 25  
(Diam. MAX 1")



# 16 Finishings



**SOLID**  
SOLIDO



**BRILLIANT**  
BRILLANTE



**ANCIENT**  
ANTICO



**TRANSPARENT**  
TRASPARENTE



**SATIN**  
SATINATO



**METALLIC**  
METALLICO



**TIDE**  
TEXTURIZZATO



**SEVERAL THICKNESS FOR COMMERCIAL USE**  
SPESSORATO PER USO COMMERCIALE



**BUSH HAMMERED**  
BOCCIARDATO



**TRIDIMENSIONAL**  
TRIDIMENSIONALE



**QUARTZ AVENTURINE**  
AVVENTURINA QUARZO



**IRIDESCENT**  
IRIDESCENTE



**WOOD**  
LEGNO

## SICIS®

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Fax +39 - 0544 469811

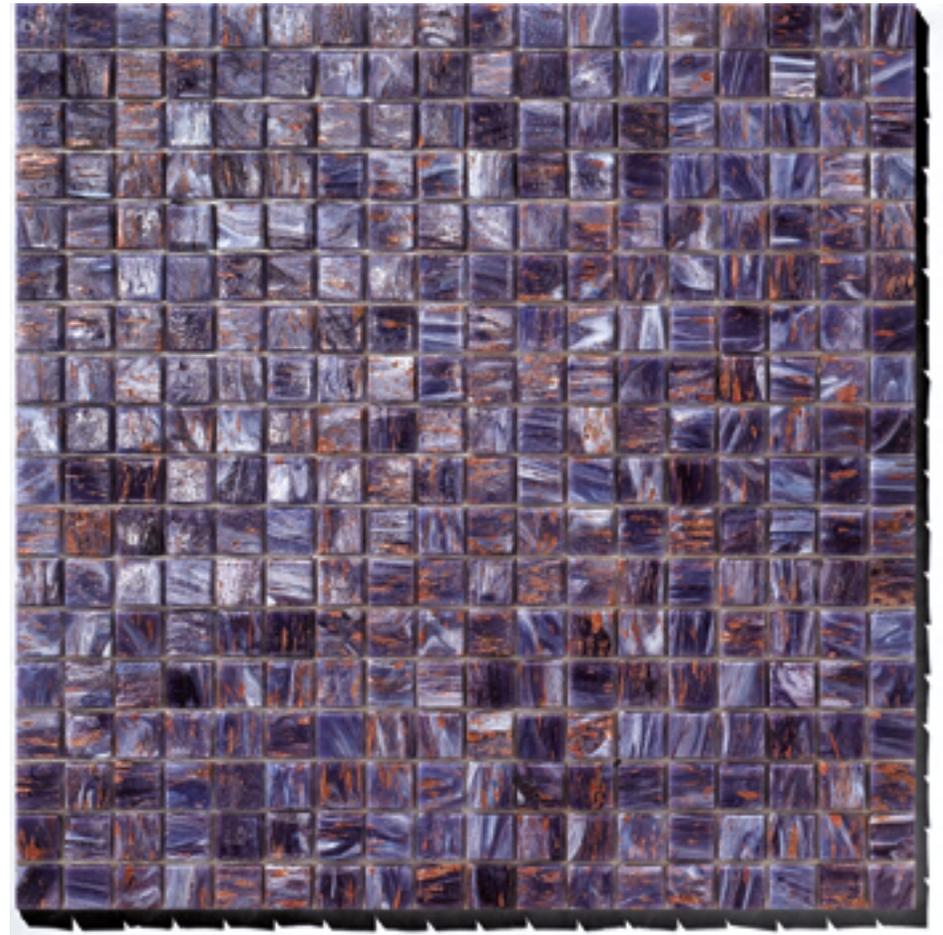
[www.sicis.com](http://www.sicis.com)

[info@sicis.com](mailto:info@sicis.com)



## Quartz aventurine

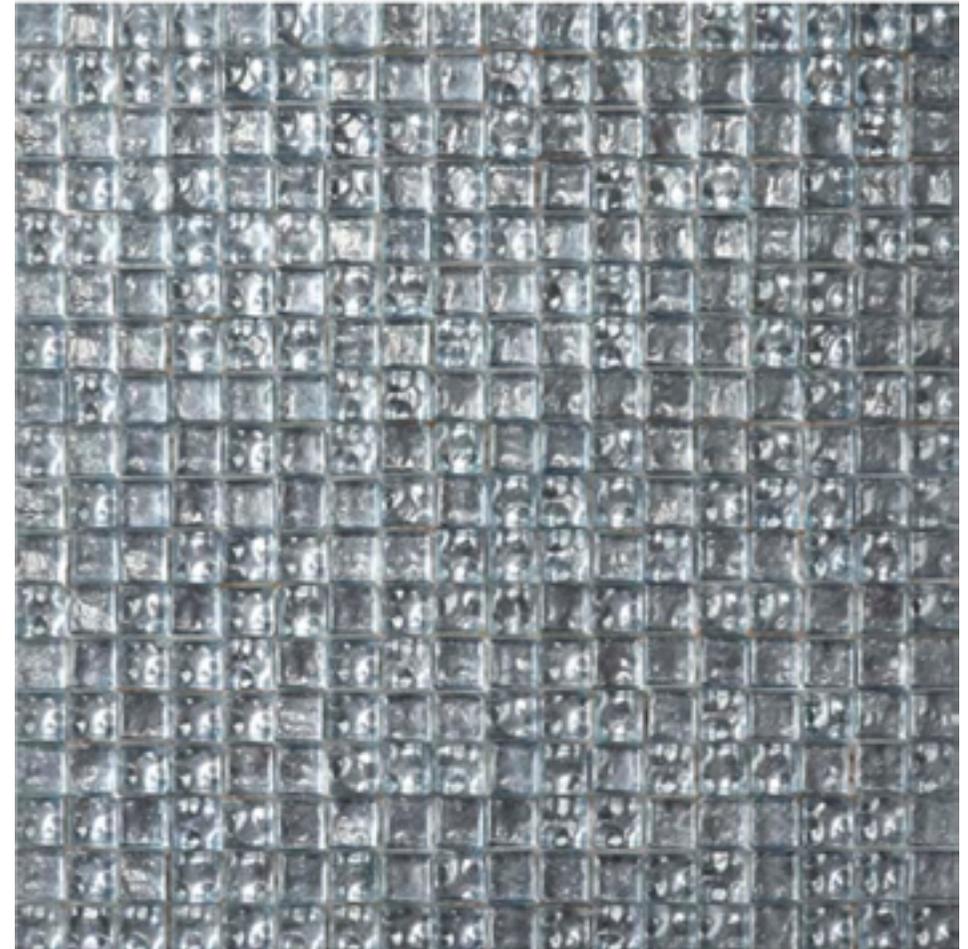
The glares given by quartz.



**Firefly - Mauritius**  
sheet size **29,6x29,6cm**

## Tide finish

Tesserae with a soft wavy surface.



**Colibrì - Yannal Tide**  
sheet size **29,6x29,6cm**

## Ancient finish

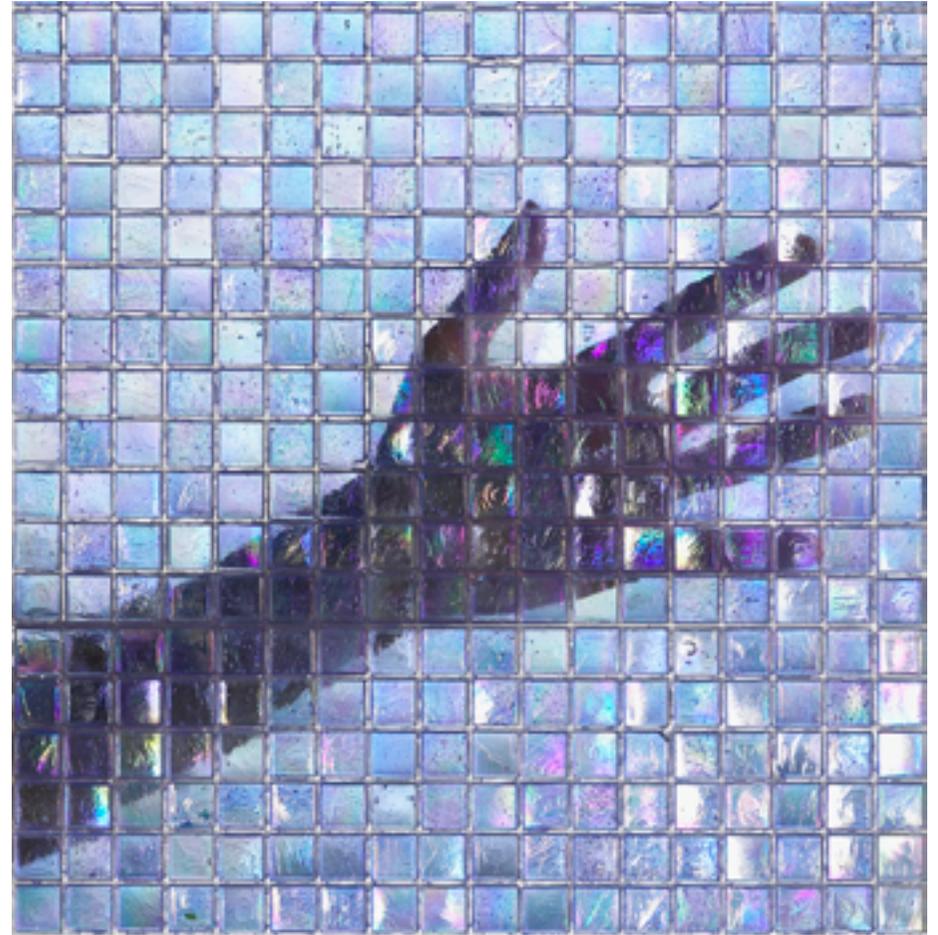
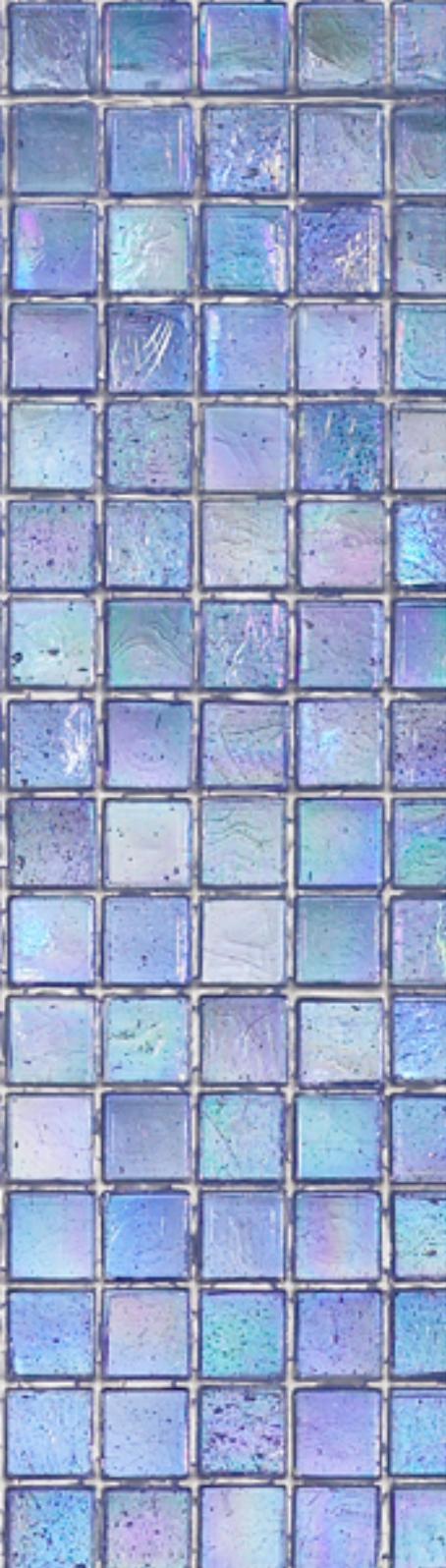
Uneven surfaces and edges, as per ancient traditions.



**Antigua - Roma**  
sheet size **29,5x29,5cm**

## Transparent finish

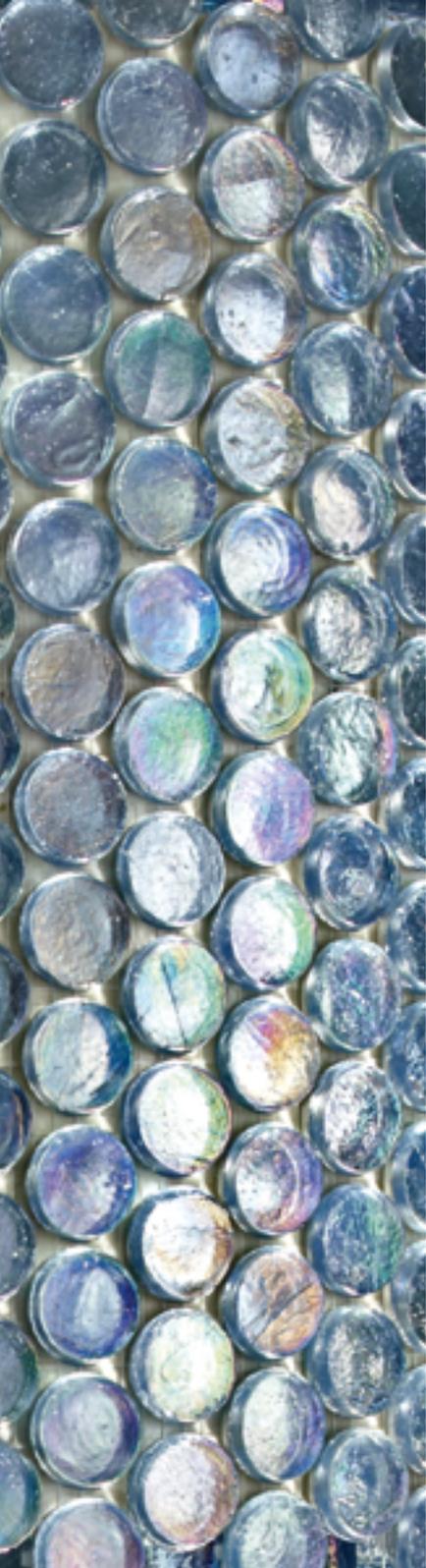
Semi-transparent tiles to allow imaginative play of light.



**Glimmer - Persimmon**  
sheet size 29,5x29,5

## Metallic effect

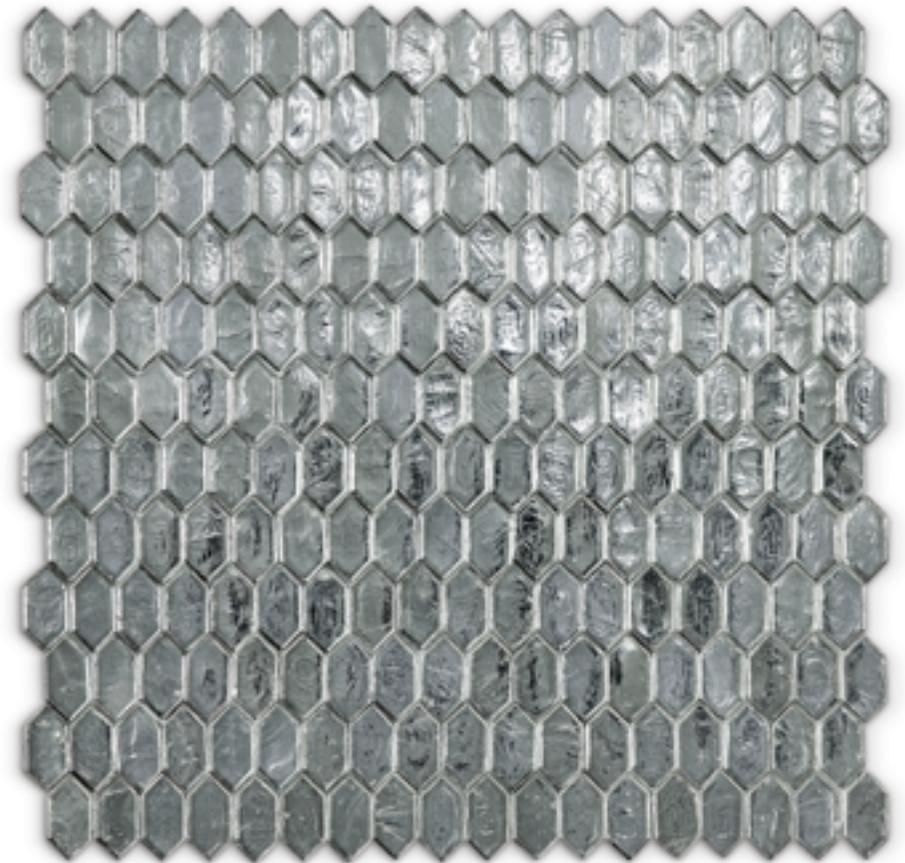
Shining and iridescent metallic reflections.



**Neoglass - Barrels 521S**  
sheet size 29,4x27,6cm

## Brilliant finish

Finishes with a shiny effect.

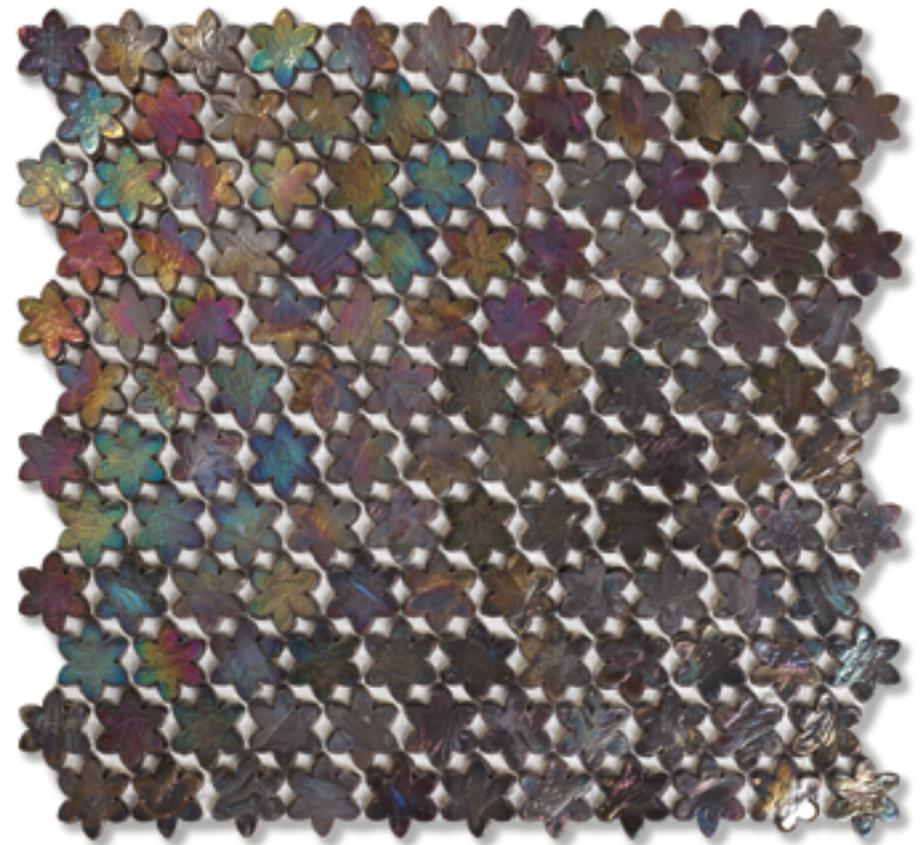


**Crystal - Galena**

**Item 1, sheet size 30,4x30cm**

## Iridescent effect

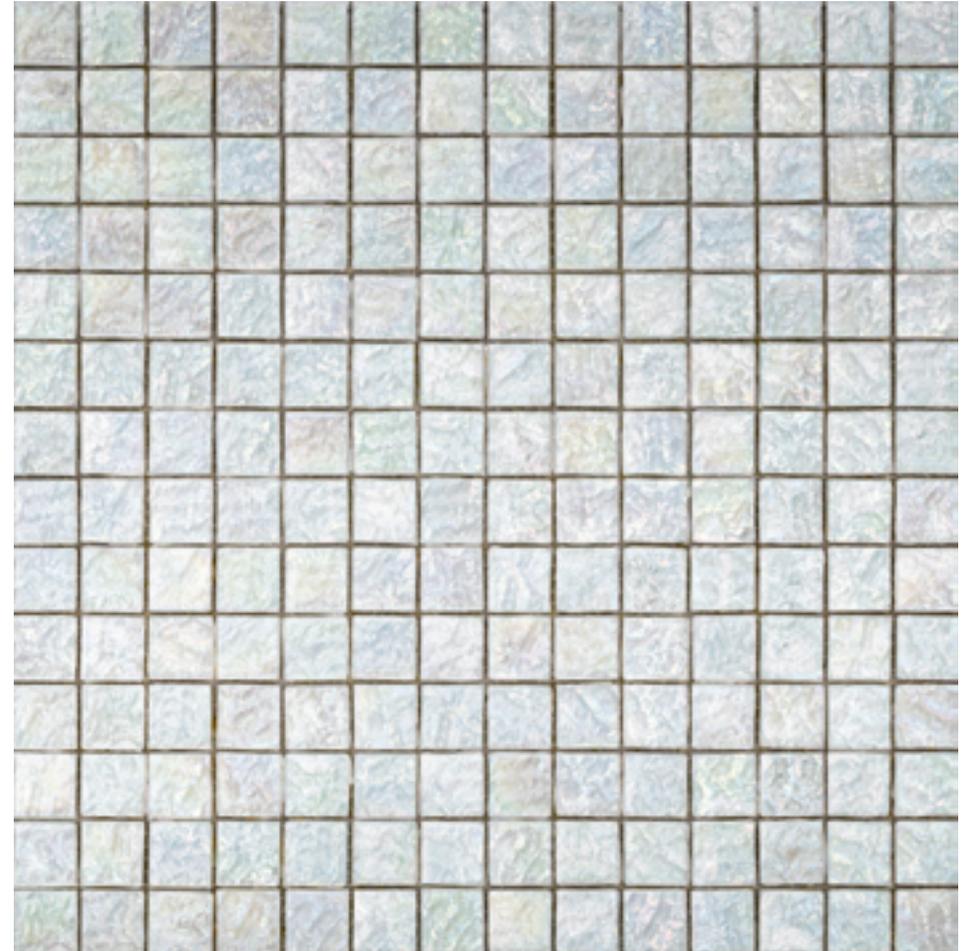
Iridescent and pearly details.



**Petites Fleurs Magnolia**  
sheet size 31,6x29,3cm

# Bush hammered finish

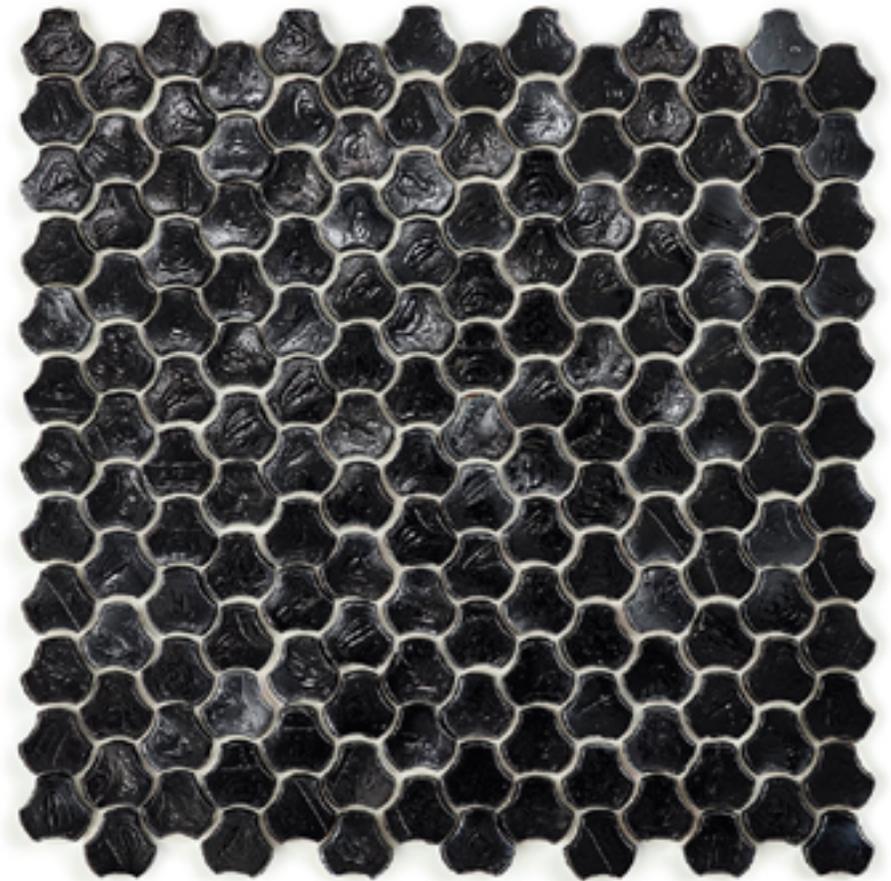
Uneven and corrugated surface.



**Tephra - Anorth**  
sheet size **29,6x29,6cm**

## Solid finish

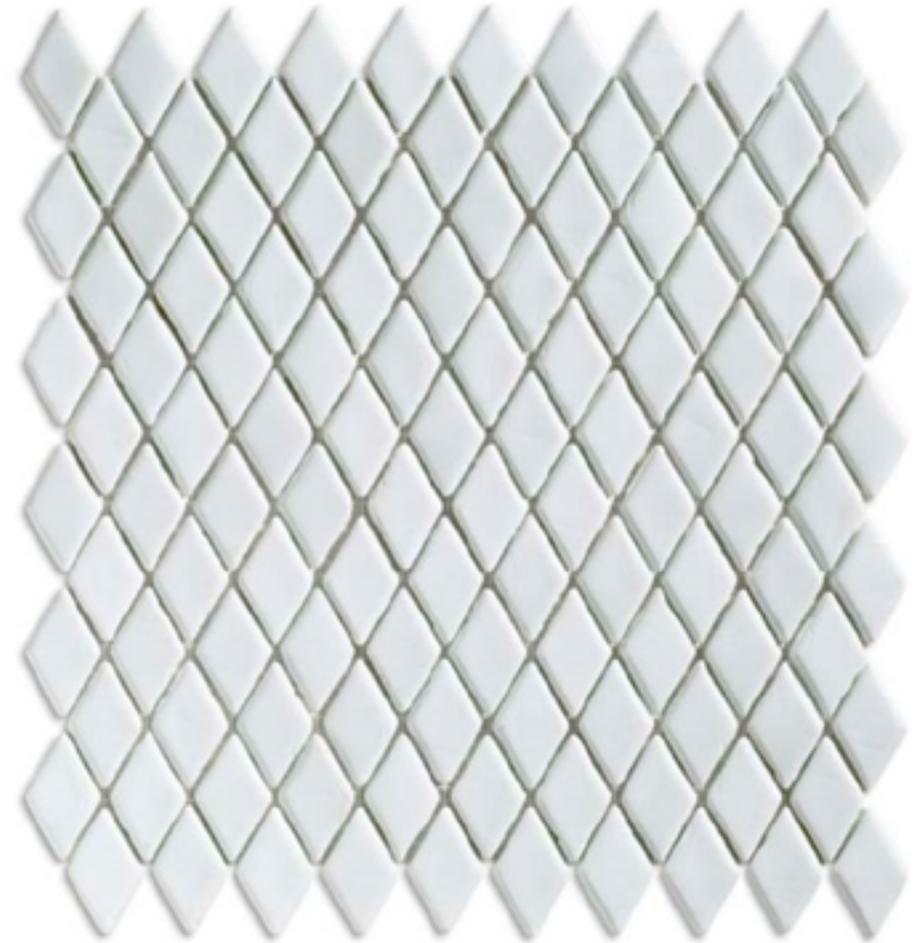
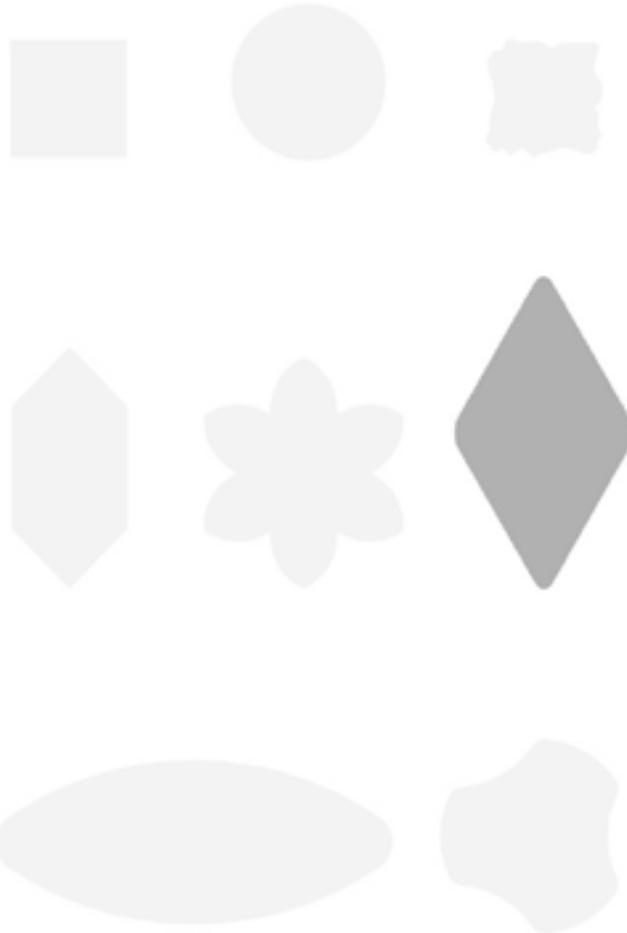
Full, solid, pure colors.



**Clover - Blackened**  
sheet size 28,6x28,3cm

## Satin finish

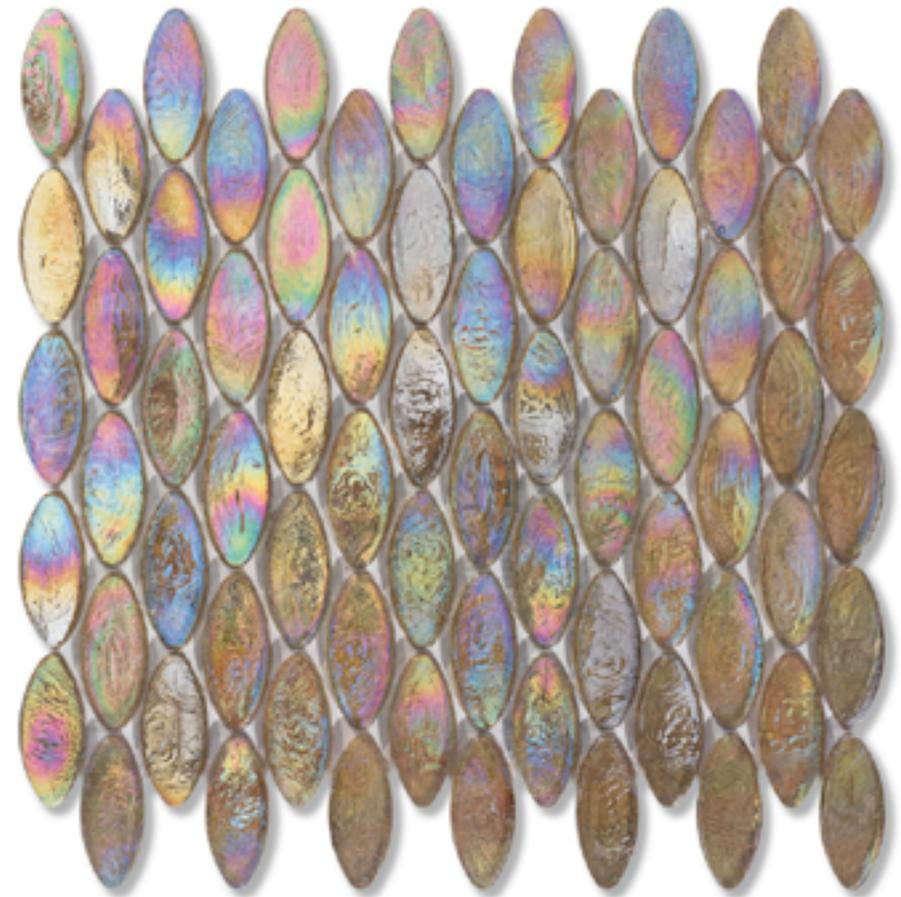
Matte and regular finishes.



**Diamond - Excelsior Satin**  
Item 02 sheet size 25,9x26,6cm

## Several thickness

Many different thicknesses for commercial use.



**Neoglass - 210,5 Satin Domes**  
sheet size 25,9x25,3cm

## Wood finish

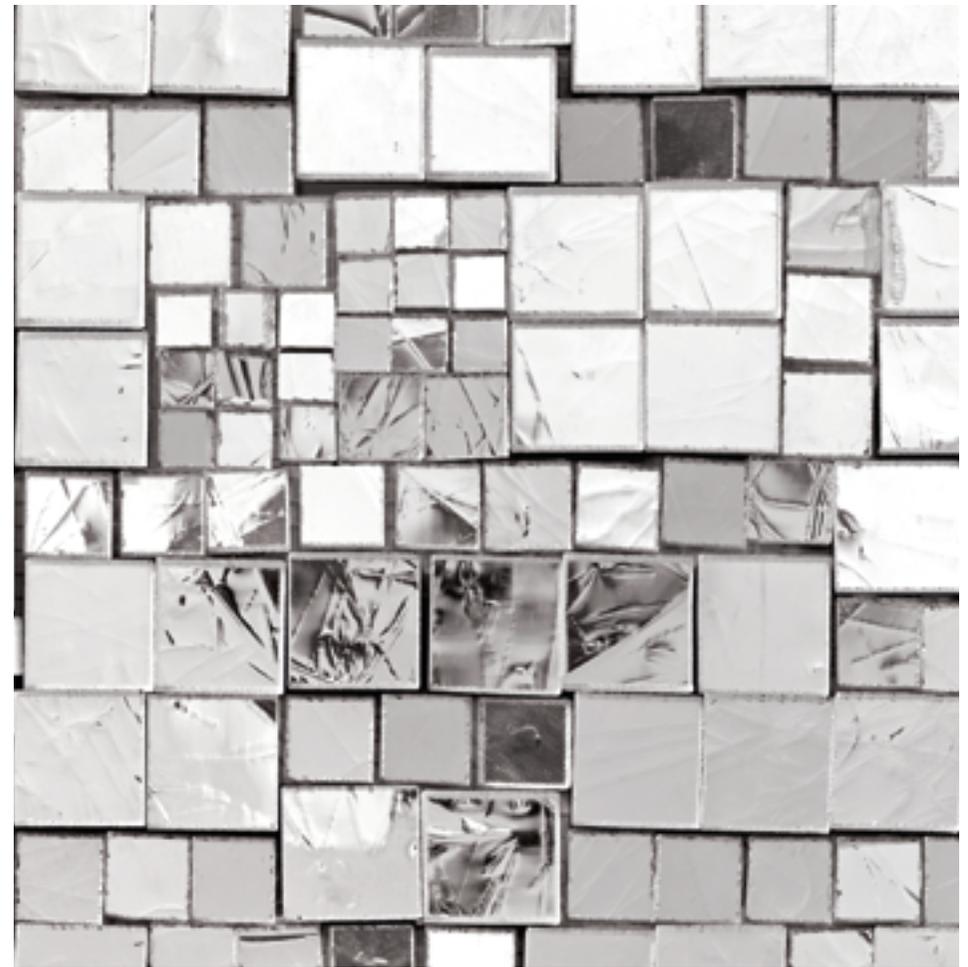
Wooden tesserae.



**Structura - Sunstone Uneven**  
Sheet size 25,4x28,4cm

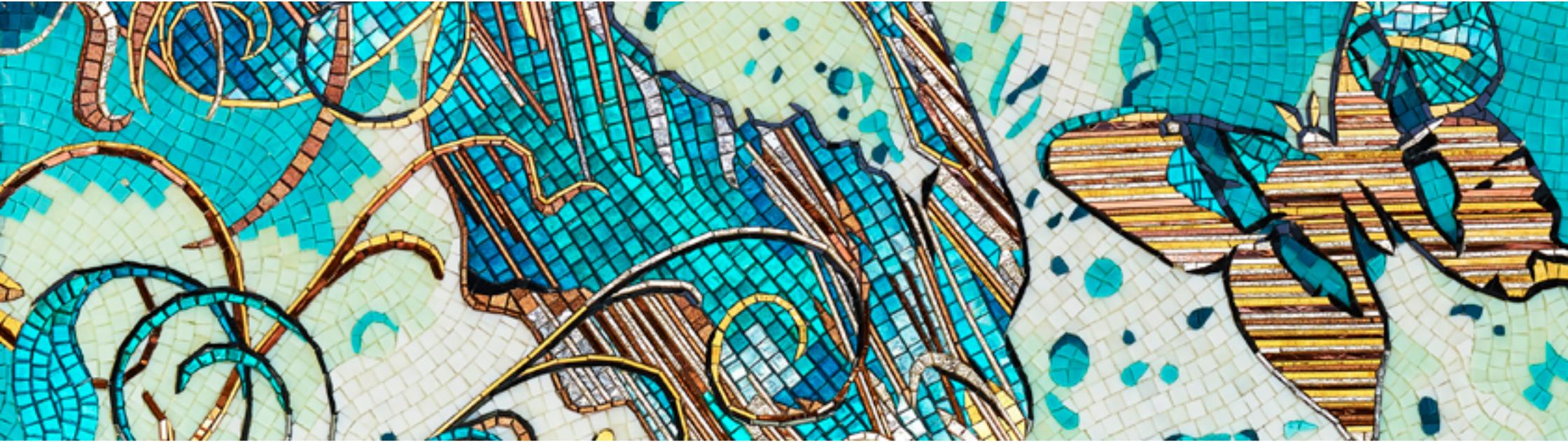
## Tridimensional

Tesserae with different thicknesses and sizes.



**Structura**

**Sheet size 25,4x28,4cm**

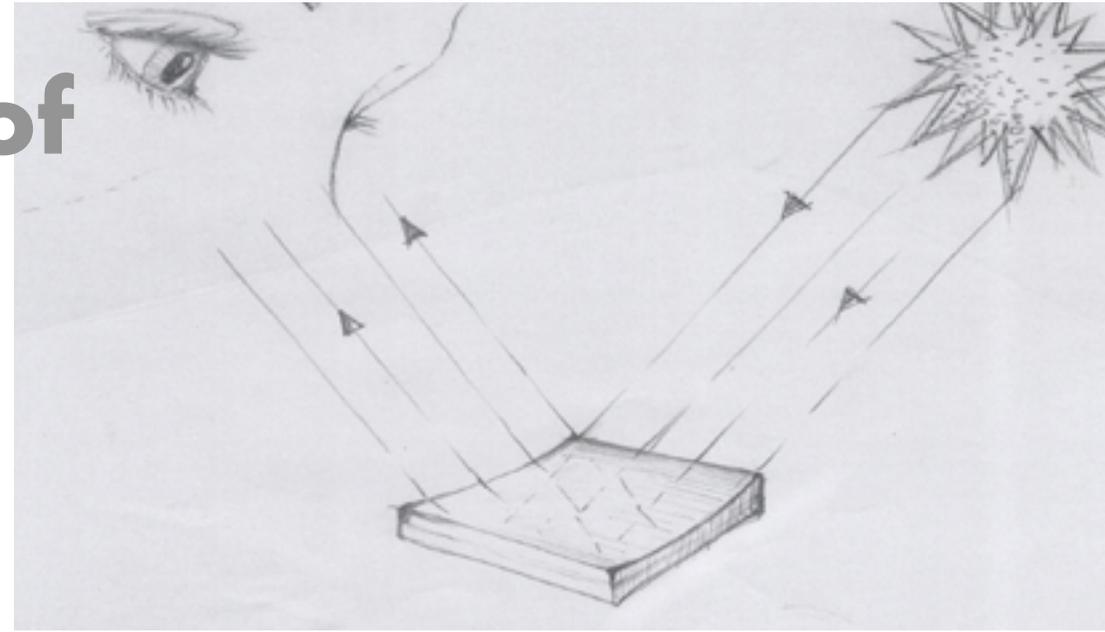


## 1. Reflection of light

SICIS Murano glass mosaic, thanks to the refined irregularity of the tesserae, concave or convex, it reflects the light not uniformly, thus giving the surface of the mosaic illuminated by the light an iridescent and dynamic appearance. This effect is enhanced with both sunlight and artificial light and is relevant both indoors and outdoors.

**Three characteristics of  
SICIS mosaic  
depending  
on light**

# Three characteristics of SICIS mosaic depending on light



## 2. Reflectance

understood as the Solar reflectance index (RSI), since there are different interpretations for reflectance according to the regulatory framework.

Relevant only externally as it is a property that simulates the behaviour of a surface when exposed to sunlight only. A building material with a high reflection index laid outdoors allows to reduce the “heat island” effect.

This is also relevant as it allows to obtain points under the LEED protocol or other environmental sustainability standards. Now, thanks to the fact that the surface of the laid mosaic is composed for approx. 25% of grout, it is also possible for dark colored mosaics (which normally would have a low RSI solar reflection index) to counterbalance with grouts that have a high index and obtain a relatively high result for a dark colored surface.

# Three characteristics of SICIS mosaic depending on light

## 3. Photocatalysis

Relevant for outdoors; also relevant for indoors when the mosaic laid indoors is sufficiently exposed to sunlight.

Some glass mosaic collections contain titanium dioxide in the anatase form, recognizable by the presence of iridescence. This makes the mosaic:

- self-cleaning / anti-pollutant (sunlight reacts by transforming air pollutants into soluble salts and water, acting as a solvent, eliminates them by facilitating surface cleaning)
- antibacterial (the oxidizing power of the radicals produced in the photocatalytic reaction inhibits the proliferation of bacteria and mold)

# SICIS Sustainability Biophilia

SICIS®



The term “**biophilia**” literally means “love of life and living systems”. It was first used by Erich Fromm (c. 1965) to describe a psychological orientation of attraction from all that is alive and vital.

The biophilia hypothesis suggests that there is an instinctive link between humans and other living organisms.

Edward O. Wilson introduced and popularized the hypothesis in his book entitled *Biophilia* (1984): “the connections that human beings subconsciously seek with the rest of living beings”.

Unlike phobias, which are aversions and fears that people have towards things in the natural world, philie are the positive attractions and feelings that people have towards certain habits, activities and objects in their natural environment.

# SICIS Sustainability Biophilia

**CENTRO CERAMICO - BOLOGNA**

**Test report N.** 434/10/S1 **Date** 29/09/2010 **Page** 2 of 3

**Description of the sample:**

Glass mosaic tile made of 9 tesserae in 3 different colors, marked "Blend Collection Caprifoglio".  
The tesserae are layed with a white adhesive; this influences the "Argolan" reflectance value.

**Manufacturer:** SICIS S.r.l

**Sampling details:**

- Where: /
- Date: /
- By whom: customer
- How (methods): /

**Date of receival in laboratory:** 27/09/2010

**1 - TESTS PERFORMED:**

		Date of starting	Date of ending
<input checked="" type="checkbox"/>	LEED 2009 NC Rating System and reference guide (US-GBC)	28/09/2010	28/09/2010
	Determination of solar reflectance spectrum and of SRI (SS Credit 7.1 - SS Credit 7.2)		
<input checked="" type="checkbox"/>	ASTM E 1980-01	29/09/2010	29/09/2010
	Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low Sloped Opaque Surfaces		

**CENTRO CERAMICO - BOLOGNA**

**Test report N.** 434/10/S1 **Date** 29/09/2010 **Page** 3 of 3

**ASTM E 1980-01 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low Sloped Opaque Surfaces**

The measurement was performed with a spectrophotometer UV-Vis-NIR Jasco mod. V-670 with double beam and equipped with an integrating sphere attachment.  
The spectrum values are processed with the Weighted Ordinates method in order to obtain the reflectance solar spectrum of the sample; the distribution of solar spectral irradiance standard (for Air mass 1.5) employed in this method was obtained by the data reported in the reference ASTM G173-03.

**RESULTS:**

Convective Coefficient (W m <sup>-2</sup> K <sup>-1</sup> )	Mean Value of SRI
5 (low-wind conditions)	35
12 (medium-wind conditions)	35
30 (high-wind conditions)	35

Mean value of Solar Reflectance, $\alpha$	31
Thermal Emissivity, $\epsilon$ (printout)	0.92

Prof. Eng. Giorgio Timellini  
Director

# SICIS Sustainability Biophilia



# SICIS®

Photocatalytic activity of vitreous materials  
Customer: SICIS - The Art Factory S.r.l.

CHEMISTRY DEPARTMENT

NATIONAL RESEARCH  
COUNCIL



UNIVERSITY OF FERRARA

ISTITUTO PER LA SINTESI ORGANICA  
E LA FOTOREATTIVITA'

Sezione di Ferrara

**TECHNICAL REPORT ON THE PHOTOCATALYTIC ACTIVITY  
OF VITREOUS MATERIALS MANUFACTURED FROM  
SICIS - THE ART FACTORY S.r.l.**

**NO<sub>x</sub> ABATEMENT**

## three different types of support

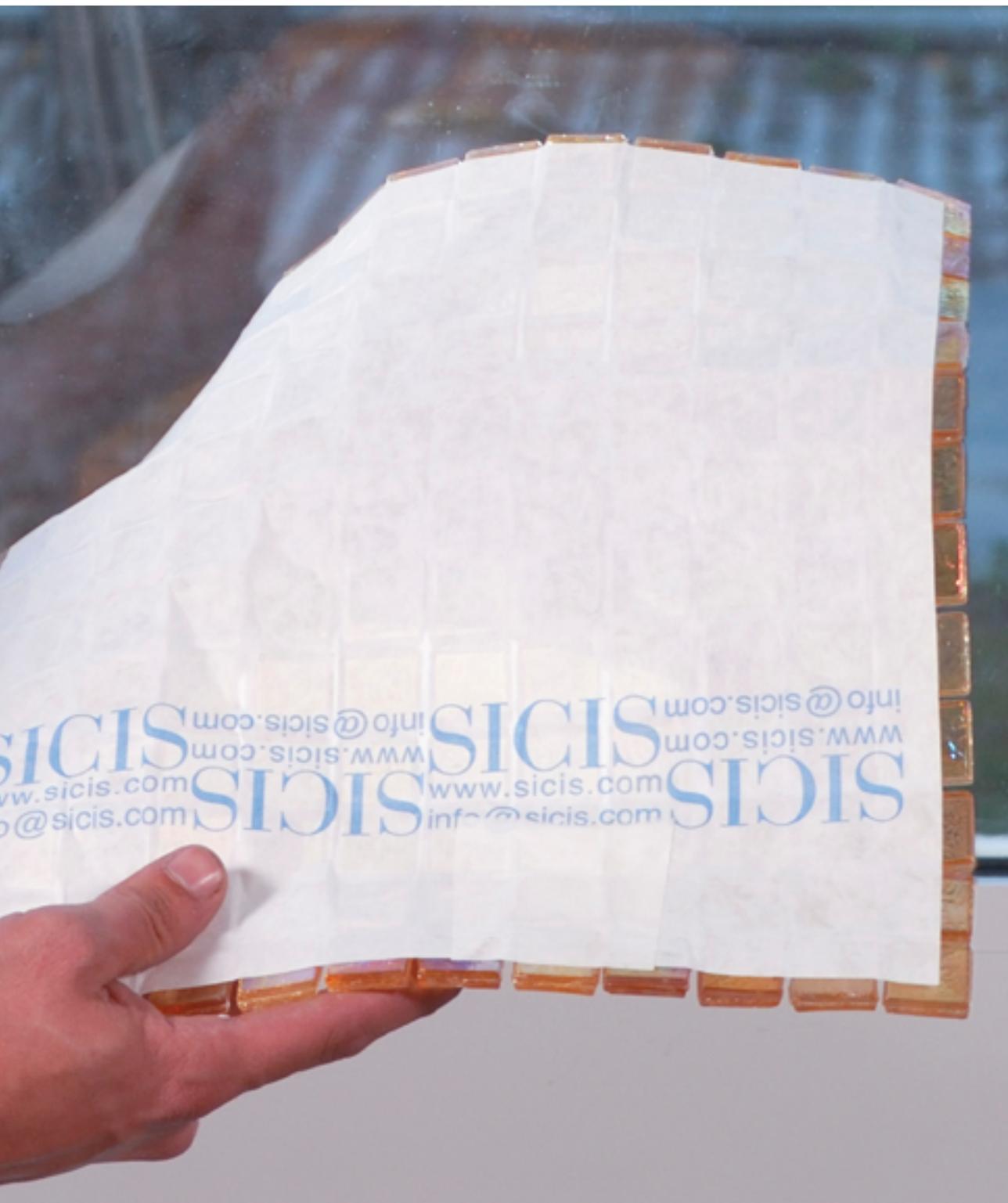
SICIS uses three different types of supports according to the project.

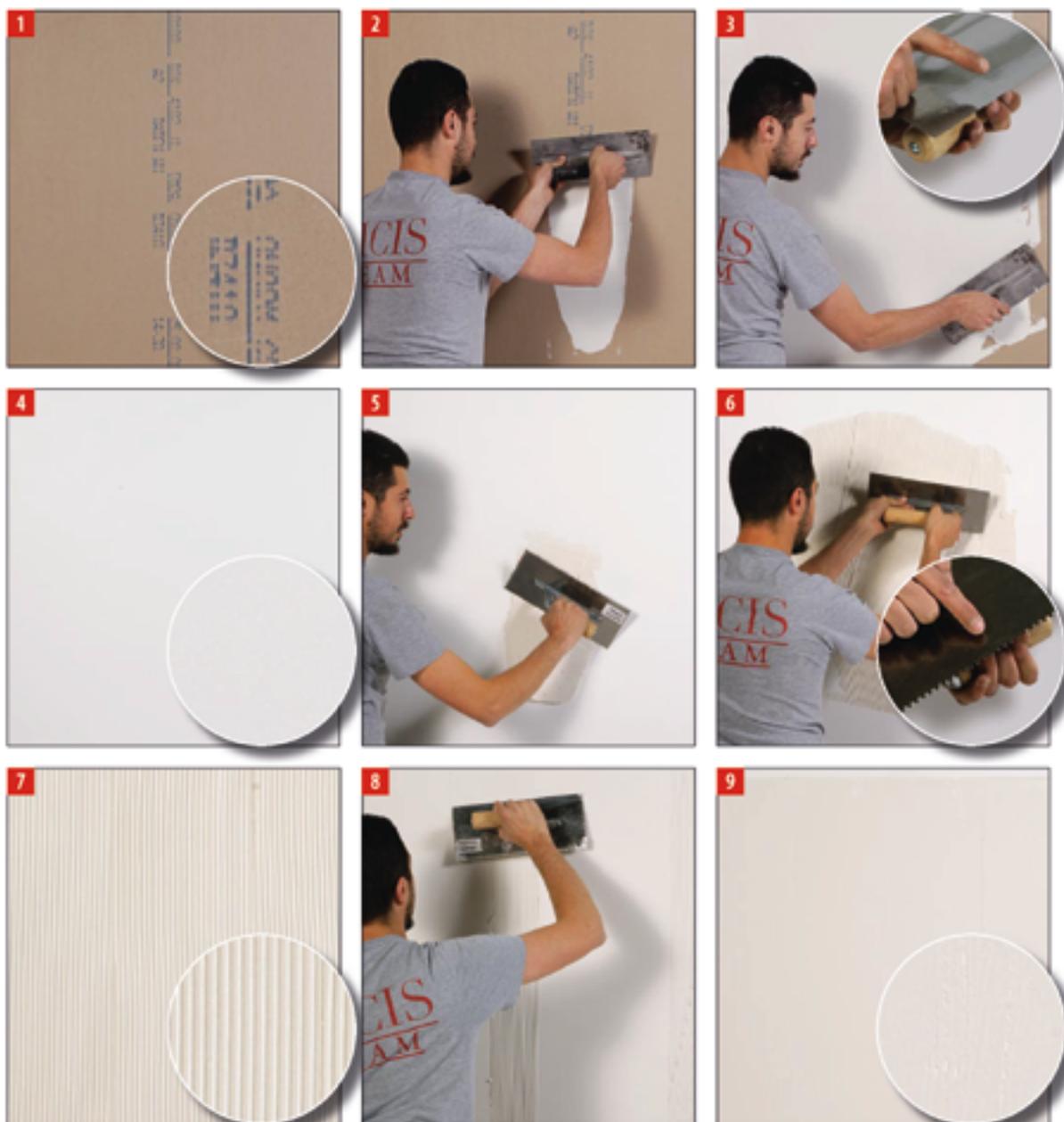
### **1. Support on paper**

is used in industrial application.

It is suitable to use on transparent or backlit surfaces. It has a lower cost than other types of mesh but it requires skilled installers and has higher costs.

**The speed of laying a mosaic on paper is approximately 7sqm in 8 hours.**







**ATTREZZATURE - EQUIPMENT - OUTILS**  
**HERRAMIENTAS - WERKZEUGE - УКЛАДКА**

**ATTREZZATURA** (A) Fresa elicoidale per mozaicature del collante e sigillante (B) Set di cassette e spatole in acciaio inox (C) Spatola fissa, dentata quadrata 3 e mm 5 in acciaio inox (D) Cutter (E) Set di misurazione (metri, martello, tracciavite) (F) Nastri in gomma per battitura/figlia staccatura (G) Set di spugne in cellulosa specifica per la pulizia di prodotti epossidici (H) Disco da taglio diamantato a forma continua montato su smerigliatrice angolare (I) Taglio da taglio manuale per vetro (J) Termoisolante per rimozione pellicola adesiva.

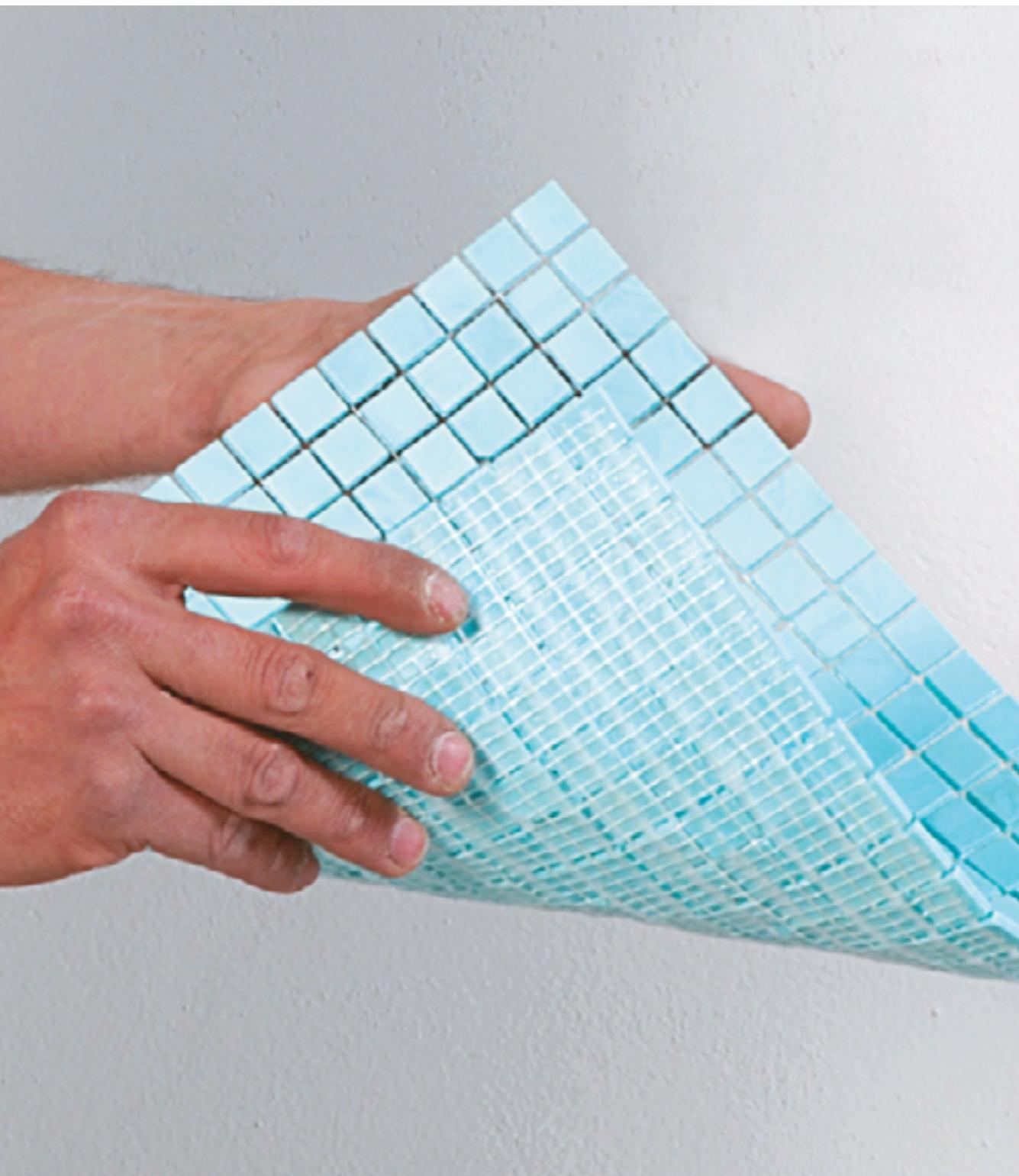
**EQUIPMENT** (A) Helical drill bit for glue and sealant (B) Stainless steel spatulas and trowels (C) Smoothie spatula, stainless steel square tooth 3 and mm 5 (D) Cutter (E) Measuring set (metre, pencil, ruler) (F) Rubber gloves's lined to tappen and plaster sheets (G) Cellulose sponges set 12 for cleaning epoxy materials (H) Continuous gear diamond cutting wheel fitted on angular sanding machine (I) Disc for manual cutting for the glass (J) Fan for adhesive film removal.

**OUTILS** (A) Furet hélicoïdal pour mélangeur l'adhésif et la colle à colorer (B) Set d'outils et spatules en acier inox (C) Spatule fixe aux dents carrées 3 et mm 5 en acier inox (D) Cutter (E) Set instruments mesure (mètre, crayon, règle) (F) Gants en caoutchouc pour battage/battage et staccage (G) Set d'éponges en cellulose spécifique pour nettoyage produits à base d'époxyle (H) Disque diamant à coupe-per à forme continue installé sur polissoire angulaire (I) Scieille manuelle pour verre (J) Isolateur thermique pour ôter la pellicule adhésive.

**HERRAMIENTAS** (A) Mocheladora para cemento cola y material de juntas (B) Juego de alfileres metálicos (C) Espátula de faja con dientes cuadrados de 3-5 mm en acero inox (D) Cutter (E) Metro (F) Juego de herramientas (metro, martillo, tracciavite) (G) Guantes de goma para limpiar y quitar (H) Conjunto de esponjas de celulosa específicas para limpieza de productos epoxidicos (I) Disco de corte diamantado de banda continua (J) Tena de corte manual de vidrio (K) Termoisolante para despegar película adhesiva (sealante).

**WERKZEUGE** (A) Spiralförmiges Bohrgerät zum Mischen des Klebers und des Fugenmaterials (B) Satz Glätteliste und Spachtel aus Edelstahl (C) Glätte, 3 mm und 5 mm-Zahnspatula aus Edelstahl (D) Glätte, 3 mm und 5 mm-Zahnspatula aus Edelstahl (E) Messgerät aus Gummi für die Kanten der Mosaikplatten und die Befestigung (F) Satz Spezialreinigungswatten zur Entfernung von Epoxid-Produkten (G) Zahnreihe Trennscheibe auf Winkelstrahlmaschine (H) Mozaikzange zum manuellen Glätteliste (I) Metallgitter für die Entfernung der Schutzfolie.

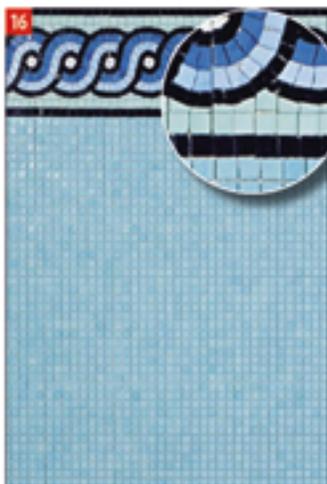
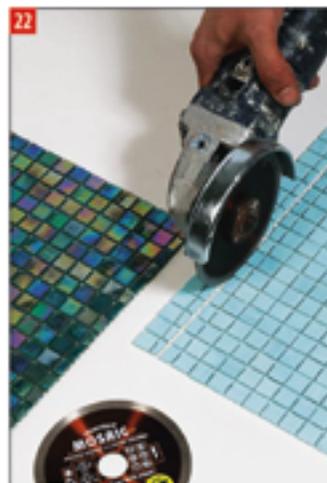
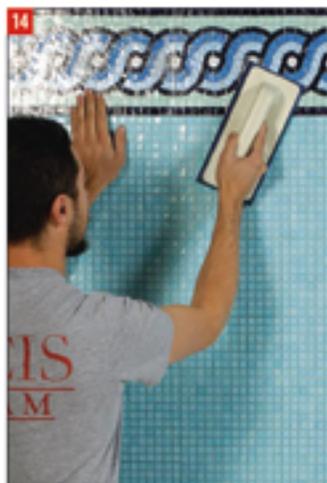
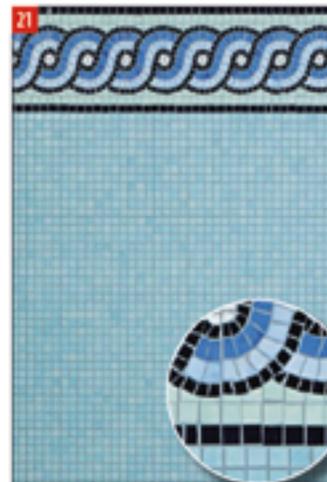
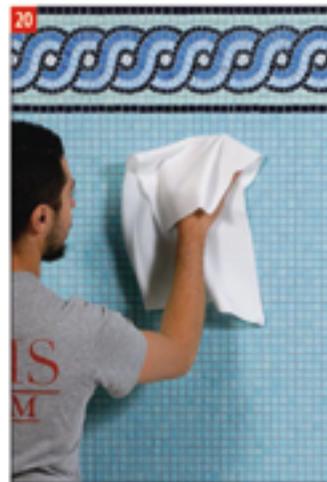
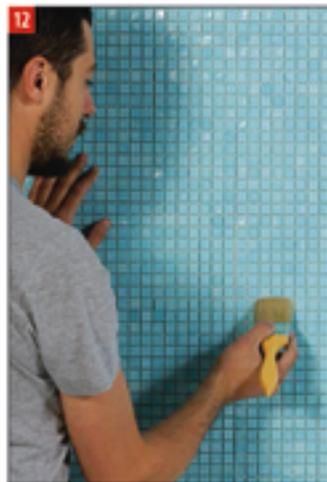
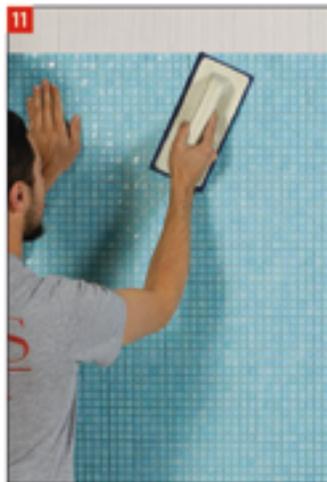
**УКЛАДКА** (A) Мисуря и апаратура из нержавеющей стали (B) Мастерки и spatule из нержавеющей стали с 3-5 мм и 5-мм зубцами (C) Мастерки с 3-5 мм и 5-мм зубцами (D) Мастерки с 3-5 мм и 5-мм зубцами (E) Мастерки с 3-5 мм и 5-мм зубцами (F) Набор инструментов (рулетка, карандаш, отвес) (G) Перчатки из резины для очистки и снятия (H) Набор губчатых изделий из целлюлозы для очистки эпоксидных материалов (I) Алмазная дисковая пила с непрерывной лентой (J) Ручная пила для резки стекла (K) Теплоизоляционный материал для удаления пленки клея.



## 2. Support on fiber mesh

is used in particular for the mosaics of the Murano and Iridium collections. Given the greater ease of installation and therefore the greater speed, it is the most used mode. Laboratory tests have in fact demonstrated the tear resistance of the mosaic on the net. **A mosaic on the mesh allows to obtain on average 15 m<sup>2</sup> in 8 hours**, doubling the laying speed and therefore allowing to reduce costs, both in terms of time and of the adhesive used. It is ideal for laying in swimming pools and outside buildings, because it allows excellent adhesion to the concrete substrate which avoids the risk of detachment of the tiles.





**ATTREZZATURE - EQUIPMENT - Outils  
HERRAMIENTAS - WERKZEUGE - УКЛАДКА**

**ATTREZZATURE** (A) Frusta elettrica per miscelazione del collante e sigillante (B) Set di cazzuole e spatole in acciaio inox (C) Spatola finita, dritto e quadro mm 1 o mm 5 in acciaio inox (D) Cutter (E) Set di rasatura (finito, medio, trapezoidale) (F) Piatto di lavoro per tagliare tegole e staccare (G) Set di spugne in cellulosa specifiche per la pulizia di prodotti epoxici (H) Disco da taglio diamantato a cerchio continuo montato su un'angolazione angolare (I) Taglio da taglio manuale per vetro (J) Termoventilatore per riscaldare l'adesivo polimerico.

**EQUIPMENT** (A) Electrical whisk to mix binder and sealant (B) Handled steel scrapers and trowels (C) Smoothed square, straight and square tools mm 1 and mm 5 (D) Cutter (E) Rasching set (small, middle, trapezoid) (F) Rubber plate for cutting tiles and plaster sheets (G) Cellulose sponges set for cleaning epoxy materials (H) Continuous gear diamond-tipped wheel placed on angular landing machine (I) Pincer for manual cutting for fine glass (J) Fan for adhesive film removal.

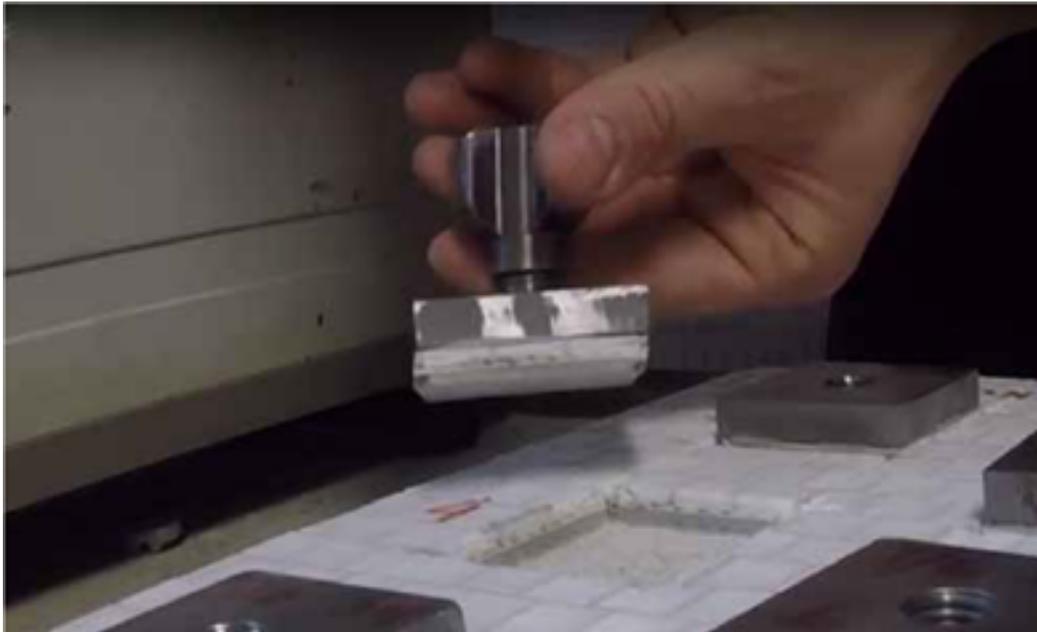
**Werkzeuge** (A) Faust elektrisch für mischen Zerkleineren der Leim- & Füllstoffe (B) Set trauflos et spatules en acier inox (C) Spatule fine avec denture et mm 1 et mm 5 en acier inox (D) Cutter (E) Set rasoirs mélange (petit, moyen, trapézoïdal) (F) Plateau en caoutchouc pour la coupe des tuiles et découpe (G) Set d'éponges en cellulose pour nettoyage des produits époxy (H) Disque de coupe diamanté à cercle continu installé sur un angleur réglable (I) Scieille manuelle pour verre (J) Ventilateur thermique pour sécher la pellicule adhésive.

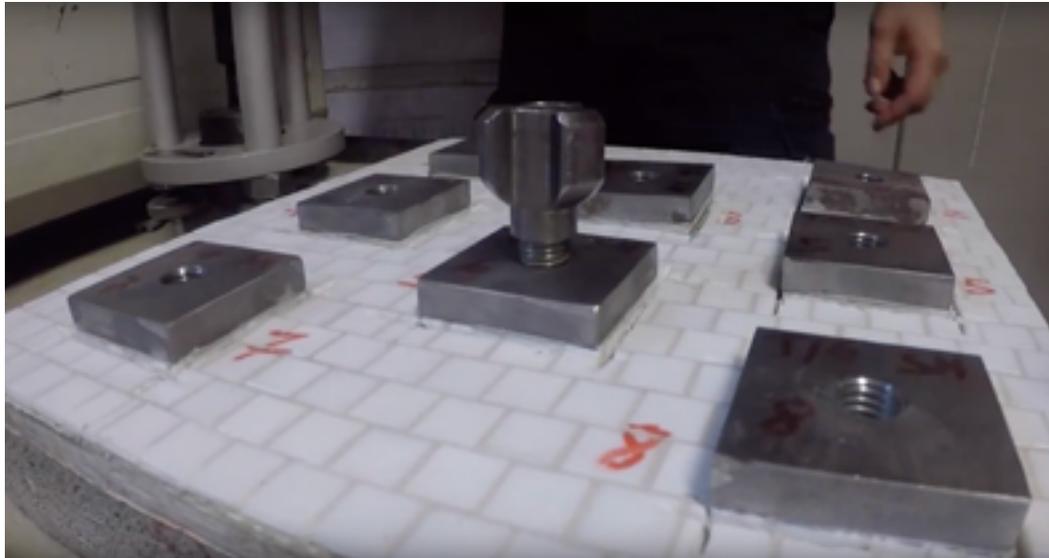
**WERKZEUGE** (A) Elektrischer Rührgerät zum Mischen des Binders und des Füllmaterials (B) Set Löffel- und Spachtelwerkzeuge aus Edelstahl (C) Spachtel 1 mm und 5 mm-Zahnung (D) Cutter (E) Rasierwerkzeuge (klein, mittel, trapezförmig) (F) Arbeitstisch aus Gummi für das Schneiden der Mosaikfliesen und der Gipsblätter (G) Set Schwämme aus Cellulose zum Entfernen von Epoxid-Produkten (H) Zahnräder-Schleifscheibe auf Winkelstütze montiert (I) Manuelle Schneidwerkzeuge für feines Glas (J) Heißluftföhn zum Entfernen der Schutzfolie.

**УКЛАДКА** (A) Мисцера для змішування клею і затірки (B) Набор металевих скребоків і терочок (C) Терочка квадратна з прямою кромкою 1 мм і 5 мм (D) Кутер (E) Набор різальних інструментів (маленький, середній, трапецієвидний) (F) Платформа з гумовою поверхнею для різання плитки і розбирання гіпсових листів (G) Набор губок з целюлози для очищення епоксидних матеріалів (H) Диск з алмазною кромкою для різання кераміки (I) Ручна пила для різання скла (J) Фен для усунення плівки клею.

## the tear resistance test of SICIS mosaic on mesh

[Watch the video](#)





SICIS mesh mosaic has tear resistance guarantees higher than that made with a concrete base. These have been proven by laboratory tests carried out by the Bologna Ceramic Center, for which certificates have been issued which can be consulted in the attached document.



CENTRO DI RICERCA E SPERIMENTAZIONE  
PER L'INDUSTRIA CERAMICA

Bologna, 23/03/2018

SICIS S.r.l.  
Via Canala 79  
48124 RAVENNA (RA)

## TEST LABORATORY

TEST REPORT No. 2805/18

Requested by:	SICIS S.r.l. Via Canala 79 48124 RAVENNA (RA)
On (date):	31/01/2018
For the sample marked:	*SICIS GLASS MOSAIC ASSEMBLED ON A MESH AND INSTALLED ACCORDING TO THE LAYERS DESCRIBED BELOW: - SUPPORTING LAYER: SCREED MADE UP OF LITOCHEM PRONTO - THICKNESS 4 CM. - WATERPROOFING LAYER: COVERFLEX AND FIBERGLASS MESH - ADHESIVE: LITOELASTIC, - COVERING: SICIS GLASS MOSAIC MESH MOUNTED - GROUTING: STARLIKE *.

The results reported relate only to the samples tested.

No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision.

The reproduction of this test report is only authorized in the form of a complete photographic facsimile.

Our written approval is necessary for any partial reproduction.

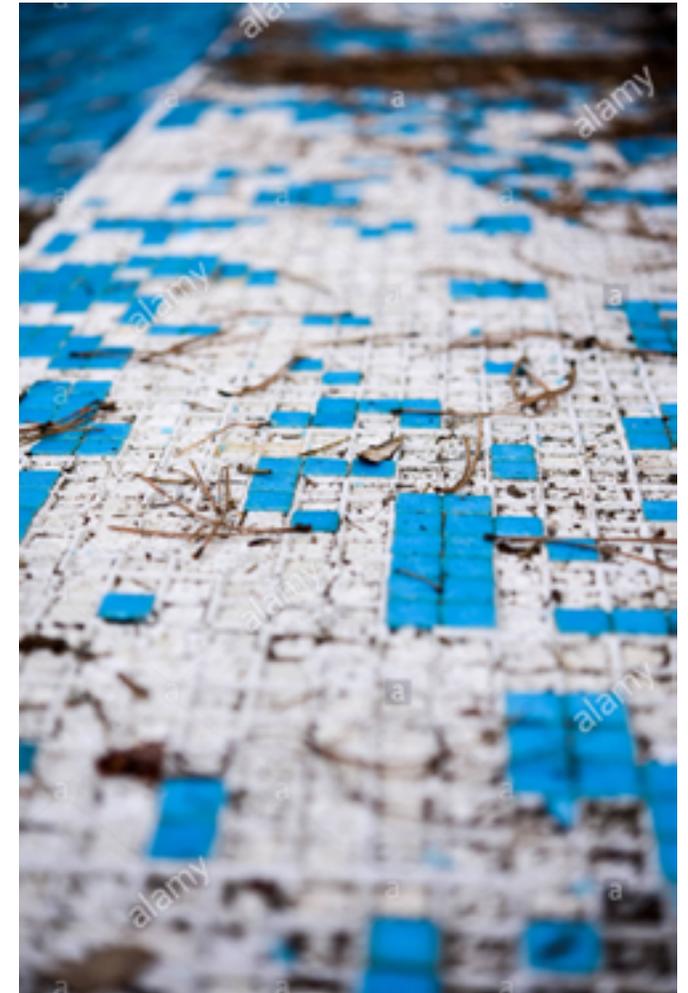
This test report consists of 4 pages this cover included.

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Fax +39 051 530005  
Part. IVA 0094778-0375

centro.ceramico@centroceramico.it  
www.centroceramico.it

Viale Valle d'Aosta 1  
41049 Sassuolo (MO) - Italy  
Tel. +39 0536 802154  
Fax +39 0536 800662

# other mosaics



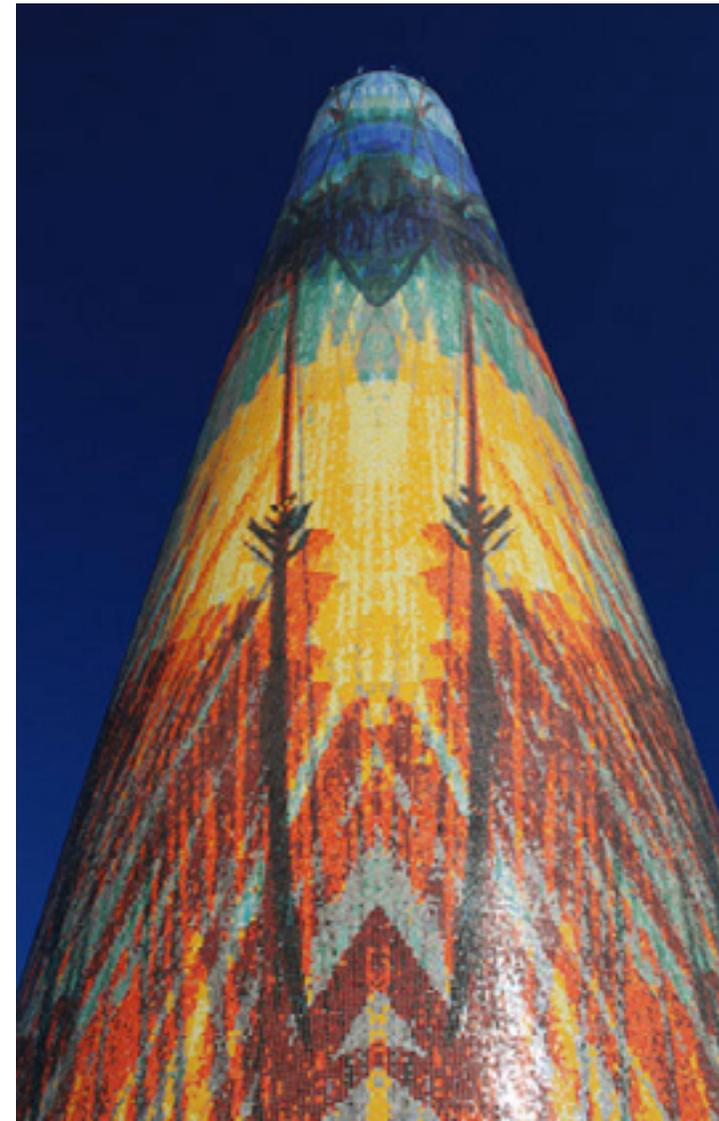
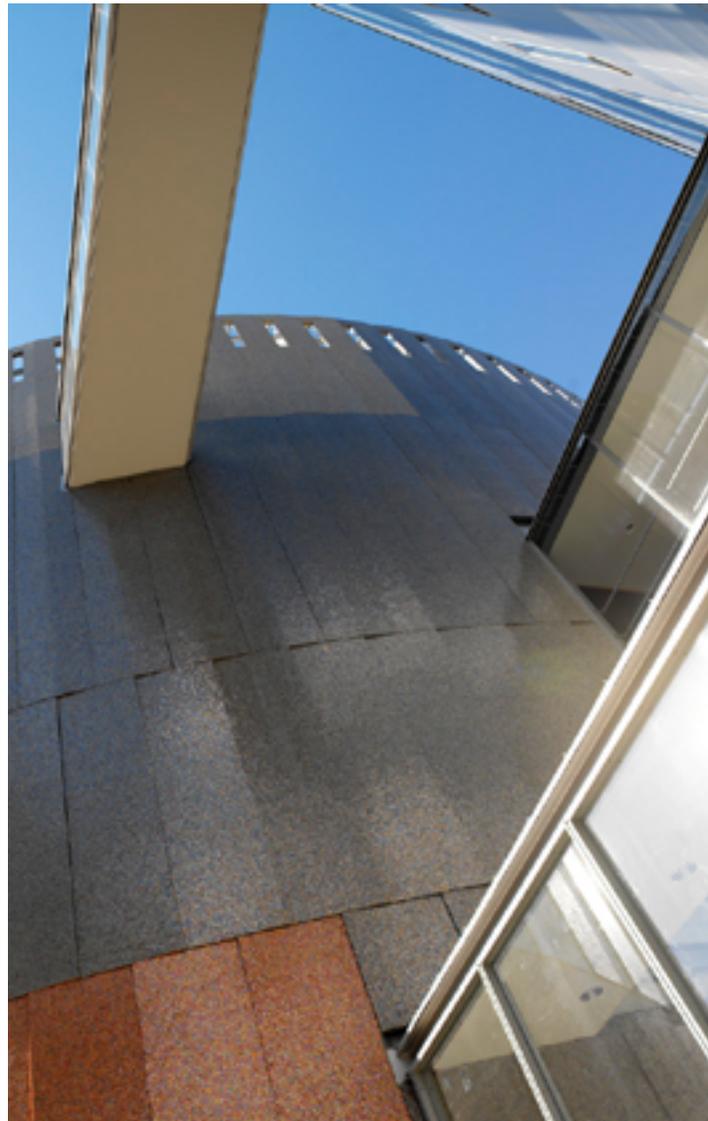
Examples of tear resistance of mosaics, produces by other companies, made with a concrete base.

These cases show that over time the card detaches easily from the base surface.



# SICIS mosaics in outdoor architecture

SICIS®



# SICIS mosaics in swimming pools

SICIS®



# SICIS®

## 3. Support on exclusive SICIS fabric

It is used for artistic mosaics.

They are useful **for laying mosaic on plexiglass or glass** in order to obtain a **backlit effect**. It also allows laying on a concrete base.





# SICIS®



CERTIFIED ISO 9001

LATICRETE INTERNATIONAL, INC.  
1 LATICRETE PARK NORTH  
BETHANY, CONNECTICUT 06324-3423  
USA  
TELEPHONE: 1 (203) 393-0010  
FAX: 1 (203) 393-3584  
Internet - <http://laticrete.com>

Title: Bond Strength to Sicis Glass 3 Mosaic Tile

Project Number: 050115-D-015-237

Author: Steven Fine

Date: 17 January 2005

Job Reference:

**Introduction:**

The objective of this project was to determine the bond strength of LATAPOXY® 300 Epoxy Thinset to Sicis Glass 3 resin backed glass mosaic tile to concrete. The tile has a plastic resin backing which is rather unusual in the tile industry.

**Procedure:**

The glass mosaics were approximately 9/16 inch x 9/16 inch by 1/8 inch thick. They had a plastic sheet mounting on the back of the tile. The samples were prepared using a modification of ANSI A118.10 M-5 Shear strength to Ceramic Tile and Concrete. The mosaics were cut into approximately 4 inch by 4 inch sections. They were bonded to the back side of Wausau concrete blocks. Tile (4 inch x 4 inch) was bonded to the top of the mosaics with LATAPOXY 310 before the samples were tested. The shear force was applied to the tile bonded to the mosaics to ensure homogeneous force application.

Please be advised that this test is not intended to be representative of field conditions and is being performed for evaluation purposes only.

**Results:**

7 day tile/concrete	112 psi (0.77 MPa)
stddev.	38 psi (0.26 MPa)
7 day cure 7 day water soak tile/concrete	204 psi (1.41 MPa)
stddev.	83 psi (0.57 MPa)
28 day tile/concrete	149 psi (1.03 MPa)
stddev.	22 psi (0.15 MPa)
28 day cure 20 cycle F/T soak tile/concrete	142 psi (0.98 MPa)
stddev.	8 psi (0.05 MPa)

All failures were the glass mosaics from the backing sheet.

**Conclusions:**

There is no ANSI standard for the bond strength of glass mosaic tile. The glass mosaic tile industry uses an internal standard of 150 psi shear strength to concrete for all test conditions. LATICRETE has adopted that internal standard.

The bond strength of the LATAPOXY 300 met the minimum internal specification of 150 psi for interior, exterior, and wet areas. There was no margin for error as the bond strengths do not exceed the minimum requirements.

LATAPOXY 300 is recommended for bonding to Sicis Glass 3 resin backed glass mosaic tile for interior and exterior installations and wet areas

S.B. Fine

Steven B. Fine

Senior Product Development Chemist for North America

LATICRETE® World Leader in Installation Systems for Ceramic Tile & Stone for 40 Years LATAPOXY®

1/18/05 2004 12:08 FAX

KERAKOLL EXPORT DEPT

0001

Messrs.

Sicis Mosaico di Ravenna

Via M. Monti, 9/11

48100 Ravenna

For the kind attention of Mr. Gianfranco Roberto

Subject: mosaic/glass textile tests

The a.m. tests have been carried out laying the samples you supplied us with H40 Tenax and filled both with Fugabella D-2 (cementitious) and with Fugabella Epoxy (epoxy).

The samples maturing has taken place both in air and in water, and the methodology used is that fixed by the regulations EN 1348.

The pull test showed an excellent resistance, always >1,0 Mpa, except for the sample filled with the epoxy, for which we will put off doing further checks.

Sure we shall please you, we take the opportunity to offer you our best regards.



Kerakoll S.p.A. - Sede e stabilimento: Via San Luca

Sede legale: Via San Luca, 1 - 41019 Soriano nel Cimino (PR) - Italia

Cap. Soc. Euro 2.000.000 i.a. - Cod. Fisc. 01174510360 - P.IVA 01174510360 - N. Reg. Imprese MO 01174510360 - R. ISCR. MO 231/012

Per info: Tel. +39 0521 814111 - Fax +39 0521 814111 - Email: [info@kerakoll.com](mailto:info@kerakoll.com) - [www.kerakoll.com](http://www.kerakoll.com)

Cap. Soc. Euro 2.000.000 i.a. - Cod. Fisc. 01174510360 - P.IVA 01174510360 - N. Reg. Imprese MO 01174510360 - R. ISCR. MO 231/012

# pull tests

2005. Laticrete and Kerakoll certify that SICIS filtering fabric is suitable with their adhesives to obtain the performances listed above.

## **Can the tesserae come off?**

If laid according to the instructions contained in the official SICIS installation manual, the tiles do not come off and remain perennial.

## **The mosaic has a defect, it is different from what I ordered. Why?**

Please check the type of mosaic you ordered. If the ordered mosaic is supplied pre-assembled on paper then the visible face of the mosaic, before being installed, is actually the rear one, because the front one is facing the paper.

## **Do I have to install the mosaic tile by tile?**

No, the mosaic is pre-assembled by SICIS before being shipped and supplied in 30x30cm (approx) sheets to facilitate installation.

## **The tesserae are all irregular and have holes, are they damaged?**

No, being a natural product and made according to traditional techniques, its irregularities are unique characteristics of the SICIS product. Each tessera is unique. There may be differences in shades, small imperfections or a slight cracking effect.

## **But is your mosaic suitable for wet areas?**

Obviously yes, being our mosaic created with minerals and natural materials, and if installed correctly it does not fear chemical additives.

## **Can mosaic be used to make a Turkish bath?**

Yes. SICIS mosaic is made with minerals and natural materials that do not fear humidity or high temperatures. For application in wet areas such as Turkish baths or swimming pools, it is important to use special adhesives and follow the instructions contained in the installation manual.

## **Does the iridescence go away with time?**

No, because it is a component used in the production of glass tesserae itself.

## **Does mosaic resist high and low temperatures?**

Our mosaic is made according to traditional methods with high percentages of minerals that help strengthen the tiles and make them resistant to temperature changes.

## **Why the tiles have not a perfectly regular clean cut?**

The tesserae are produced following traditional techniques, using a casting method patented by SICIS. In this way the tiles are not perfectly regular, a unique feature of the SICIS mosaic.

## **How is the mosaic laid on paper? Do the tiles go under or above?**

The mosaic with paper support must be laid with the free part attached to the support surface, then with the paper facing upwards. Once the laying is complete, the paper must then be removed.

## **In the Diamond collection, are Item 02, T45 and H1 different forms of chips?**

No, the tiles in the Diamond collection are all rhomboid in shape and of the same size. However, it is possible to vary the angle in the juxtaposition of one card to another, to create different types of patterns (grid, herringbone, floral).

## **Does the mosaic last over time?**

SICIS mosaic is made with traditional methods and high percentages of minerals that contribute to giving it strength and brilliance lasting over time. If installed following the specific instructions of our installation manuals, it resists wear and the strength of time.

For any information on our mosaics or to find the installation manuals you can  
visit our website  
[www.sicis.com](http://www.sicis.com)

Our staff is at your disposal throughout the territory.

# SICIS