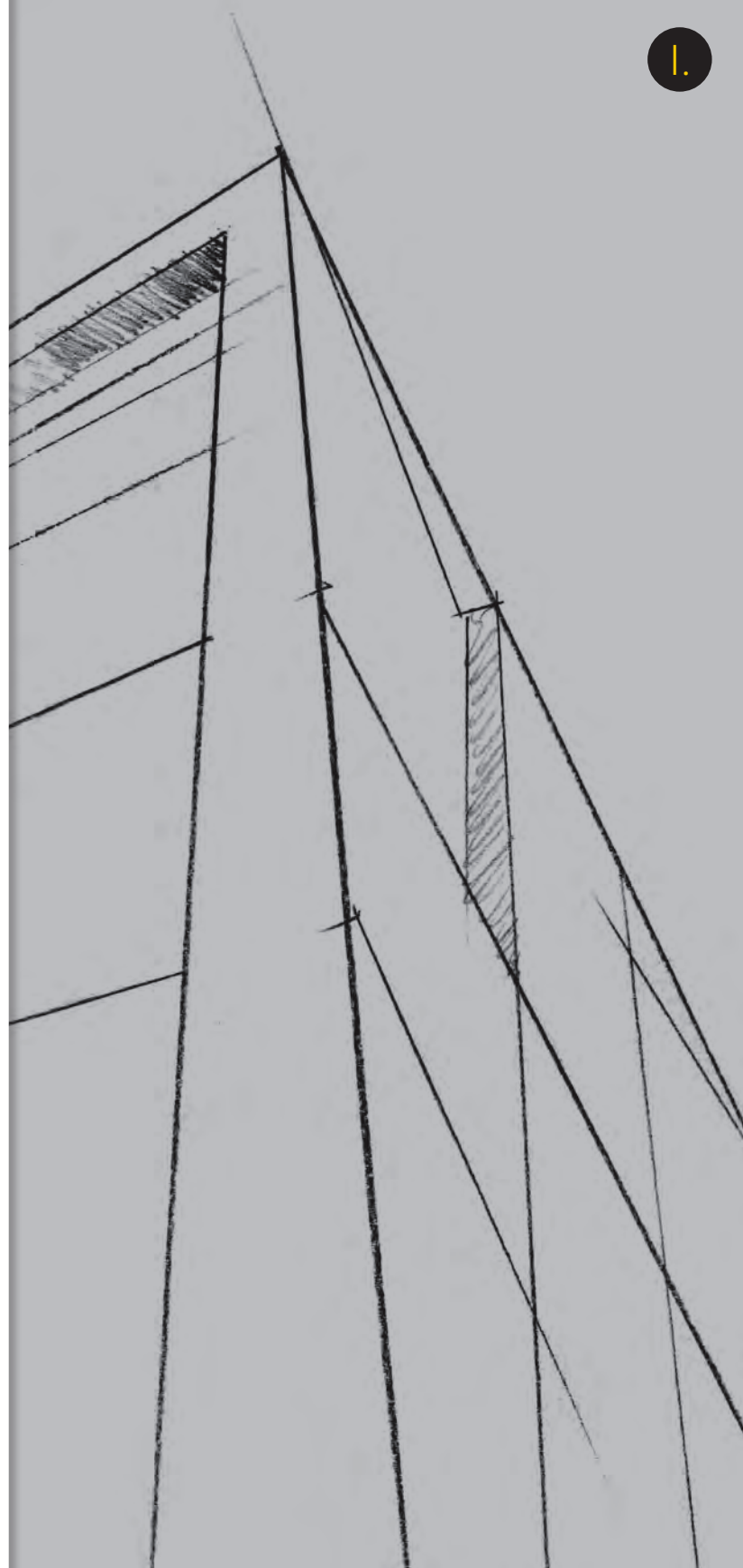


NEOLITH
skyline



WHAT IS NEOLITH?

“Good design is where science and art meet in decorum.” - Robin Mathew

Born in the last decade, Neolith -a Sintered Stone- is a revolutionary product category pioneered by TheSize to effectively respond to the most demanding architectural and interior design needs.

Neolith does not belong to what is traditionally known as “ceramic” or “porcelain”: it is rather an extreme evolution to the extent of creating a new kind of surface previously inexistent. Neolith is the pioneer and continuous innovator of the Sintered Stones.

What is a Sintered Stone?

Composition: 100% natural based on 3 groups of natural elements:

Granite Minerals: Quartz and Feldspar that grant hardness and strength to the product.

Glass Minerals and Silica that grant chemical stability.

Natural oxides that grant chromatic properties.

Production Process – Sintering and Technology - NDD or Full Body:

The Sintering Technology that TheSize has developed to create Neolith, replicates in just a few of hours the process by which natural stones are created over a period of thousand of years. It exposes the raw materials described above to extremely high pressures and temperatures. During the first phase, the raw materials go through the pressing machinery where a pressure of 400 bars is applied.

In the second phase, the slab goes through a kiln with temperatures reaching more than 1200°C (2200°F). This process of ultracompaction gives birth to a full-body surface (more than 12 colors out of its palette) with unique technical features.

Decoration: TheSize has developed a new and revolutionary digital printing decoration technology named NDD (Neolith Digital Design) that exponentially increases the possibilities in terms of designs (rich in details) and finishes offered by Neolith (30 colors).

Results: A Sintered Stone of large format and minimum thickness with physical and mechanical characteristics never seen before in the construction industry.

Applications: Thanks to the format and physical and mechanical characteristics, this type of product is ideal for limitless indoors and outdoors applications in the commercial and residential area: countertops, cladding, façades, furniture. The imagination is the only limitation.



RESISTANT TO HIGH
TEMPERATURES



142"x48"

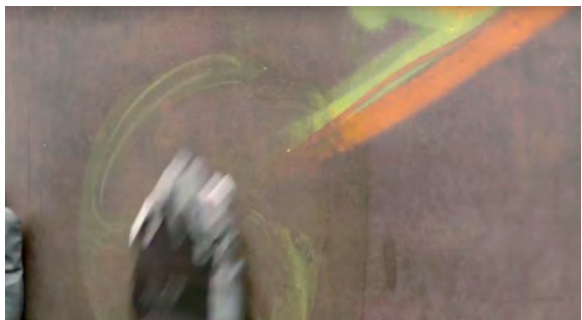
125"x60"

*Cut-to-size formats are also available.
The recommended thickness for ventilated facades is 1/4".*

TECHNICAL FEATURES AND SPECS.



GRAFFITI
PROOF



Only 1.4 lb/sqft in the 1/8" slab and 6.14 lb/sqft in the 1/2" slab.



LIGHTWEIGHT

Waterproof and resistant to liquids, with an absorption level of almost zero.



WATERPROOF

Its hard surface makes it resistant to scratches and abrasion.



RESISTANT TO
SCRATCHES

It does not burn in contact with fire nor does it emit smoke or toxic substances when subjected to high temperatures.



RESISTANT TO HIGH
TEMPERATURES

Resistant to any kind of chemical cleaning agent such as bleach or ammonia.



EASY TO CLEAN

It has a high shear rate, making it resistant to heavy loads and pressure.



RESISTANT TO
BENDING

It does not give off any substances that are harmful to the environment.



100% NATURAL

Up to 52% of recycled content. 100% Recyclable.



RECYCLABLE

It does not give off any harmful substances and is totally suitable for contact with food. NSF Certified.



HYGIENIC

Being 100% natural, its colors do not fade away when being exposed to sun light or other extreme weather conditions.



RESISTANT TO UV
RAYS



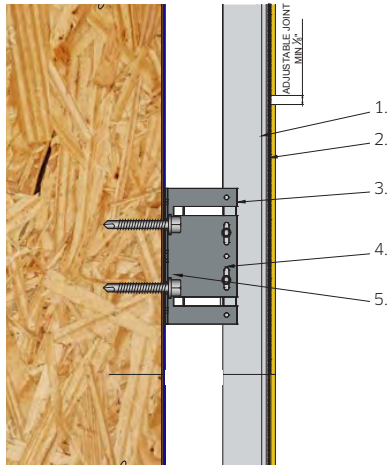
RESISTANT TO
SCRATCHES



HC SYSTEM



HC System installed with densglass



General Specs.

Minimum Joint Requirements	1/8"
Standard Air Flow Gap between back of panel and exterior insulation	Standard Air Gap 4"
Maximum Wind Load vs Panel size vs Support spacing	Wind Load 3000Pa vs 142"x48" vs Vertical Supp. 24"

HC System vertical section

1. Vertical Alum. T Profile 4" * 2"
2. Adhesive Paneltack - HM
3. Fastening Alum. Bracket 5 7/8" * 3 1/8" * 1 1/8"
4. Self screw 1/8" * 3/4"
5. Screw 1/2" * 4" + Washer



Hidden Fixing with Longitudinal Adhesion:

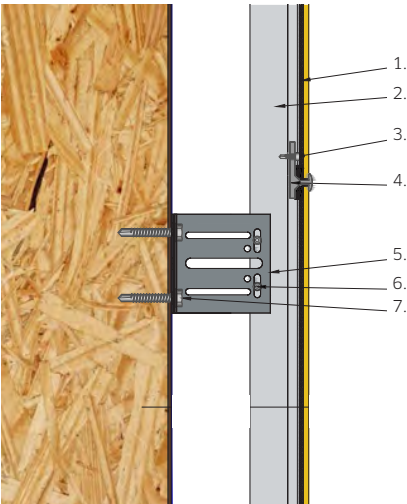
This option developed for Neolith cladding, consists of a hidden support system using chemical elastic longitudinal fixation mounting on vertically "T"-shaped or "L"-shaped profiles, depending on whether the profiles match the joints between Neolith slabs or if they are reinforcing the center of the joint and supporting the bearing through retention or sustentation brackets.

The whole system has been tested in certified laboratories for such facts, and the results have been found satisfactory for the use of Neolith. Results can be found later on in this catalogue.

VM SYSTEM



VM System installed with densglass



General Specs.

Minimum Joint Requirements	1/8"
Standard Air Flow Gap between back of panel and exterior insulation	Standard Air Gap 4"
Maximum Wind Load vs Panel size vs Support spacing	Wind Load 1580Pa vs 125"x60" vs Vertical Supp. 40"

VM System vertical section

1. Adhesive Paneltack-HM
2. Vertical Supporting Alum. Profile
3. Screw 1/4" * 11"
4. VM Alum. Supporting Clip
5. Fastening Alum. Bracket 4" * 2 1/2" * 4"
6. Self Screw 1/4" * 1"
7. Screw 3/8" * 3 1/2" + Washer



Visible Mechanical Fastening Fixation:

This system consists of a metallic self-supporting substructure kit for ventilated façades, designed to support ceramic coatings of different formats and thicknesses. It has been developed for Neolith façades based on a visible mechanical fastening system composed of sustentation and retention brackets, vertical "T" or "L"-shaped profiles and safety clips upon which the cladding system rests.

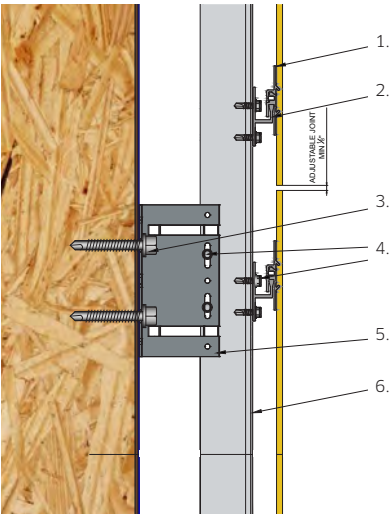
Flatness of the vertical "T" or "L"-shaped profiles is achieved thanks to the supporting and retention brackets or spacers. Complete flatness will depend on whether the profiles exactly match the joints between the slabs, correcting possible deviations on the interior layer of the façade to cladding.

The clamps responsible for sustaining the structure described above are located on the Neolith slab as well as on a grooved area for the application of adhesive, granting greater security to the system.

STRONGFIX SYSTEM



Strongfix System installed with densglass



General Specs.

Minimum Joint Requirements	1/8"
Standard Air Flow Gap between back of panel and exterior insulation	Standard Air Gap 4"
Maximum Wind Load vs Panel size vs Support spacing	Wind Load 3650Pa vs 125"x60" vs Vertical Supp. 30"

Strongfix system details and section

1. Hanger and closer profile
2. Horizontal supporting Alum. profile
3. Screw 1/2" * 4" + Washer
4. Self Screw 1/8" * 3/4"
5. Fastening Alum. Bracket 5/8" * 3/8" * 1 1/8"
6. Vertical Alum. T Profile 3/8" * 2"



Mixed hidden longitudinal fastening system:

The Strongfix system is a mixed hidden longitudinal fastening system (chemical and mechanical), which works by the compression exerted by the system on the back of the Neolith tile.

These tiles are industrially mechanized in a longitudinal profile at the top and bottom of its backside with a double 45° groove in the shape of a dovetail where a couple of aluminum profiles are inserted and fixed with a MS adhesive putty in order to secure the Neolith tile. These metal profiles make up the hanging mechanism of the tiles which is beneficial given that they are very easy to extract and replace.

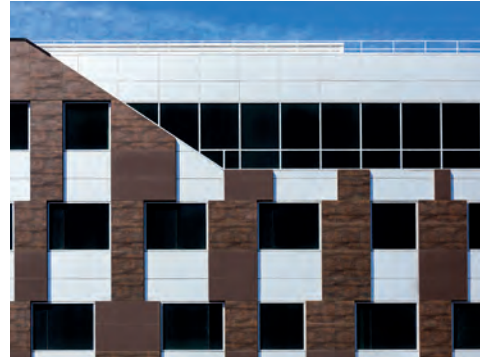
The system is composed of aluminum vertical profiles, supporting retaining brackets. Through the brackets it is possible to install the aluminum "T" profiles totally flat, thus correcting possible wall deviations of the facade to be coated.

The panels are hand set to a horizontal supporting profile with a mechanical longitudinal fixation system composed by two aluminum profiles fixation.

This aluminum set becomes indivisible given the mechanizing method of the tile and the fixing of the profiles. This system eliminates the risk of Neolith slabs becoming detached from the structure in case of breakage. This is the reason why this system is considered the safest in the market.

Furthermore, the way in which the Neolith slabs are hung on the horizontal structure provides for perfect flatness and aesthetic finish.

The Strongfix system also allows for easy extraction and replacement when needed.



Produced by:

Thesize[®]
SURFACES

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12550 - Almassora (Spain)
+34 964 652 233
info@thesize.es
www.neolith.com

Marketed by:

NEOLITH[®]
DISTRIBUTION

ASTM SUMMARY RESULTS

	TEST	STANDARD METHOD	DETERMINATION	UNIT	RESULT
PHYSICAL PROPERTIES	Nominal Size and Thickness	ASTM C499	Lenght variation	in	0,612
			Thickness variation	in	0,293
	Edge Warpage and Diagonal Warpage	ASTM C485	Edge warpage	%	0,05
			Diagonal warpage	%	0,086
	Wedging	ASTM C502	Wedging	%	-0,029
	Water absorption	ASTM C373	Water absorption	%	0,2
			Bulk Density	g/cm3	2,4
			Apparent porosity	%	0,4
			Apparent Specific Gravity		2,4
	Color Uniformity	ASTM C609	Average LRV (Light reflectance value)		44
			Color Difference		0,488
	Crazing Resistance	ASTM C424	Crazing resistance at max. 250psi		Pass
DURABILITY TESTING	Temperature Cycling	ASTM C880	VM System: resistance after 25 cycles		No damage
			Strongfix system: resistance after 25 cycles		No damage
	Flexural Strength	ASTM C880	Condition: dry	psi	5887
			Condition: wet	psi	5250
STRUCTURAL PERFORMANCE TESTING	Shear (Gravity) Anchor-to-Panel load	ASTM E330	VM system - Allowable load	lbf	427,38
			Strongfix system - Allowable load	lbf	606,64
	Transverse Wind Load (Anchor-to-panel load)	ASTM E330	VM system - Allowable load	lbf	53,01
			Strongfix system - Allowable load	lbf	88,92
	Transverse Wind Load (full system)	ASTM E330	VM system - Allowable load (negative)	psf	16,4
			VM system - Allowable load (positive)	psf	11,3
			Strongfix system - Allowable load (negative)	psf	25,4
			Strongfix system - Allowable load (positive)	psf	35,8

Almazora, October 10th, 2017

TEST	ASTM	Unit	FINISH			
			SATIN	SILK	PULIDO	RIVERWASHED
Moisture expansion	ASTM C370-12 (2016)	%	<0,1%	<0,1%	<0,1%	*PTR
Thermal expansion	ASTM C372-94 (2016)	(x10-6) °C-1	5,725	5,9	5,65	*PTR
Water absorption	ASTM C373-16	%	0,18%	0,20%	0,16%	*PTR
Crazing resistance	ASTM C424-93 (2016)	-	OK	OK	OK	*PTR
Thermal Shock resistance	ASTM C484-99 (2014)	-	OK	OK	OK	*PTR
Chemical resistance	ASTM C650-04 (2014)	-	OK	OK	OK	*PTR
Visible abrasion	ASTM C1027-09	Class	*PTR	Class 3	Class 5	*PTR
Deep abrasion	ASTM C1243-93 (2015)	mm ³	102,5	*PTR	*PTR	*PTR
Stain resistance	ASTM C1378 (2014)	Class	*PTR	*PTR	*PTR	*PTR

*PTR: Pending Test Results.

This chart will be updated as we get more test results.

Obtaining LEED Credits with Neolith

TheSize complies with all European environmental safety standards. The product has been designed and manufactured in accordance with sustainability criteria and a commitment to the environment and society. Composed entirely of natural materials, Neolith does not give off any substances that are harmful to the environment and is 100% recyclable.

Indoor Air Quality

Neolith has been independently tested and verified to meet strict emission levels of pollutants and has been granted the "**Greenguard Gold**" certificate which guarantees maximum security for its use in schools and nurseries.



Recycled Content

Neolith enables architects and design teams to maintain aesthetics and safety within a building's design and because of its high content of recycled materials (23-52%), Neolith helps the pursuit of LEED Green Building Rating points.



23 – 52 %

Neolith helps earning LEED Credits in the following areas:

Low emitting materials (IEQc 4 Credit)

- Neolith has the **Greenguard Gold Indoor Air Quality** certificate, which guarantees that Neolith is safe to use indoors. The Greenguard certificate helps to earn LEED credits for your projects.

Recycled Content (MRc4 Credit)

- Neolith has a high percentage of recycled material (23 -52%), which is certified annually by SGS Ibérica according to the **ISO 14021:1999 Standard**. This certificate helps you to earn LEED credits for your projects.

CERTIFICATE OF COMPLIANCE



The Size Sintered
Ceramics, S.L.
Neolith

21156-410
Certificate Number

02/23/2012 - 02/23/2015
Certificate Period

Certified
Status

UL 2818 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.



Environment

UL Environment investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL Environment and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Environment Mark for the identified Product(s) manufactured at the production site(s) covered by the ULE Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(A)	-	0.50	mg/m ³
Formaldehyde	50-00-0	61.3 (50 ppb)	µg/m ³
Total Aldehydes ^(B)	-	0.10	ppm
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	1/10th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ range, with responses calibrated to a toluene surrogate.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Allowable levels for chemicals not listed are derived from 1/10th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



Environment

Neolith by TheSize Shares “Green” Fact Sheet

Neolith's high-performance Sintered Stone for kitchen and bathroom countertops, flooring, interior wall, facades and cladding applications comes with an assortment of green benefits.

Neolith has a variety of qualities that make it ideal for the environmentally-conscious professional.

Product Composition



100% Natural: Made of clays, feldspar, silica and natural mineral oxides, Neolith will not emit toxic fumes into the environment when exposed to fire or extremely high temperatures.



100% Recyclable: Due to its natural composition, Neolith can be recycled and reduced to its aggregates.
Up to 52% recycled content: Up to 52% of any Neolith slab is composed of recycled raw materials.



Near-Zero Porosity: With a porosity of less than 0.08%, Neolith is impervious to absorption, making it a hygienic product resistant to bacteria that can cause disease and trigger allergies.

Certifications and Memberships



Greenguard Certification (formerly GREENGUARD Indoor Air Quality Certification): Certifies that Neolith meets strict chemical emissions limits, contributing to a healthier environment.



Greenguard Gold Certification (formerly known as GREENGUARD Children & Schools Certification): Certifies that Neolith is safe indoors for sensitive individuals (such as children and the elderly) and ensures that the product is acceptable for use in environments such as schools and healthcare facilities.



CE (European Commission) Certification: Confirms that Neolith meets European safety, health and environmental protection requirements.



LEED Points Earner: LEED, Leadership in Energy and Environmental Design, is a program that provides third-party verification of green buildings. Neolith satisfies safety prerequisites and earns points to help consumers achieve the desired level of certification for their home or commercial project.



Member of the U.S. Green Building Council (USGBC): The USGBC, the council that oversees LEED, allows advocates for green-building policies and practices to come together.

Neolith's unique sintering process and proprietary design also provide additional green benefits:

Fewer raw materials, less erosion: Neolith's thin slabs use fewer raw materials, resulting in less soil erosion, without sacrificing any strength.

CO2 emissions reduction: A slimmer slab means a lighter slab. With Neolith, it's possible to transport more than double the amount of surface per container than with thicker products like marble, granite or quartz. The lighter weight allows for a more fuel efficient journey and considerable reductions in CO2 emissions.

No gut remodels: Neolith's slim surface can be applied directly onto existing surfaces, saving remodelers from costly tear-outs while reducing landfill waste. No landfill waste means no waste transportation needed, further reducing net CO2 emissions.

Optimized energy consumption: Neolith's resistance to extremely high and low temperatures makes it ideal for ventilated façades. The thermal insulation and ventilation between the Neolith façade and the building itself optimizes the building's energy consumption considerably (up to 40%).

10 years—warranty: Neolith comes with a manufacturer's guarantee of 10 years and does not need frequent replacement or maintenance treatments like other surfacing materials. Neolith gives designers, architects and other industry professionals confidence that their aesthetically-appealing design decisions are equally appealing to the environment.

CERTIFICATE OF COMPLIANCE



The Size Sintered Ceramics, S.L. Neolith

21156-420

Certificate Number

02/23/2012 - 02/23/2015

Certificate Period

Certified

Status

UL 2818 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.

Building products and Interior finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.1-2010 using the applicable exposure scenario(s).



Environment

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(A)	-	0.22	mg/m ³
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m ³
Total Aldehydes ^(B)	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Particle Matter less than 10 µm ^(C)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(D)	872-50-4	160	µg/m ³
Individual VOCs ^(E)	-	1/2 CREL or 1/100th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ range, with responses calibrated to a toluene surrogate.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day
- (E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.1 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



Environment

Self-Cleaning and Sustainable Facades



Self Cleaning



Decontaminating



Anti-Bacterial



Anti-Odor



Anti-Allergen

What is Pureti?

It's an aqueous and titanium dioxide nanoparticle-based treatment that is sprayed on Neolith to create a photocatalytic, self-cleaning and decontaminating effect.

How does it work?

The Neolith + Pureti technology creates self-cleaning surfaces that purify the air by means of two fundamental processes: **PHOTOCATALYSIS** and **SUPERHYDROPHILICITY**.

Over time, building facades become dirty and full of contaminating agents that are carried through the air to the surface.

When the surface enters into contact with sunlight (or some LED lights), titanium dioxide particles are activated which use light energy to transform the moisture in the air into oxidizing agents which destroy the nitrogen dioxide particles and contaminating agents and transform them into water vapor and salt.

This process, which is known as **PHOTOCATALYSIS**, is repeated millions of times per second until all contaminants are destroyed, meaning the surface is constantly being self-cleaned.

SUPERHYDROPHILICITY is produced to complete the treatment action. Thanks to the properties of Neolith + Pureti facades, water expands on the surface even when it rains to drag and remove any remaining dirt particles. This leaves the surface completely clean without any water marks.



More information in www.neolith.com





NEOLITH
GALLERY

AWARDS PREMIOS

Neolith is synonymous with excellence and obsession for details. Its striking designs and superior technical characteristics make it an ideal material for a vast array of demanding applications. The increasing number of industry awards achieved in the past years reveal Neolith's restless spirit to continuously innovate...

Neolith es sinónimo de excelencia y obsesión por los detalles. Sus diseños llamativos y sus altas prestaciones técnicas hacen de Neolith el material ideal para un sinfín de aplicaciones. El creciente número de premios internacionales dan fe del espíritu incesable de innovación continua...

Refer to the models included in this Magazine only as an indication. Neolith is a 100% natural product, so it is subject to slight variations in color. Samples of some models may not completely be representative of the full slab (specially in the Fusion Collection).

Los modelos incluidos en esta revista son solo indicativos. Neolith es un producto 100% natural y por tanto está sujeto a ligeras variaciones de color. Las muestras en alguno de los modelos pueden no ser del todo representativas de la tabla completa (especialmente en la Colección Fusion).

2012



Best of KBIS Winner 2012

2014



Alfa de Oro 2014 a Diamond Glass sobre una aplicación con Neolith



Installation Award Winner 2014



Product Innovation Award Winner 2014
Neolith



Record Products 2014 Winner
Best New Product

2015



Reddot Design Award Winner 2015
Calacatta



Product Innovation Award Winner 2015
Calacatta
Strongfix Facade System



KBB Readers' Choice Awards Winner 2015
Kitchen Flooring
Kitchen Countertops
Bath Flooring



Muuuz International Awards Winner 2015
Calacatta



30 Most Innovative Products
Neolith

2016



Best of Houzz 2016
Design



A'Design Award Winner 2016
Calacatta



Architizer A+Awards Winner 2016
Calacatta



Muuuz International Awards Winner 2016
La Bohème



KBB Readers' Choice Awards Winner 2016
Kitchen Flooring
Kitchen Countertops



Product Innovation Award Winner 2016
Neolith Polished



Record Products 2016 Winner
La Bohème



Materialica Awards Winner 2016 Gold Award
Neolith Polished



Plus X Awards Winner 2016
Neolith Polished
Innovation - High Quality - Design - Functionality



IDC Innovation Awards 2016
Neolith

2017



Reddot Design Award Winner 2017
Nero Marquina



Interzum Award Winner 2017
Nero Marquina



Plus X Awards Winner 2017
La Bohème
Innovation - High Quality - Functionality



Muuuz International Awards Winner 2017
Nero Marquina



Infoprogetto 2017
Most Innovative product



Architectural Record Winner 2017
Zaha Stone



KBB Readers' Choice Awards Winner 2017
Kitchen Countertops



Premios Interiores 2017
Producto sostenible



KBB Readers' Choice Awards Winner 2017
Kitchen Countertops



AP50 Readers Choice 2017
Neolith



AD Great Design Award 2017
Neolith



La Razón: Producto del año Innovación y Tecnología



ESTUARIO E01

3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6		6	3
Satin					
Silk	●	●	●		●
Riverw.					
Polish.	●	●			



ESTUARIO E01-R

3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6		6	3
Satin					
Silk	●	●	●		●
Riverw.					
Polish.	●	●			



ESTUARIO E04

3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6		6	3
Satin					
Silk	●	●			
Riverw.					
Polish.					



ESTUARIO E04-R

3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6		6	3
Satin					
Silk	●	●			
Riverw.					
Polish.					



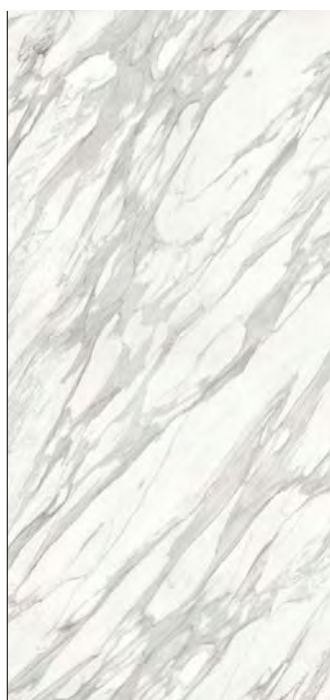
ESTUARIO E05

3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6		6	3
Satin					
Silk	●	●			
Riverw.					
Polish.	●	●			



ESTUARIO E05-R

3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6		6	3
Satin					
Silk	●	●			
Riverw.					
Polish.	●	●			



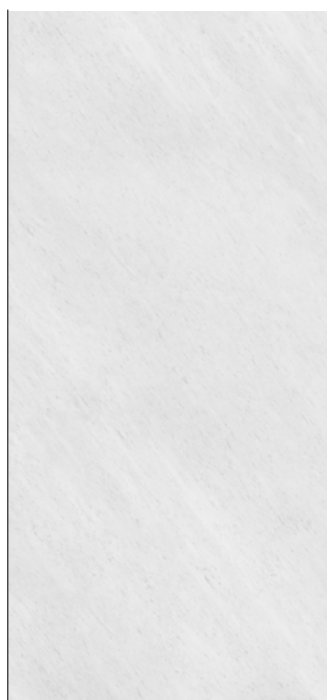
CALACATTA GOLD CG01

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk		•	•		•	
Riverw.						
Polish.	•		•			



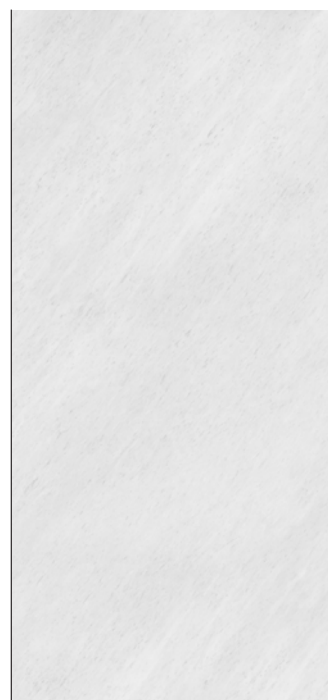
CALACATTA GOLD CG01-R

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk		•	•		•	
Riverw.						
Polish.	•		•			



BLANCO CARRARA BC01

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk		•	•			
Riverw.						
Polish.	•		•			



BLANCO CARRARA BC01-R

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk		•	•			
Riverw.						
Polish.	•		•			



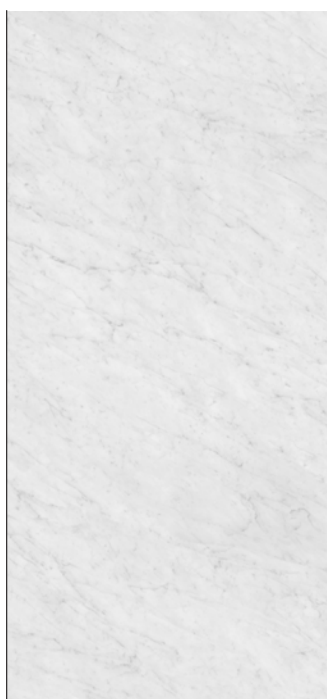
CALACATTA C01

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk	•	•	•		•	
Riverw.						
Polish.	•		•			



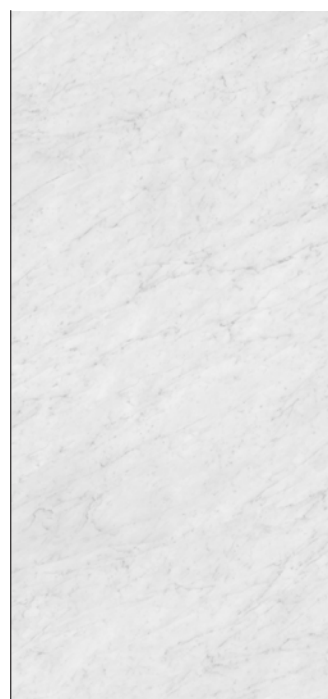
CALACATTA C01-R

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk	•	•	•		•	
Riverw.						
Polish.	•		•			



BLANCO CARRARA BC02

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk	•	•	•			
Riverw.						
Polish.	•		•			



BLANCO CARRARA BC02-R

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6	6	3	
Satin						
Silk		•	•			
Riverw.						
Polish.	•		•			



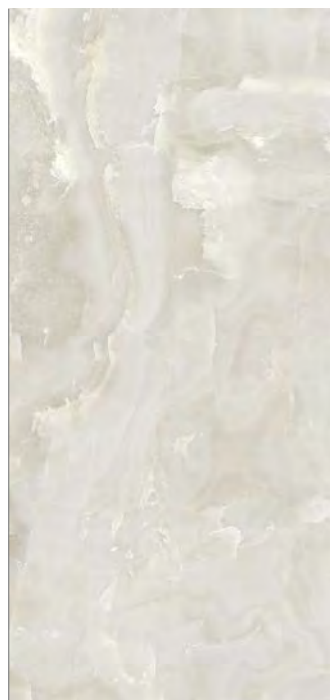
STRATA ARGENTUM

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk						
Riverw.	●		●			●
Polish.						



ONYX 001 TRANSLUCENT

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk						
Riverw.						
Polish.			●			

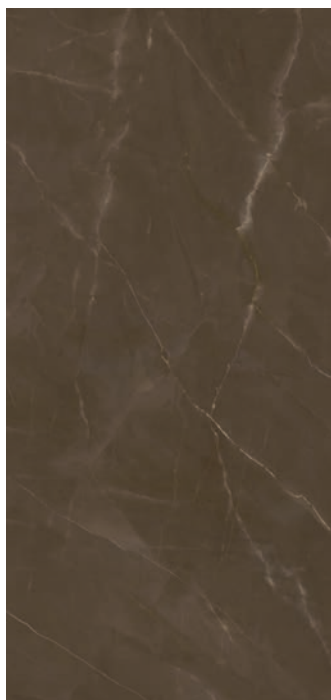


ONYX 001-R TRANSLUCENT

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk						
Riverw.						
Polish.			●			

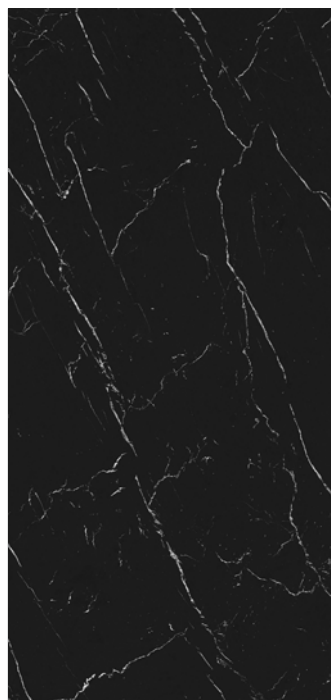
Onyx Translucent 001 and 001-R are available in 8 mm thick.
Onyx Translúcido 001 y 001-R están disponibles en 8mm de espesor.

NEW



PULPIS

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk		●	●			●
Riverw.						
Polish.	●		●			



NERO MARQUINA NM01

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk		●	●			
Riverw.						
Polish.	●		●			



NERO MARQUINA NM01-R

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk		●	●			
Riverw.						
Polish.	●		●			



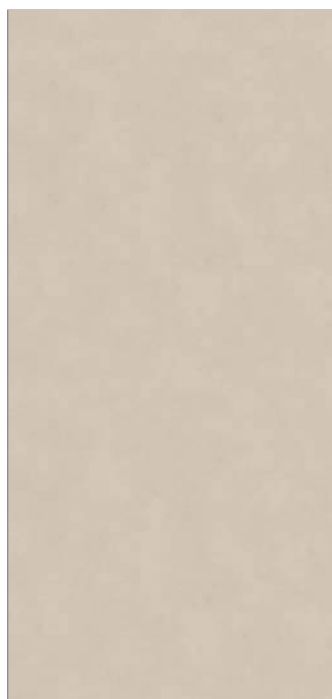
CALATORAO

	3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
	20	12	6		6	3
Satin						
Silk	●	●	●			
Riverw.						
Polish.						



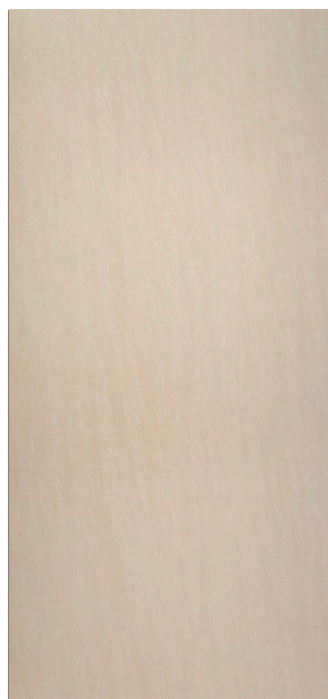
ARENA

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk				
Riverw.				
Polish.				



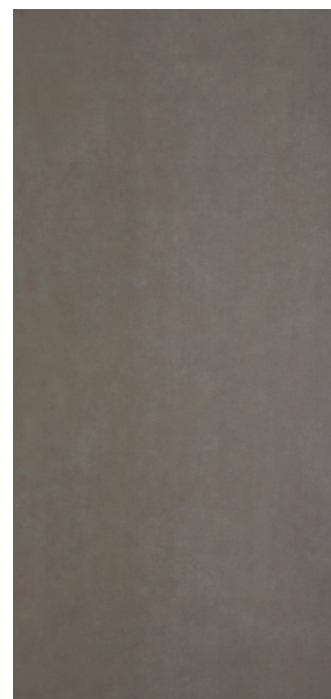
PIETRA DI OSSO

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk	●	●		
Riverw.				
Polish.				



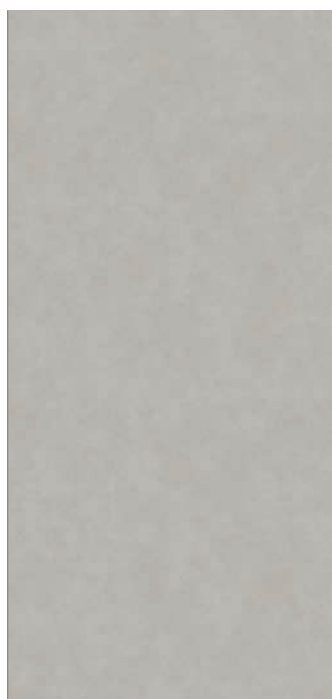
BASALT BEIGE

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin		●	●	●
Silk				
Riverw.				
Polish.				



BARRO

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk				
Riverw.				
Polish.				



PIETRA DI LUNA

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk	●	●	●	
Riverw.				
Polish.				



PHEDRA

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk				
Riverw.				
Polish.				



BETON

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk	●	●	●	●
Riverw.	●	●		
Polish.				



CONCRETE TAUPE

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk	●	●		
Riverw.				
Polish.				

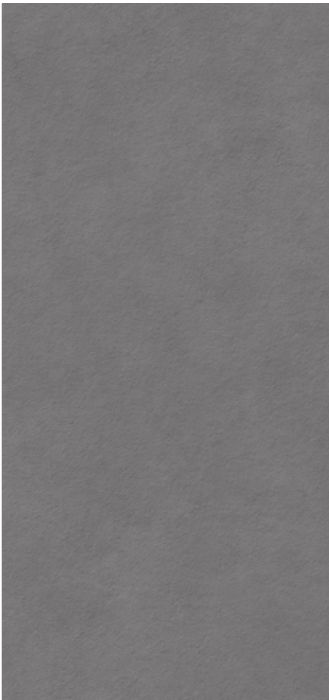


NEW

RETROSTONE					
3.200 x 1.600 3.200 x 1.500 3.600 x 1.200					
20	12	6	6	3	
Satin					
Silk	•	•			
Riverw.					
Polish.					



CEMENT					
3.200 x 1.600 3.200 x 1.500 3.600 x 1.200					
20	12	6	6	3	
Satin	•	•	•	•	•
Silk					
Riverw.					
Polish.					

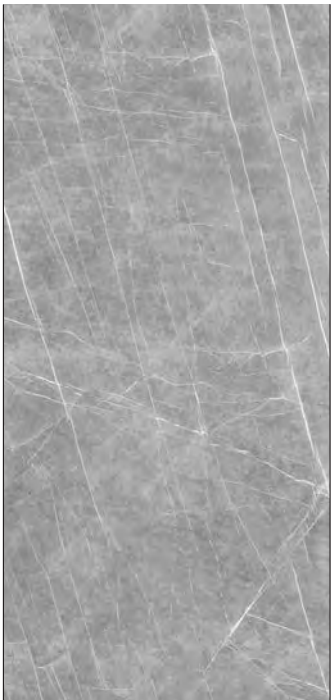


PIETRA DI PIOMBO					
3.200 x 1.600 3.200 x 1.500 3.600 x 1.200					
20	12	6	6	3	
Satin					
Silk	•	•			
Riverw.					
Polish.					

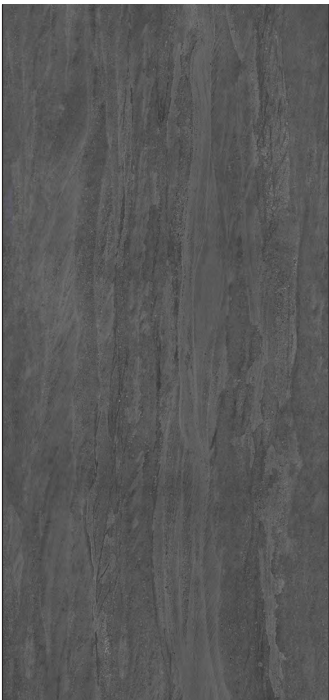


NEW

MIRAGE					
3.200 x 1.600 3.200 x 1.500 3.600 x 1.200					
20	12	6	6	3	
Satin					
Silk	•	•			
Riverw.					
Polish.					



ZAHA STONE					
3.200 x 1.600 3.200 x 1.500 3.600 x 1.200					
20	12	6	6	3	
Satin					
Silk	•	•	•		
Riverw.					
Polish.					



ASPEN GREY					
3.200 x 1.600 3.200 x 1.500 3.600 x 1.200					
20	12	6	6	3	
Satin					
Silk	•	•	•		
Riverw.					
Polish.					

LAVA					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin		●	●	●	
Silk					
Riverw.					
Polish.					

BASALT GREY					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin	●	●	●	●	
Silk	●	●			
Riverw.					
Polish.					

KRATER					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin					
Silk					
Riverw.	●	●			
Polish.					

NEW

BASALT BLACK					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin	●	●	●	●	●
Silk	●	●			
Riverw.					
Polish.					

PIERRE BLEUE					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin					
Silk	●	●	●	●	
Riverw.					
Polish.					

NERO ZIMBABWE					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin					
Silk					
Riverw.	●	●	●		
Polish.					

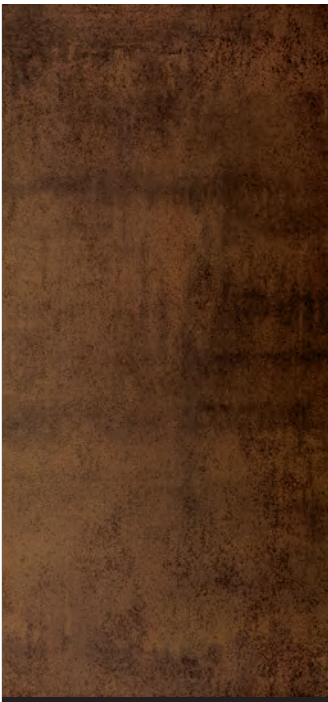


STEEL MARENGO				
3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk	●	●		
Riverw.				
Polish.				

Shine Silk Finish / Acabado Shine Silk



IRON COPPER						
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200		
20	12	6	6	3		
Satin	●	●	●	●		
Silk						
Riverw.						
Polish.						



IRON CORTEN						
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200		
20	12	6	6	3		
Satin	●	●	●	●	●	
Silk						
Riverw.						
Polish.						



IRON MOSS						
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200		
20	12	6	6	3		
Satin	●	●	●	●	●	
Silk						
Riverw.						
Polish.						




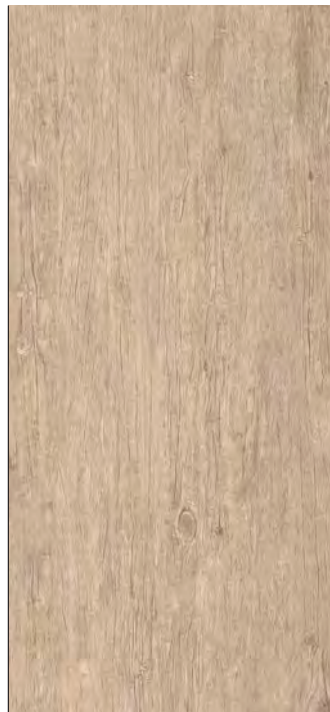
IRON GREY						
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200		
20	12	6	6	3		
Satin	●	●	●	●	●	
Silk						
Riverw.						
Polish.						



IRON FROST						
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200		
20	12	6	6	3		
Satin	●	●		●		
Silk						
Riverw.						
Polish.						

					
TEXTIL WHITE					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin					●
Silk					
Riverw.					
Polish.					

					
LA BOHÈME B01					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin	●	●			
Silk					
Riverw.					
Polish.					

					
LA BOHÈME B02					
3.200 x 1.600		3.200 x 1.500		3.600 x 1.200	
20	12	6	6	3	
Satin	●	●			
Silk					
Riverw.					
Polish.					

Natural Honed Finish / Acabado Natural Honed

ARCTIC WHITE

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk	●	●	●	●
Riverw.				
Polish.	●	●	●	●

PERLA

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin			●	●
Silk				
Riverw.				
Polish.				

NEW

LUNA

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk				
Riverw.				
Polish.	●	●		

HUMO

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin			●	●
Silk				
Riverw.				
Polish.				

NIEVE

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk	●	●		
Riverw.				
Polish.				

AVORIO

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk				
Riverw.				
Polish.				

NEW

BOMBÓN

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin				
Silk				
Riverw.				
Polish.	●	●		

NERO

3.200 x 1.600		3.200 x 1.500	3.600 x 1.200	
20	12	6	6	3
Satin	●	●	●	●
Silk	●	●		
Riverw.				
Polish.	●	●		

All Colorfeel models available in Polished finish are Nanotech Polished / Todos los modelos Colorfeel disponibles en acabado pulido son Nanotech Polished.

BOOKMATCH & ENDMATCH

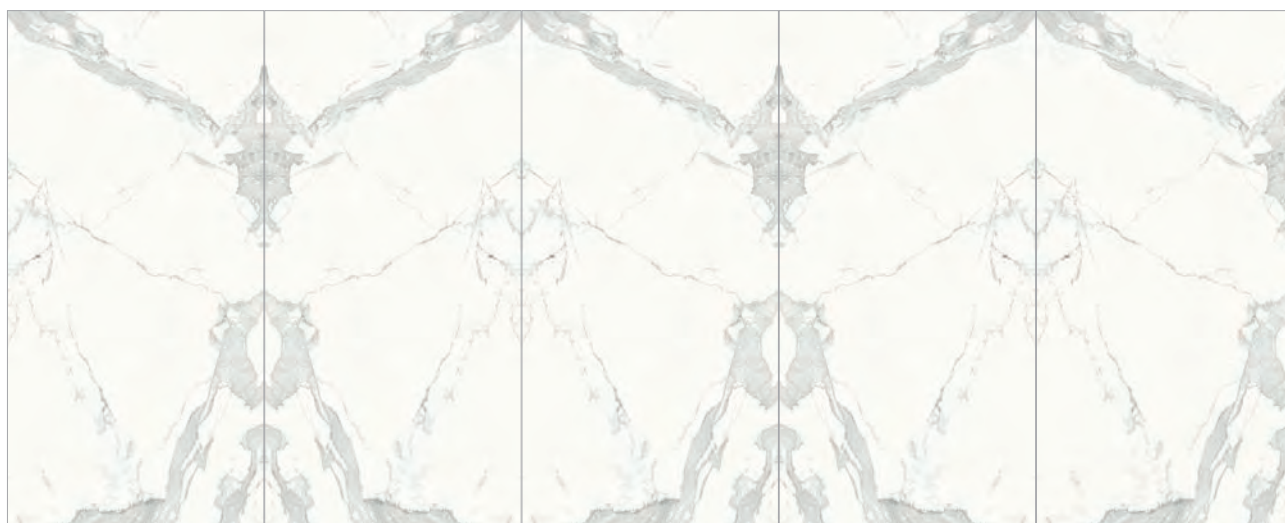
The Estatuario, Calacatta, Calacatta Gold, Onyx Translucent, Blanco Carrara and Nero Marquina models have the possibility of being presented with a Bookmatched effect (mirror effect) the same way the natural marble can be directly extracted from the quarries. For each model there exists a Reverse option (referred to with an "R") which enables to create boockmatched options.

The Endmatch is a very special feature that the design of the Calacatta, Calacatta Gold, Blanco Carrara and Nero Marquina own. Using the same slab just turning it 180°, it's possible to obtain continuing vein with endless pattern.

Los modelos Estatuario, Calacatta, Calacatta Gold, Onyx Translúcido, Blanco Carrara y Nero Marquina permiten la posibilidad de presentarse con efecto Bookmatch (efecto espejo) de la misma forma que el mármol natural es directamente extraído de una cantera. Para cada modelo se ha creado una versión reversa (marcada con "R") para presentar efectos Bookmatched.

El Endmatch es una característica muy especial que tienen los diseños de los modelos Calacatta, Calacatta Gold, Blanco Carrara y Nero Marquina. Usando la misma tabla, sólo girándola 180°, puede obtenerse un patrón de vena continua sin fin.

Estatuario Bookmatch



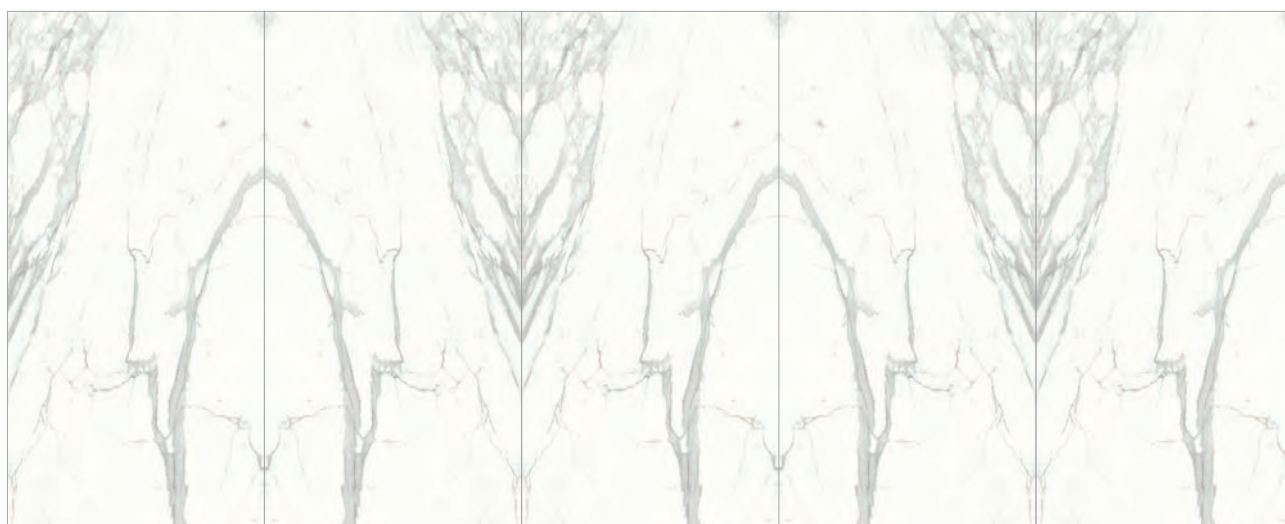
Estatuario E01

Estatuario E01R

Estatuario E01

Estatuario E01R

Estatuario E01



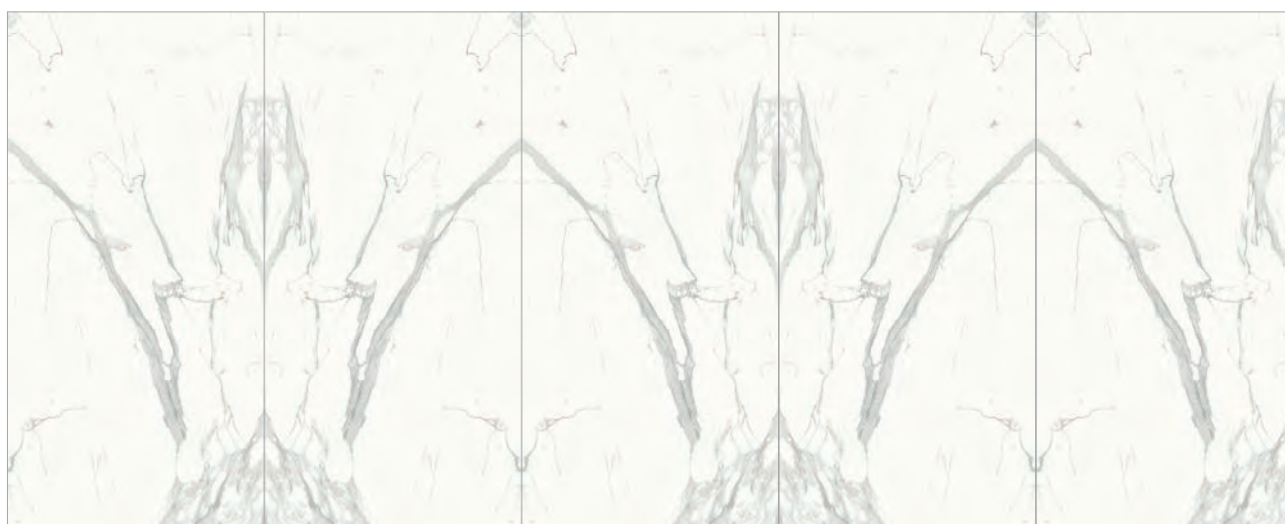
Estatuario E04

Estatuario E04R

Estatuario E04

Estatuario E04R

Estatuario E04



Estatuario E05

Estatuario E05R

Estatuario E05

Estatuario E05R

Estatuario E05

Calacatta Bookmatch



Calacatta C01R Calacatta C01 Calacatta C01R Calacatta C01 Calacatta C01R



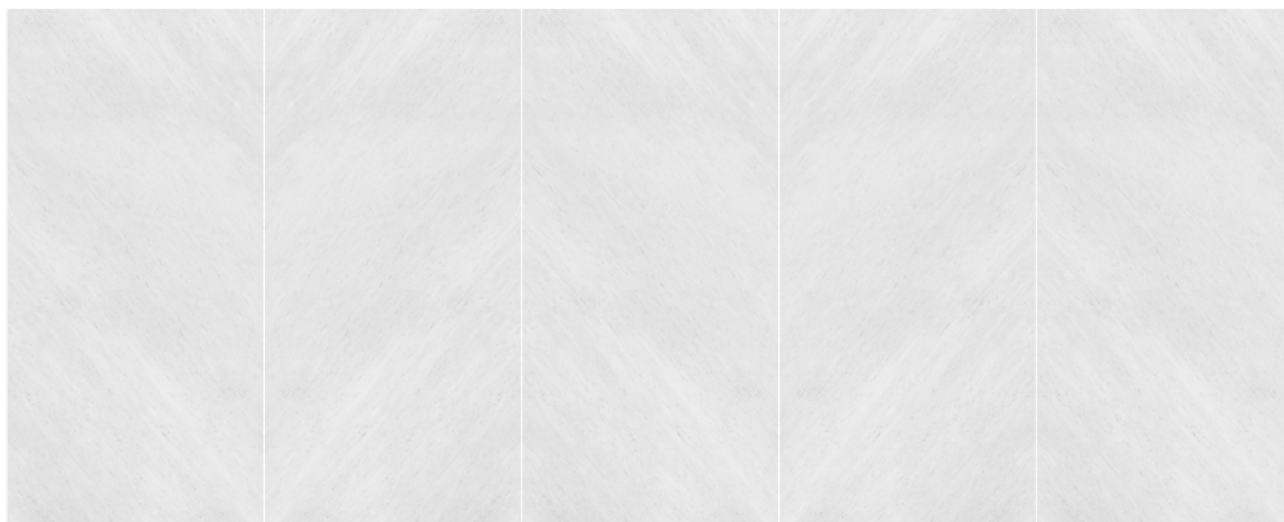
Calacatta Gold CG01 Calacatta Gold CG01R Calacatta Gold CG01 Calacatta Gold CG01R Calacatta Gold CG01

Onyx Translucent Bookmatch



Onyx Translucent O01 Onyx Translucent O01R Onyx Translucent O01 Onyx Translucent O01R Onyx Translucent O01

Blanco Carrara Bookmatch



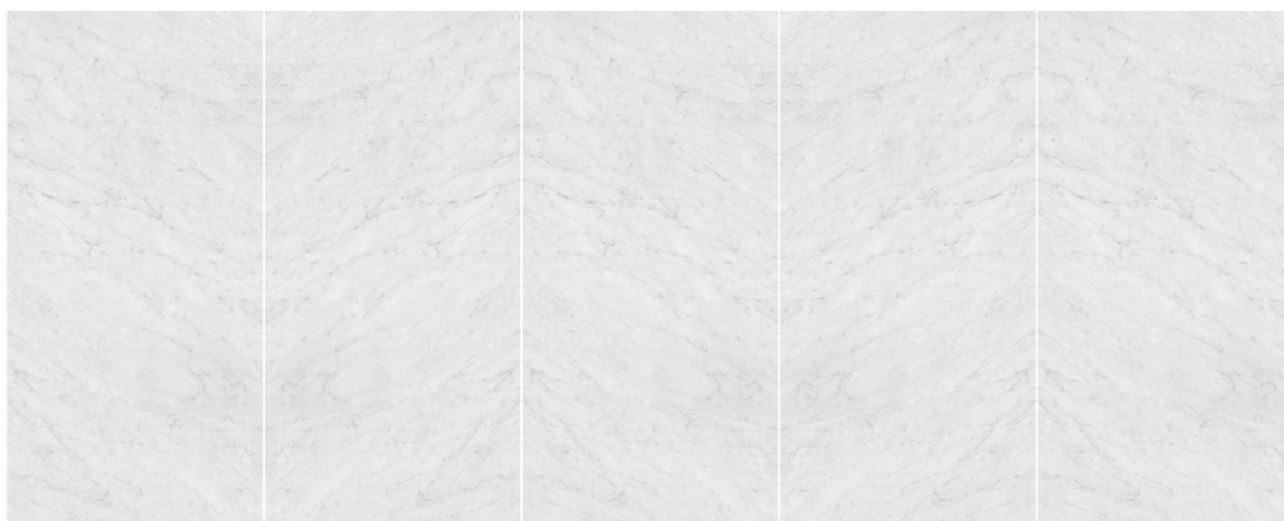
Blanco Carrara BC01

Blanco Carrara BC01R

Blanco Carrara BC01

Blanco Carrara BC01R

Blanco Carrara BC01



Blanco Carrara BC02

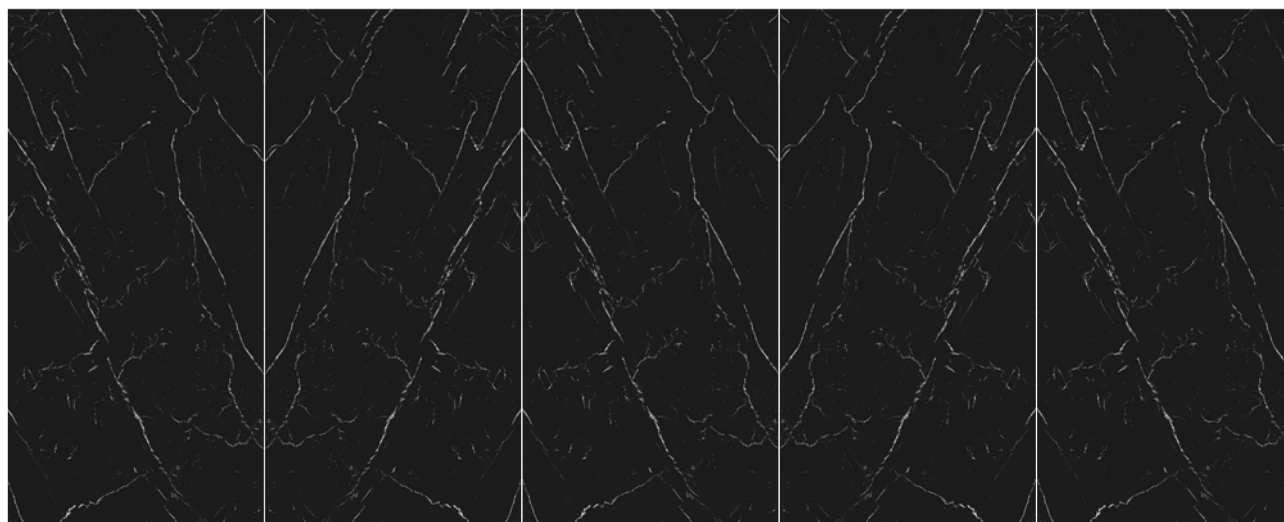
Blanco Carrara BC02R

Blanco Carrara BC02

Blanco Carrara BC02R

Blanco Carrara BC02

Nero Marquina Bookmatch



Nero Marquina NM01

Nero Marquina NM01R

Nero Marquina NM01

Nero Marquina NM01R

Nero Marquina NM01

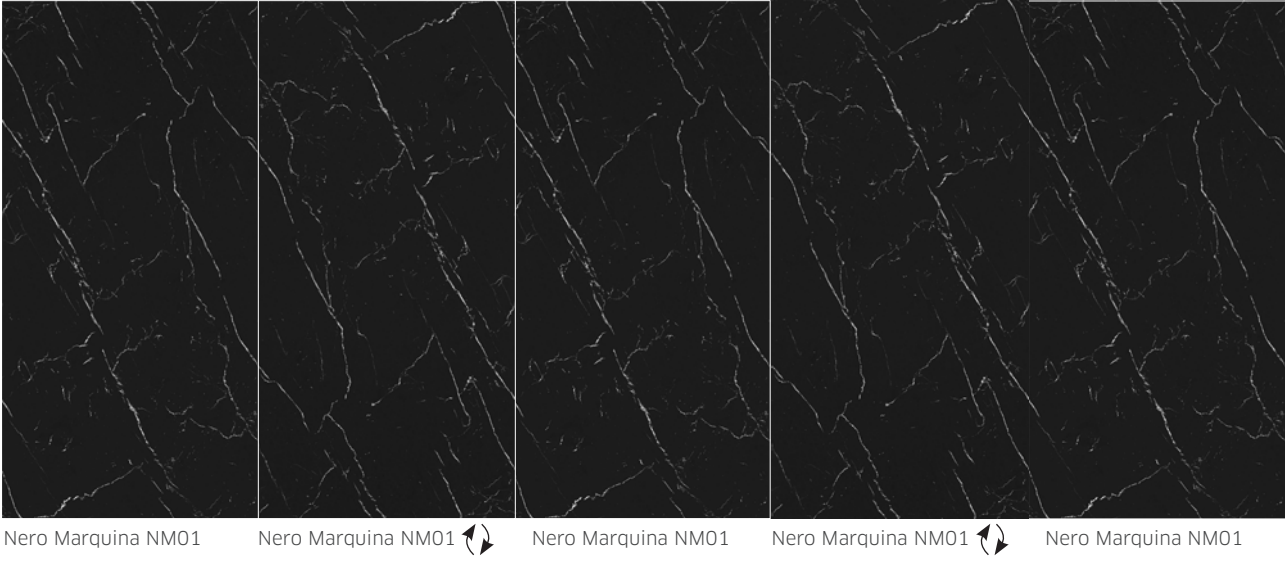
Calacatta Endmatch



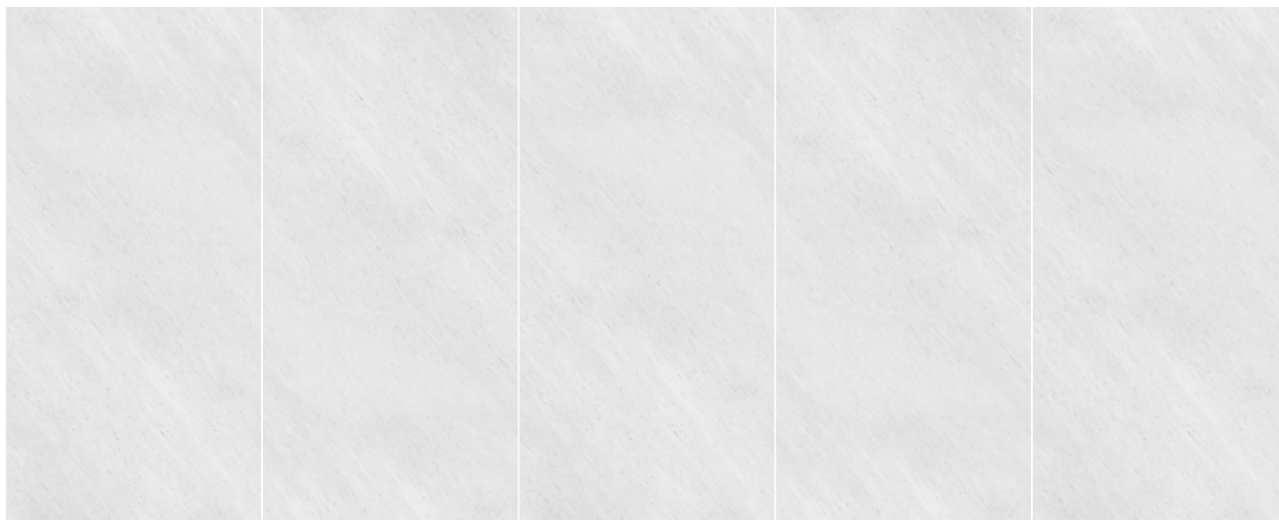
Calacatta Gold Endmatch



Nero Marquina Endmatch



Blanco Carrara BC01 Endmatch



Blanco Carrara BC01

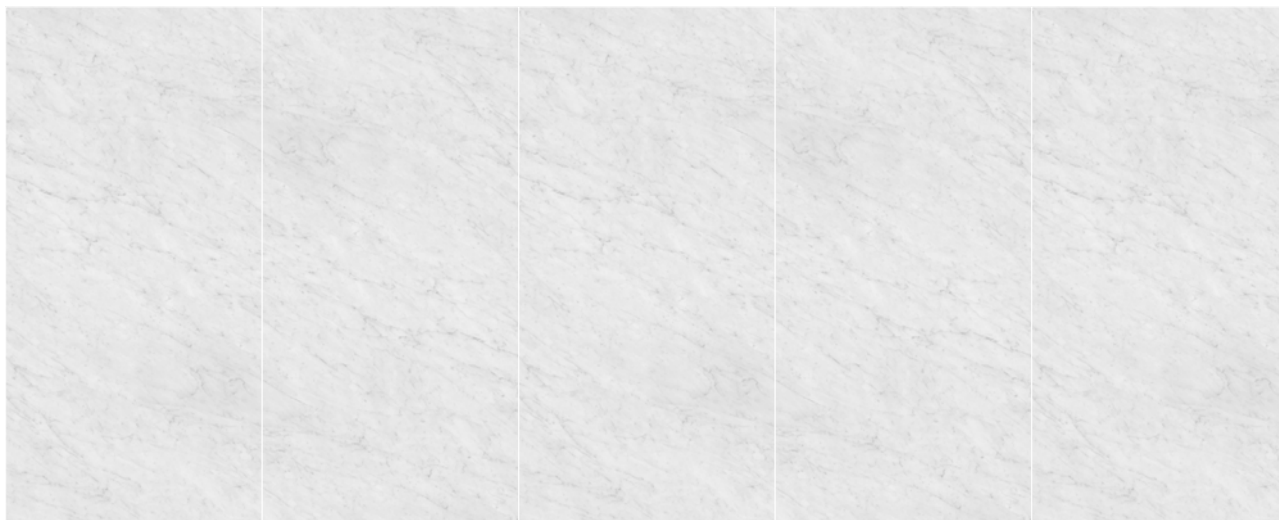
Blanco Carrara BC01 ↺↻

Blanco Carrara BC01

Blanco Carrara BC01 ↺↻

Blanco Carrara BC01

Blanco Carrara BC02 Endmatch



Blanco Carrara BC02

Blanco Carrara BC02 ↺↻

Blanco Carrara BC02

Blanco Carrara BC02 ↺↻

Blanco Carrara BC02

DESIGN VARIANTS IN 6MM

VARIANTES DE DISEÑO EN 6MM

To avoid the repetition of design in some NEOLITH® models of **6 mm thickness**, variants have been created which will be sent in a random manner once these colors are ordered, without the possibility of choosing the specific design, this does not apply to other models like Estatuario for example, you are still able to choose between 1,4,5.

Para evitar la repetición de diseño en algunos modelos NEOLITH® de **6 mm de espesor**, se han creado variantes que se enviarán de forma aleatoria, en los pedidos de estos colores, sin la posibilidad de elegir el diseño como por ejemplo ocurre con otros modelos como Estatuario 1, 4, 5.

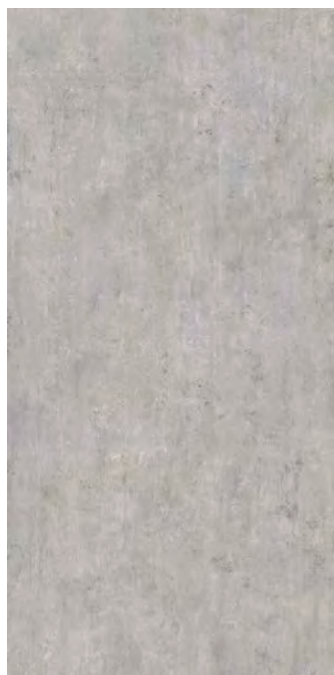
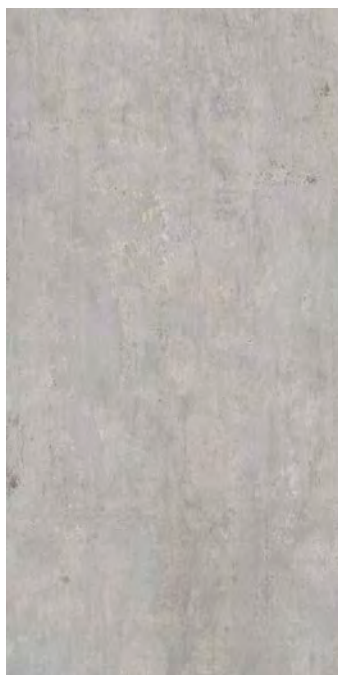
Mirage



Aspen Grey



Beton



DESIGN VARIANTS IN 6MM
VARIANTES DE DISEÑO EN 6MM

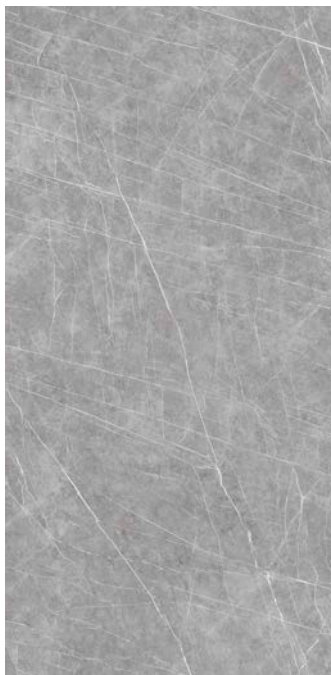
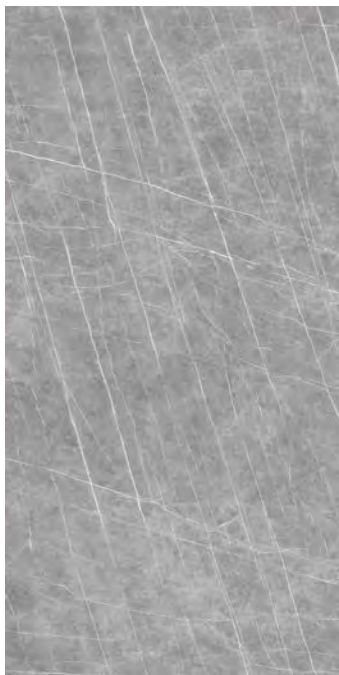
Strata Argentum



Concrete Taupe



Zaha Stone



Krater



MODELS ONLY AVAILABLE FOR PROJECTS

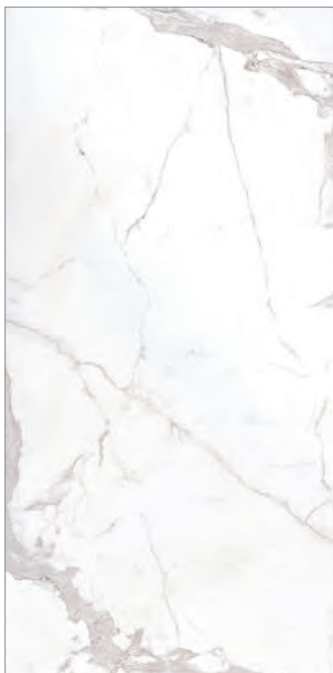
MODELOS SOLO DISPONIBLES PARA PROYECTOS

Starting from 2.000 sqm (21.500 sqft) for 6 mm and 2.500 sqm (27.000 sqft) for 3 mm thickness, Neolith makes available a series of different models to choose from for large scale projects.

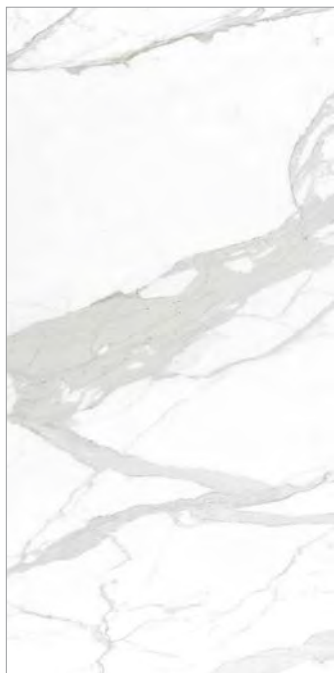
Ask your nearest distributor for more information.

A partir de 2.000 m² para 6 mm y 2.500 m² para 3 mm de espesor, Neolith tiene disponibles una serie de modelos distintos para elegir para grandes proyectos. Consulta a tu distribuidor para más información.

Estatuario E02



Estatuario E06



Estatuario E07



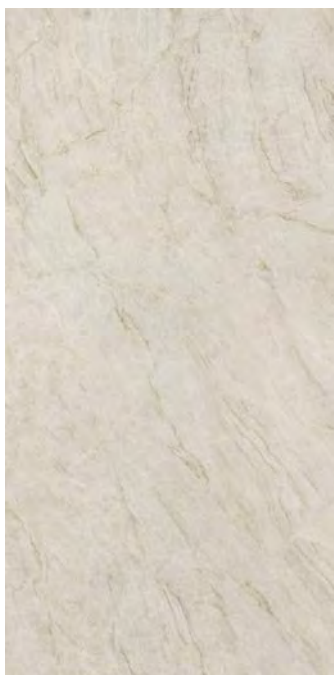
Estatuario E08



Estatuario E03



Taj Mahal



Onyx 001 & 001R 6mm



Marfil



MODELS ONLY AVAILABLE FOR PROJECTS
MODELOS SOLO DISPONIBLES PARA PROYECTOS

Valanges



Light Travertino



Travertino Navona



Travertino Clásico



Iron Silver



Iron Green



Iron Blue



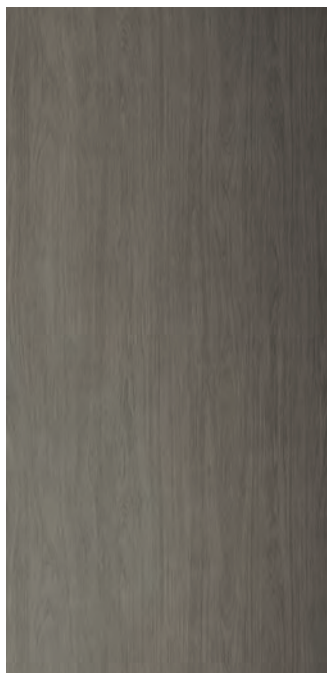
Iron Ash



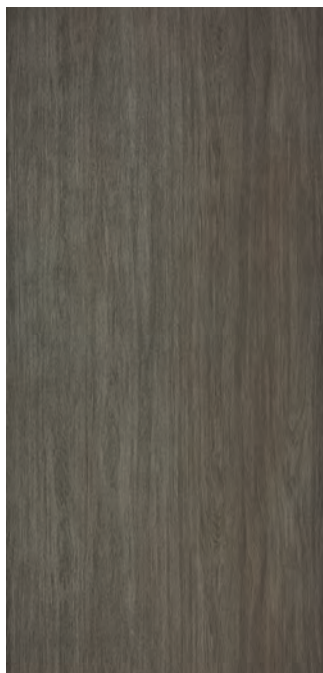
Timber Ice



Timber Ash



Timber Oak



Timber Night



Jura Stone



Piacentina



Textil Black

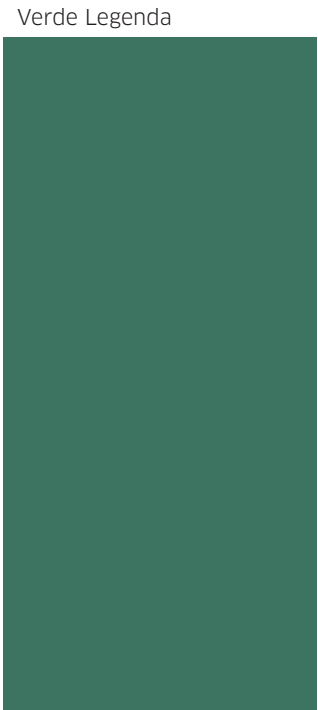
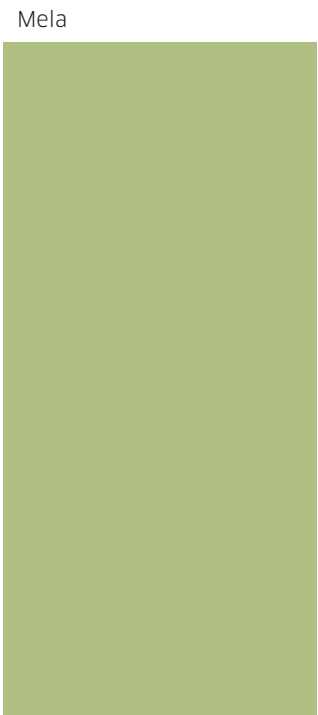
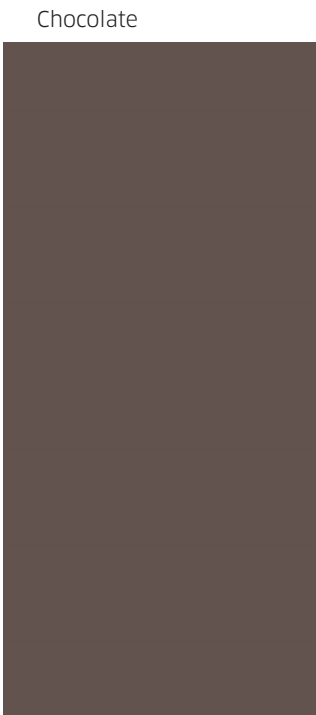


Timber Arancio

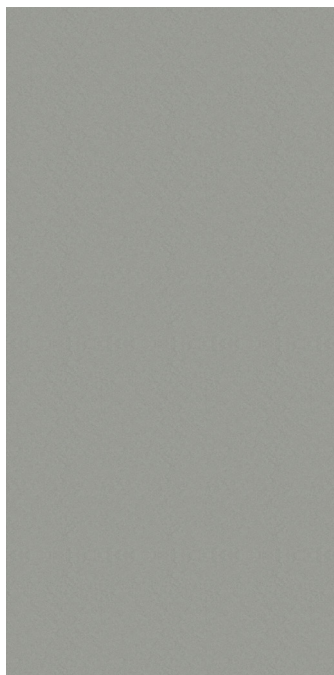


MODELS ONLY AVAILABLE FOR PROJECTS

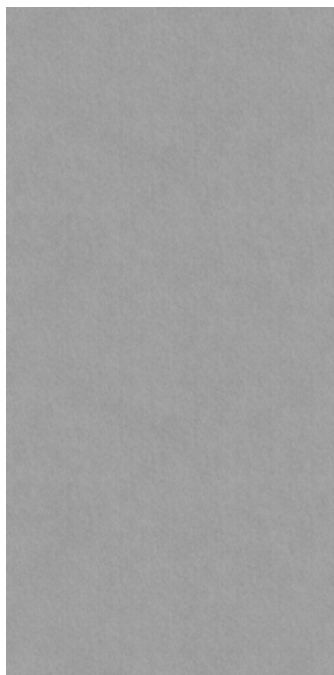
MODELOS SOLO DISPONIBLES PARA PROYECTOS



Pietra Serena



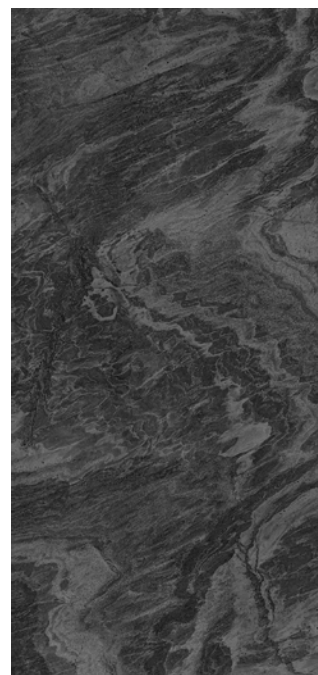
Basalt Ash



Strata Argentum 7006



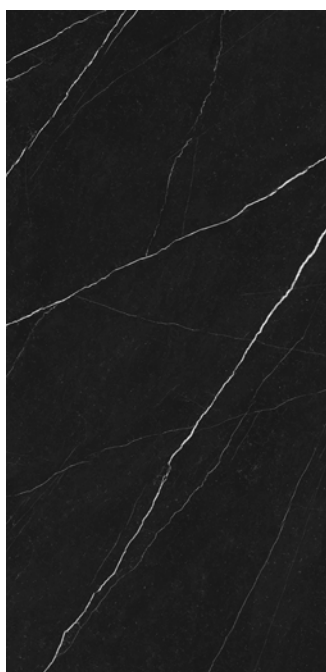
Magma



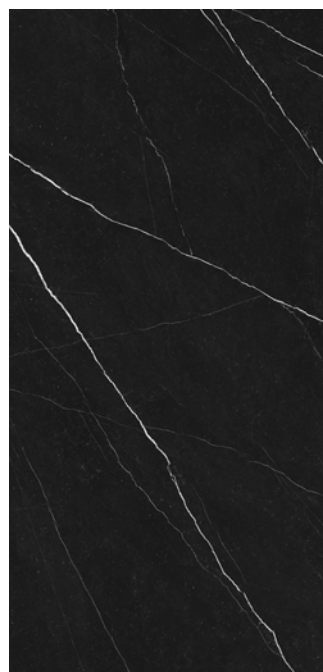
Belgian Blue



Nero Marquina Pencil Vein



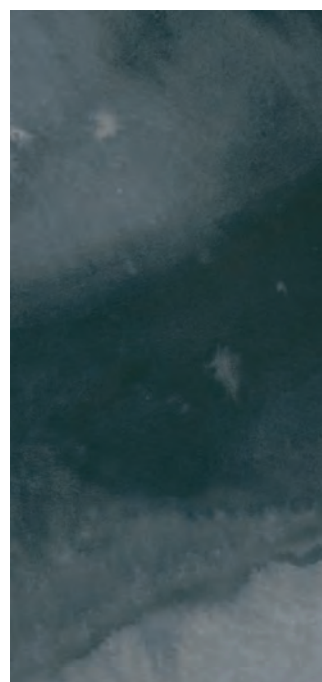
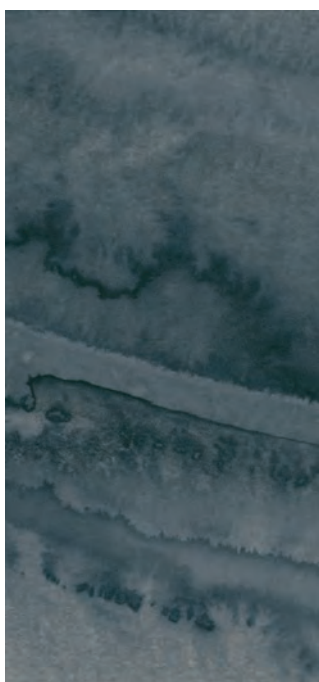
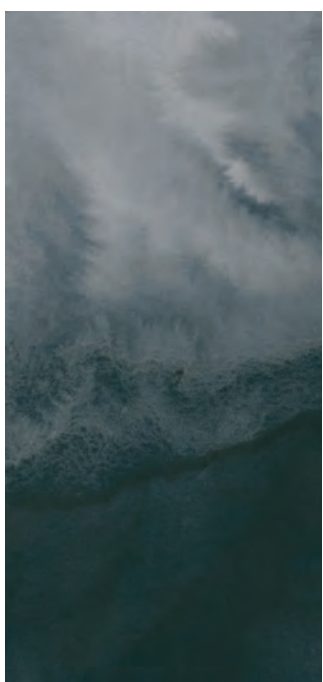
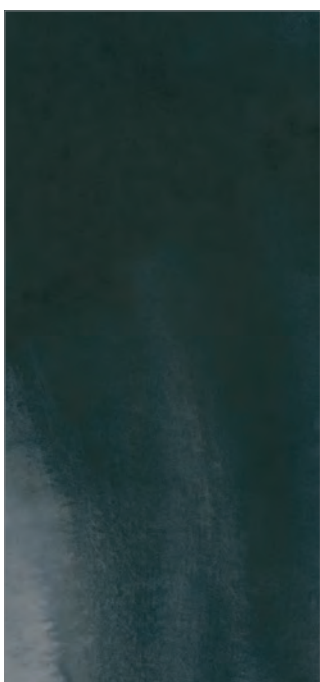
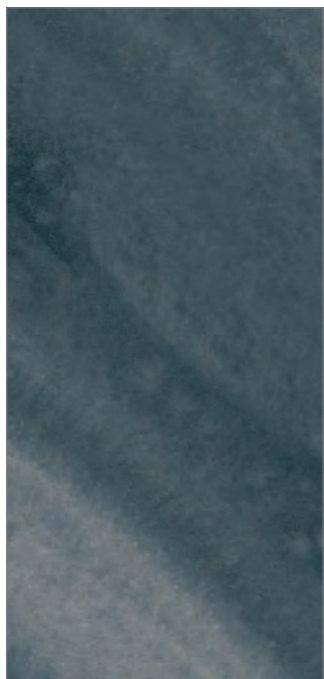
Nero Marquina Pencil Vein R



CUSTOM-MADE COLORS

Starting from 4.000 sqm (43.000 sqft) Neolith can develop and create from scratch custom-made colors that meet most demanding architectural requests. Ask your nearest distributor to find out more.

A partir de 4.000 m² Neolith puede desarrollar y crear desde cero modelos personalizados que cumplan con las más exigentes demandas del mundo de la arquitectura e interiorismo. Consulta a tu distribuidor más cercano para saber más.



Above some of the slabs developed for the Enigma Project. / Algunas de las tablas desarrolladas para el proyecto Enigma.





ENIGMA RESTAURANT
BARCELONA (SPAIN)

Flooring, Islands, Wall Cladding
and Air Extractors:
Neolith Customized model

Designed by:
RCR ARQUITECTES
Fabricated by:
MARBRES RODÓN
Image by:
DÁMASO PÉREZ-FOTOTEC

GENERAL REVIEW

RESUMEN GENERAL

This table may have updates anytime. Please check www.neolith.com to get the latest version.

Esta tabla puede tener actualizaciones en cualquier momento. Por favor consultar en www.neolith.com para descargar la última versión.

	3200x1600 mm				3200x1500 mm				3600 x 1200 mm			
	12 and 20 mm				6 mm				3 and 6 mm			
	Finishes available											
Color	Satin	Polished	Silk	Riverw.	Satin	Polished	Silk	Riverw.	Satin	Polished	Silk	Riverw.
Arctic White	12	20/12	20/12		6	6	6		6/3			
Avorio	12				6				6/3			
Bombón		12				6						
Humo									6/3			
Luna		12				6						
Nero	20/12	12	12		6	6	6		6/3			
Nieve	12		12		6		6		6/3			
Perla									6/3			
Arena	12				6				6/3			
Aspen Grey			20/12				6					
Barro	20/12				6				6/3			
Basalt Beige					6				6/3			
Basalt Black	20/12		12		6		6		6/3			
Basalt Grey	12		12		6		6		6/3			
Beton			20/12	12			6	6			3	
Cement	20/12				6				6/3			
Concrete Taupe			12				6					
Lava					6				6/3			
Mirage			12				6					
Nero Zimbabwe				20/12				6				
Phedra	12				6				6/3			
Pierre Bleue			20/12				6				3	
Pietra di Luna			20/12				6					
Pietra di Osso			12				6					
Pietra di Piombo			12				6					
Retrostone			12				6					
Zaha Stone			20/12				6					
Iron Copper	12				6				6/3			
Iron Corten	20/12				6				6/3			
Iron Frost	12				6				3			
Iron Grey	20/12				6				6/3			
Iron Moss	20/12				6				6/3			
Textil White									3			
La Bohème B01/B02	12 NH				6 NH							
Blanco Carrara BC01/BC02/R		12	12			6	6					
Calacatta C01/C01R		12	20/12			6	6				3	
Calacatta Gold CG01/CG01-R		12	12			6	6				3	
Calatorao			20/12				6					
Estatuario E01/E01R		12	20/12			6	6				3	
Estatuario E04/E04R			12				6					
Estatuario E05/E05R		12	12			6	6					
Krater				12				6				
Nero Marquina NM01/NM01R		12	12			6	6					
Onyx translucent O01/O01R						8						
Pulpis		12	12			6	6				3	
Strata Argentum				12				6				3
Steel Marengo			12 SS				6 SS					

● New model 2018



Produced by:

Thesize[®]
SURFACES

P.I. Camí Fondo, Supoi 8. C/ Íbers 31
12550 - Almassora (Spain)
+34 964 652 233
info@thesize.es
www.neolith.com

Marketed by:

NEOLITH[®]
DISTRIBUTION

HC SYSTEM: TECHNICAL DATA

The Skyline HC System is a kit of self supporting metallic substructure for installing NEOLITH slabs as a ventilated façade.

Just a few elements are necessary for installing this system, which makes it very simple, versatile and adaptable to the different NEOLITH slabs formats. The HC system provides an easy way to design a light, secure and effective architectural solution.

DESCRIPTION OF THE SYSTEM:

The system is composed by aluminum vertical profiles, supporting and retaining brackets. Through the brackets the correct level of flatness of the aluminum "T" profiles is achieved, correcting all possible wall deviations of the façade to be cladded.

The panels are fixed to the profiles with a structural longitudinal vertical fixation Panel Tack.

SISTEMA HC: FICHA TÉCNICA

El Sistema Skyline HC es un kit de subestructura metálica auto portante para la instalación de tablas de NEOLITH en fachada ventilada.

Para la instalación de este sistema se necesitan pocos elementos lo cual hace que sea un sistema muy sencillo de instalar y gracias a la versatilidad para adaptarse al tamaño de los paneles NEOLITH, es fácil conseguir darle al edificio un diseño arquitectónico ligero, seguro y realmente efectivo.

DESCRIPCIÓN DEL SISTEMA:

El sistema está compuesto por perfiles verticales, ménsulas de sustentación y ménsulas de retención. Por medio de las ménsulas o separadores de sustentación y retención se consigue una correcta planimetría de los perfiles verticales en forma de "T", corrigiendo así las posibles desviaciones del paramento original de la fachada a recubrir.

Los paneles serán fijados a los perfiles verticales con sistema de pegado Panel-Tack.



COMPOSITION AND MAIN PROPERTIES:

NEOLITH Sintered Stone slabs are developed using 100% natural raw materials to produce a highly resistant and graffiti-proof wall cladding.

NEOLITH Slabs come with fiberglass reinforcing mesh backing. The Sintered Stone is then attached to a proprietary aluminum profile system.

AVAILABLE FORMATS AND FINISHES:

Slabs are available in 125" x 59" and 141" x 47". Standard thickness' are 1/4" and 1/2". Please consult NEOLITH for recommended sheet size and proper thickness based on application.

Cut-to-size for projects is available.

NEOLITH slabs are available in a variety of finishes and textures. Please visit www.neolith.com to discover the full range.

INSTALLATION:

NEOLITH provides training and certifies local installers for the correct use of the Sintered Stone on the Ventilated Façade application according with the existant regulations.

WARRANTY AND LIFE CYCLE:

NEOLITH slabs count with a 10 warranty that certifying that the product is free of production defects. Life expectancy for a NEOLITH ventilated façade is more than 50 years.

COMPOSICIÓN Y PROPIEDADES PRINCIPALES:

Las tablas de Piedra Sinterizada NEOLITH se desarrollan utilizando materias primas 100% naturales para producir un revestimiento de paredes altamente resistente y anti graffiti.

La tablas NEOLITH vienen con un refuerzo de fibra de vidrio por la parte trasera. La piedra Sinterizada va sujeta a un sistema apropiado de perfilería de aluminio.

FORMATOS Y ACABADOS DISPONIBLES:

Las tablas están disponibles en formato 3.200 x 1.500mm (125" x 59") y 3.600 x 1.200mm (141" x 47"). Los espesores estándar son 6mm (1/4") y 12mm (1/2"). Consultar con NEOLITH por precios recomendados de tabla y por los espesores más adecuados en función de la aplicación.

Corte a medida disponible.

Las tablas NEOLITH están disponibles en una gran variedad de acabados y texturas. Por favor, visitar www.neolith.com para conocer la gama completa.

INSTALACIÓN:

NEOLITH da formación y certifica a instaladores locales para el correcto uso de la Piedra Sinterizada para su aplicación en fachada ventilada de acuerdo con las normativas existentes.

GARANTÍA Y CICLO DE VIDA:

Las tablas NEOLITH cuentan con una garantía de 10 años que aseguran que el producto está libre de defectos de fabricación. La expectativa de vida útil de una fachada ventilada realizada con NEOLITH es superior a 50 años.



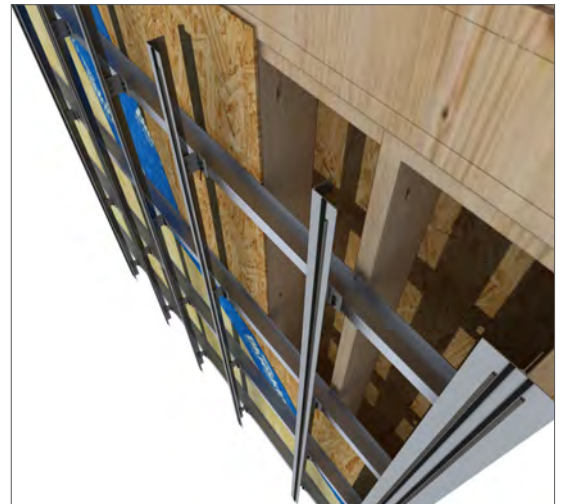
HC System. Detail / Detalle



HC System. Detail / Detalle



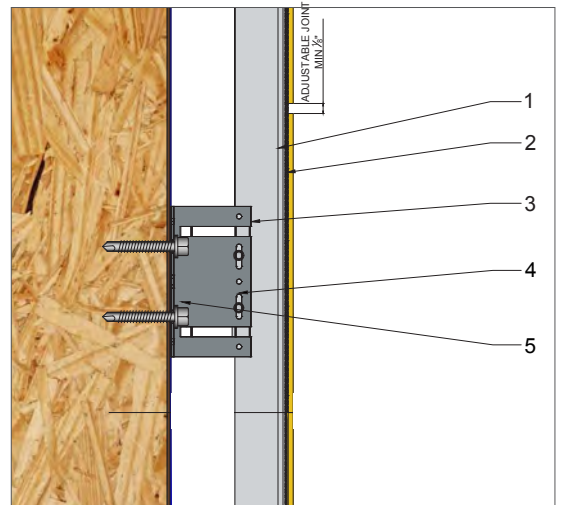
HC System. Installation / Instalación



HC System. Installation / Instalación



HC System. Installation / Instalación



1. Vertical Alum. T Profile 4" * 2"
2. Adhesive Paneltack - HM
3. Fastening Alum. Bracket 5 7/8" * 3 1/8" * 1 5/8"
4. Self screw 1/8" * 3/4"
5. Screw 1/2" * 4" + Washer

COMPONENT DETAILS

Components	Materials
Vertical Profile	Al 6063 T5
Brackets	Al 6063 T5
Screws and Fixations	AISI 304/316

MAIN CHARACTERISTICS OF THE MATERIAL

Characteristics Al 6063 T5	
Specific Gravity	168,55 lb/ft ³
Coefficient of Thermal Expansion from 20 to 100 °C	0,087 x 10 ⁻⁶ K ⁻¹
Modulus of elasticity	10.080.123 lb/in ²
Poisson Coefficient	0,33
Tensile Resistance	1.227,68 lb/in
Shear Resistance	20.305 lb/in ²
Yield stress (Rp 0,2%)	913,62 lb/in
Elongation (L0-mm)	12%
Elongation (L50-mm)	14%
Brinell Hardness	70

Characteristics AISI 304	
Specific Gravity	495,05 lb/ft ³
Coefficient of Thermal Expansion from 20 to 100 °C	0,056 x 10 ⁻⁶ K ⁻¹
Modulus of Elasticity	27.557.170 lb/in ²
Poisson Coefficient	0,33
Tensile Resistance	3254-4282 lb/in ²
Yield stress (Rp 0,2%)	≥ 1313,33 lb/in ²
Elongation (L0-mm)	< 45%
Brinell Hardness	183

GENERAL SPECS.

Minimum Joint Requirements	1/8"
Standard Air Flow Gap between back of panel and exterior insulation	Standard Air Gap 4"
Maximum Wind Load vs Panel size vs Support spacing	Wind Load 3000Pa vs 142"x48" vs Vertical Supp. 24"

VIDEOS

<https://www.youtube.com/watch?v=glWe9G9Szn0>

STRONGFIX SYSTEM: TECHNICAL DATA

The Skyline Strongfix system is a kit of self supporting metallic substructure for installing NEOLITH slabs as a ventilated façade.

Just a few elements are necessary for installing this system, which makes it very simple, versatile and adaptable to the different NEOLITH slabs formats. The Strongfix system provides an easy way to design a light, secure and effective architectural solution.

DESCRIPTION OF THE SYSTEM:

The system is composed by aluminum vertical profiles, supporting and retaining brackets. Through the supporting and retaining brackets the correct level of flatness of the aluminum "T" profiles is achieved, correcting all possible wall deviations of the façade to be cladded.

The panels are hanged to a horizontal supporting profile with a mechanical longitudinal fixation system composed by two aluminum profiles fixation.

SISTEMA STRONGFIX: FICHA TÉCNICA

El Sistema Skyline Strongfix es un kit de subestructura metálica auto portante para la instalación de paneles de NEOLITH en fachada ventilada.

Para la instalación de este sistema se necesitan pocos elementos lo cual hace que sea un sistema muy sencillo de instalar y debido a la versatilidad para adaptarse al tamaño de las tablas NEOLITH es fácil conseguir darle al edificio un diseño arquitectónico ligero, seguro y realmente efectivo.

DESCRIPCIÓN DEL SISTEMA:

El sistema está compuesto por perfiles verticales, ménsulas de sustentación y ménsulas de retención. Por medio de las ménsulas o separadores de sustentación y retención se consigue una correcta planimetría de los perfiles verticales en forma de "T", corrigiendo así las posibles desviaciones del paramento original de la fachada a recubrir.

Los paneles serán colgados a la perfilaría portante horizontal mediante agarre longitudinal mecánico compuesto por dos perfiles de cierre.



COMPOSITION AND MAIN PROPERTIES:

NEOLITH Sintered Stone slabs are developed using 100% natural raw materials to produce a highly resistant and graffiti-proof wall cladding.

NEOLITH Slabs come with fiberglass reinforcing mesh backing.. The Sintered Stone is then attached to a proprietary aluminum profile system.

AVAILABLE FORMATS AND FINISHES:

Slabs are available in 125" x 59" and 141" x 47". Standard thickness' are 1/4" and 1/2". Please consult NEOLITH for recommended sheet size and proper thickness based on application.

Cut-to-size for projects is available.

NEOLITH slabs are available in a variety of finishes and textures. Please visit www.neolith.com to discover the full range.

INSTALLATION:

NEOLITH provides training and certifies local installers for the correct use of the Sintered Stone on the Ventilated Façade application according with the existant regulations.

WARRANTY AND LIFE CYCLE:

NEOLITH slabs count with a 10 warranty certifying that the product is free of production defects. Life expectancy for a NEOLITH ventilated façade is more than 50 years.

COMPOSICIÓN Y PROPIEDADES PRINCIPALES:

Las tablas de Piedra Sinterizada NEOLITH se desarrollan utilizando materias primas 100% naturales para producir un revestimiento de paredes altamente resistente y anti graffiti.

La tablas NEOLITH vienen con un refuerzo de fibra de vidrio por la parte trasera. La piedra Sinterizada va sujeta a un sistema apropiado de perfilería de aluminio.

FORMATOS Y ACABADOS DISPONIBLES:

Las tablas están disponibles en formato 3.200 x 1.500mm (125" x 59") y 3.600 x 1.200mm (141" x 47"). Los espesores estándar son 6mm (1/4") y 12mm (1/2"). Consultar con NEOLITH por precios recomendados de tabla y por los espesores más adecuados en función de la aplicación.

Corte a medida disponible.

Las tablas NEOLITH están disponibles en una gran variedad de acabados y texturas. Por favor, visitar www.neolith.com para conocer la gama completa.

INSTALACIÓN:

NEOLITH da formación y certifica a instaladores locales para el correcto uso de la Piedra Sinterizada para su aplicación en fachada ventilada de acuerdo con las normativas existentes.

GARANTÍA Y CICLO DE VIDA:

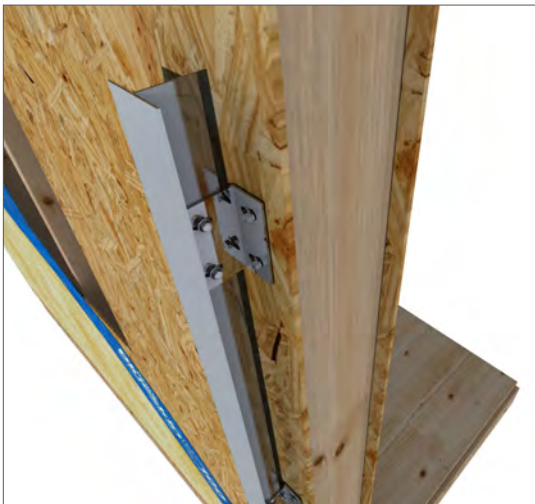
Las tablas NEOLITH cuentan con una garantía de 10 años que aseguran que el producto está libre de defectos de fabricación. La expectativa de vida útil de una fachada ventilada realizada con NEOLITH es superior a 50 años.



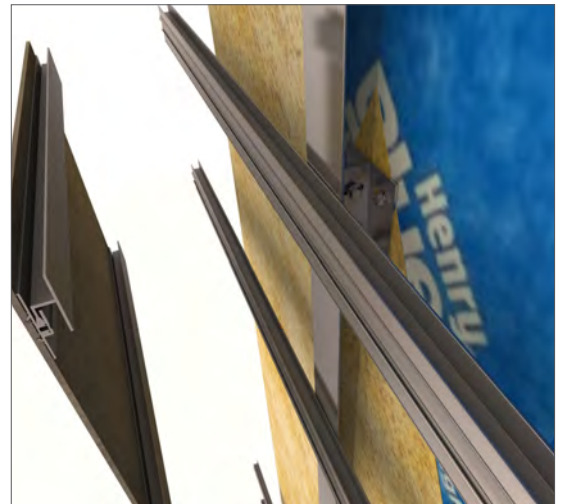
Strongfix System. Detail / Detalle



Strongfix System. Detail / Detalle



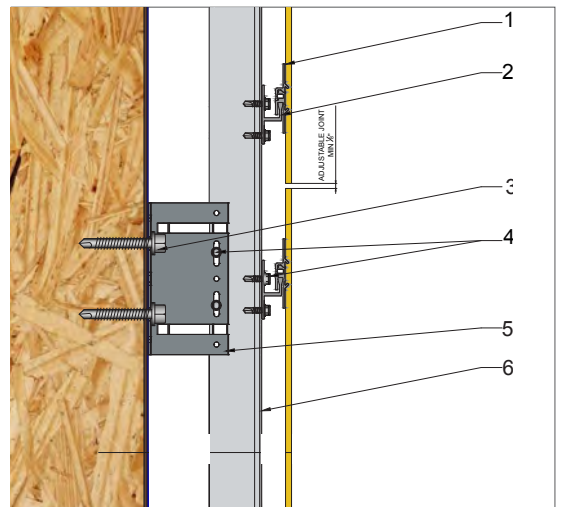
Strongfix System. Installation / Instalación



Strongfix System. Installation / Instalación



Strongfix System. Installation / Instalación



1. Hanger and closer profile
2. Horizontal supporting Alum. profile
3. Screw $\frac{1}{2}$ " * 4" + Washer
4. Self Screw $\frac{1}{8}$ " * $\frac{3}{4}$ "
5. Fastening Alum. Bracket $5\frac{7}{8}$ " * $3\frac{1}{8}$ " * $1\frac{1}{8}$ "
6. Vertical Alum. T Profile $3\frac{1}{8}$ " * 2"

INSTALLATION PROGRESS:

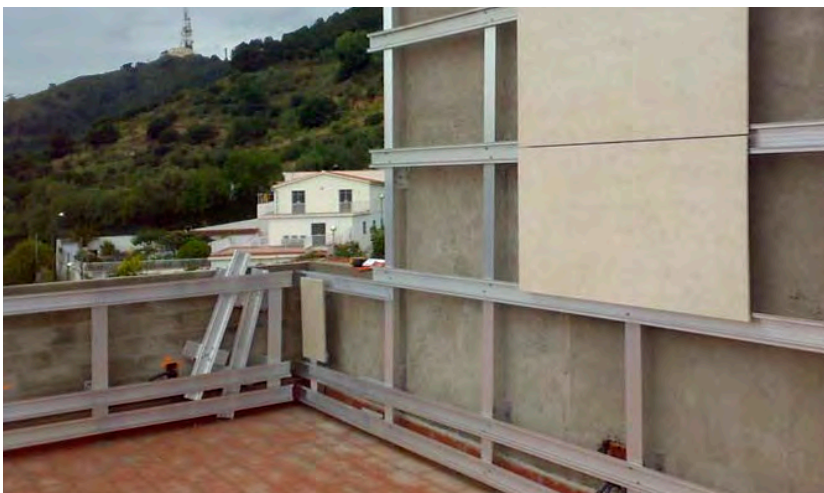


1. **Façade staking:** Aluminum vertical profiles arrangement and staking, which can be installed completely independent to the vertical joints.

Replanteo de la fachada: Disposición de los perfiles verticales de aluminio y replanteo, los cuales pueden ser instalados independientemente de las juntas verticales.

2. **Vertical profiles installation:** The vertical structure is anchored to the wall using retencion and supporting brackets and anchors.

Instalación de los perfiles verticales: la estructura vertical se ancla al muro usando escuadras de fijación y anclajes.



3. **Horizontal profiles installation:** It is needed to be determined the horizontal profiles position, in response to horizontal cutting façade scheme. This structure is anchored to the vertical structure by 5.5x19cm drilling screws.

Instalación de los perfiles horizontales: es necesario determinar la posición de los perfiles horizontales, siguiendo el plan de corte horizontal de la fachada. Esta estructura se ancla a la estructura vertical con tornillos perforantes de 5.5x19cm.



4. **NEOLITH installation:** NEOLITH cladding installation, it is needed to start by the bottom of the façade. It is a façade system very fast to install which allows to replace the slim tiles if it is required.

Instalación de NEOLITH: es necesario empezar la instalación del revestimiento NEOLITH se recomienda desde el arranque de la fachada. Este sistema de fachada es muy rápido de instalar y permite el reemplazo de las baldosas si fuera necesario.

SUMMARY COMPONENTS:

Components	Materials
Vertical Profile	Al 6063 T5
Brackets	Al 6063 T5
Screws and Fixations	AISI 304/316

MAIN CHARACTERISTICS OF THE MATERIAL:

Characteristics Al 6063 T5	
Specific Gravity	168,55 lb/ft ³
Coefficient of Thermal Expansion from 20 to 100 °C	0,087 x 10 ⁻⁶ K ⁻¹
Modulus of elasticity	10.080.123 lb/in ²
Poisson Coefficient	0,33
Tensile Resistance	1227,68 lb/in
Shear Resistance	20.305 lb/in ²
Yield stress (Rp 0,2%)	913,62 lb/in
Elongation (L0-mm)	12%
Elongation (L50-mm)	14%
Brinell Hardness	70

Characteristics AISI 304	
Specific Gravity	495,05 lb/ft ³
Coefficient of Thermal Expansion from 20 to 100 °C	0,056 x 10 ⁻⁶ K ⁻¹
Modulus of Elasticity	27.557.170 lb/in ²
Poisson Coefficient	0,33
Tensile Resistance	3254-4282 lb/in ²
Yield stress (Rp 0,2%)	≥ 1313,33 lb/in ²
Elongation (L0-mm)	< 45%
Brinell Hardness	183

GENERAL SPECS.

Minimum Joint Requirements	1/8"
Standard Air Flow Gap between back of panel and exterior insulation	Standard Air Gap 4"
Maximum Wind Load vs Panel size vs Support spacing	Wind Load 3650Pa vs 125"x60" vs Vertical Supp. 30"

VIDEOS:

<https://www.youtube.com/watch?v=gIWe9G9Szn0>

VM SYSTEM: TECHNICAL DATA

The Skyline VM System consist of a metallic self supporting substructure kit for ventilated facades, designed to support NEOLITH slabs of different formats.

DESCRIPTION OF THE SYSTEM:

The system is composed of retention and support angle brackets, vertical profiles and staples to support the cladding.

Through the supporting and retaining brackets the correct level of flatness of the aluminum "T" profiles is achieved, correcting all possible wall deviations of the façade to be cladded.

The staples that support the weight of the NEOLITH slabs are made of aluminium, and contain an EPDM cap to absorb possible dilations of the structure.

To ensure the dimensional stability of the system, an elastic adhesive line is applied along the T-shaped vertical profile. This elastic adhesive ensures the correct fitting of the pieces, improving the system response against wind pressure or suction and gravity loads. Possible vibrations produced by these efforts are also absorbed by this adhesive.

Finally, the staples are fixed to the vertical profile using stainless steel self-drilling screws.

SISTEMA VM: FICHA TÉCNICA

El Sistema Skyline VM es un kit de subestructura metálica auto portante para la instalación de tablas NEOLITH en fachada ventilada en diferentes formatos.

DESCRIPCIÓN DEL SISTEMA:

El sistema está compuesto por perfiles verticales, ménsulas de sustentación y ménsulas de retención. Por medio de las ménsulas o separadores de sustentación y retención se consigue una correcta planimetría de los perfiles verticales en forma de "T", corrigiendo así las posibles desviaciones del paramento original de la fachada a recubrir.

Las grapas encargadas de soportar el peso de las tablas NEOLITH están fabricadas en aluminio, estas incorporan un casquillo de EPDM para absorber las posibles dilataciones de la estructura.

Para favorecer la estabilidad dimensional del sistema se aplica un cordón del adhesivo elástico a lo largo del perfil vertical, que asegura el correcto posicionamiento de los paneles escogidos mejorando las respuestas del sistema a las cargas de presión, succión de viento y gravitatorias, absorbiendo las vibraciones.

Finalmente las grapas son atornilladas al perfil vertical por medio de tornillería autotaladrante de acero inoxidable.



COMPOSITION AND MAIN PROPERTIES:

NEOLITH Sintered Stone slabs are developed using 100% natural raw materials to produce a highly resistant and graffiti-proof wall cladding.

NEOLITH Slabs come with fiberglass reinforcing mesh backing. The Sintered Stone is then attached to a proprietary aluminum profile system.

AVAILABLE FORMATS AND FINISHES:

Slabs are available in 125" x 59" and 141" x 47". Standard thickness' are 1/4" and 1/2". Please consult NEOLITH for recommended sheet size and proper thickness based on application.

Cut-to-size for projects is available.

NEOLITH slabs are available in a variety of finishes and textures. Please visit www.neolith.com to discover the full range.

INSTALLATION:

NEOLITH provides training and certifies local installers for the correct use of the Sintered Stone on the Ventilated Façade application according with the existant regulations.

WARRANTY AND LIFE CYCLE:

NEOLITH slabs count with a 10 warranty certifying that the product is free of production defects. Life expectancy for a NEOLITH ventilated façade is more than 50 years.

COMPOSICIÓN Y PROPIEDADES PRINCIPALES:

Las tablas de Piedra Sinterizada NEOLITH se desarrollan utilizando materias primas 100% naturales para producir un revestimiento de paredes altamente resistente y anti grafiti.

La tablas NEOLITH vienen con un refuerzo de fibra de vidrio por la parte trasera. La piedra Sinterizada va sujeta a un sistema apropiado de perfilería de aluminio.

FORMATOS Y ACABADOS DISPONIBLES:

Las tablas están disponibles en formato 3.200 x 1.500mm (125" x 59") y 3.600 x 1.200mm (141" x 47"). Los espesores estándar son 6mm (1/4") y 12mm (1/2"). Consultar con NEOLITH por precios recomendados de tabla y por los espesores más adecuados en función de la aplicación.

Corte a medida disponible.

Las tablas NEOLITH están disponibles en una gran variedad de acabados y texturas. Por favor, visitar www.neolith.com para conocer la gama completa.

INSTALACIÓN:

NEOLITH da formación y certifica a instaladores locales para el correcto uso de la Piedra Sinterizada para su aplicación en fachada ventilada de acuerdo con las normativas existentes.

GARANTÍA Y CICLO DE VIDA:

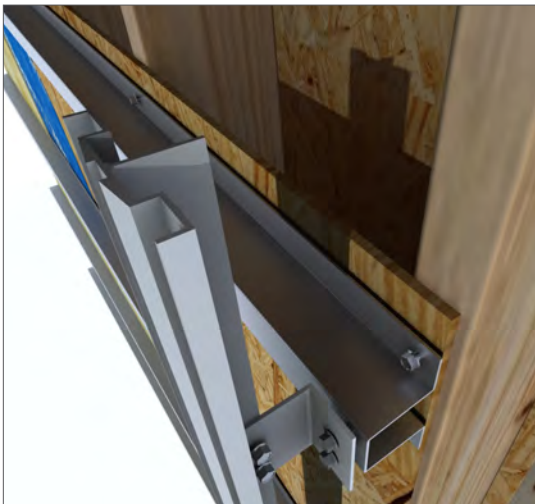
Las tablas NEOLITH cuentan con una garantía de 10 años que aseguran que el producto está libre de defectos de fabricación. La expectativa de vida útil de una fachada ventilada realizada con NEOLITH es superior a 50 años.



VM System. Detail / Detalle



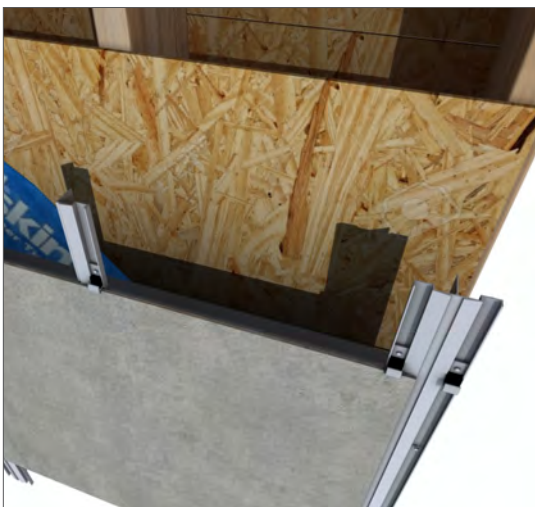
VM System. Detail / Detalle



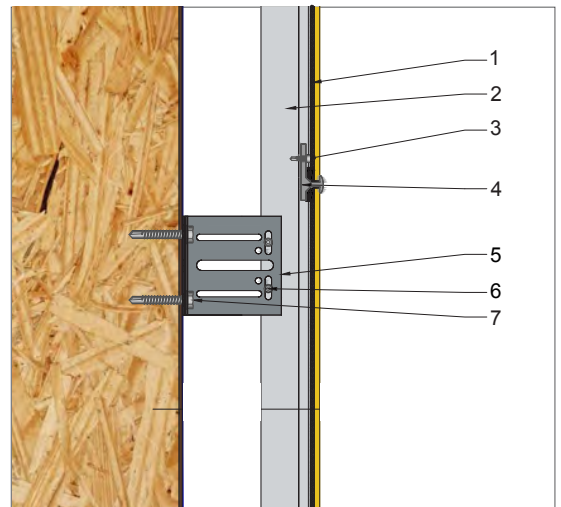
VM System. Installation / Instalación



VM System. Installation / Instalación



VM System. Installation / Instalación



1. Adhesive Paneltack-HM
2. Vertical Supporting Alum. Profile
3. Screw $\frac{1}{4}$ " * 11"
4. VM Alum. Supporting Clip
5. Fastening Alum. Bracket 4" * 2 $\frac{1}{2}$ " * 4"
6. Self Screw $\frac{1}{4}$ " * 1"
7. Screw $\frac{3}{8}$ " * 3 $\frac{1}{2}$ " + Washer

SUMMARY COMPONENTS:

Components	Materials
Vertical Profile	Al 6063 T5
Brackets	Al 6063 T5
Screws and Fixations	AISI 304/316

MAIN CHARACTERISTICS OF THE MATERIAL:

Characteristics Al 6063 T5	
Specific Gravity	168,55 lb/ft ³
Coefficient of Thermal Expansion from 20 to 100 °C	0,087 x 10 ⁻⁶ K ⁻¹
Modulus of elasticity	10.080.12 lb/in ²
Poisson Coefficient	0,33
Tensile Resistance	1.227,68 lb/in
Shear Resistance	20.305 lb/in ²
Yield stress (Rp 0,2%)	913,62 lb/in
Elongation (LO-mm)	12%
Elongation (L50-mm)	14%
Brinell Hardness	70

Characteristics AISI 304	
Specific Gravity	495,05 lb/ft ³
Coefficient of Thermal Expansion from 20 to 100 °C	0,056 x 10 ⁻⁶ K ⁻¹
Modulus of Elasticity	27.557.170 lb/in ²
Poisson Coefficient	0,33
Tensile Resistance	3.254-4.282 lb/in ²
Yield stress (Rp 0,2%)	≥ 1313,33 lb/in ²
Elongation (LO-mm)	< 45%
Brinell Hardness	183

GENERAL SPECS.

Minimum Joint Requirements	1/8"
Standard Air Flow Gap between back of panel and exterior insulation	Standard Air Gap 4"
Maximum Wind Load vs Panel size vs Support spacing	Wind Load 1580Pa vs 125"x60" vs Vertical Supp. 40"

VIDEOS:

<https://www.youtube.com/watch?v=glWe9G9Szn0>



Performance Testing for TheSize's
Neolith Cladding Systems in
Accordance with ICC-ES File Number
14-01-08

Home Innovation Research Labs

TABLE OF CONTENTS

Background	1
Description of the Product.....	1
Test Specimens.....	1
I. Physical Properties Testing	1
A. Nominal Size and Thickness	2
B. Warpage Edge and Warpage Diagonal	2
C. Wedging	4
D. Water Absorption	4
E. Color Uniformity	5
F. Craze Resistance	6
G. Breaking Strength.....	7
H. Resistance to Freeze/Thaw Cycling	8
II. Durability Testing	8
A. Temperature Cycling.....	8
B. Flexural Strength	9
III. Structural Performance Testing	10
A. Shear (Gravity) Anchor-to-Panel Load Test.....	11
B. Transverse Wind Load Anchor-to-Panel Load Test	12
C. Transverse Wind Load Test	13
Appendix A - ASTM C499 Test Results	
Appendix B - ASTM C485 Test Results	
Appendix C - ASTM C502 Test Results	
Appendix D - ASTM C373 Test Results	
Appendix E - ASTM C609 Test Results	
Appendix F - ASTM C424 Test Results	
Appendix G - ASTM C648 Test Results	
Appendix H - ASTM C1026 Test Results	
Appendix I - ASTM C880 Test Results	

List of Tables

Table 1 - ASTM C499 Standard Test Method for Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile Test Results	2
Table 2 - ASTM C485 Standard Test Method for Measuring Warpage of Ceramic Tile Test Results	3
Table 3 - ASTM C502 Standard Test Method for Wedging of Flat, Rectangular Ceramic Wall and Floor Tile Test Results	4
Table 4 - ASTM C373 Standard Test Methods for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles Test Results.....	5
Table 5 - ASTM 609 Standard Test Method for Measurement of Light Reflectance Value and Small Color Differences Between Pieces of Ceramic Tile Test Results	6
Table 6 - ASTM C424 Standard Test Method for Craze Resistance of Fire Glazed Whitewares by Autoclave Treatment Test Results	7
Table 7 - ASTM C648 Standard Test Method for Breaking Strength of Ceramic Tile Test Results.....	7
Table 8 - ASTM C1026 Standard Test Method for Measuring the Resistance of Ceramic and Glass Tile to Freeze-Thaw Cycling Test Results	8
Table 9 - Temperature Cycling Test Results.....	9
Table 10 - ASTM C880 Standard Test Method for Flexural Strength of Dimension Stone Test Results Condition: Dry	10
Table 11 - ASTM C880 Standard Test Method for Flexural Strength of Dimension Stone Test Results Condition: Wet	10
Table 12 - Shear (Gravity) Anchor-to-Panel Load Test Results	12
Table 13 - Transverse Wind Load Anchor-to-Panel Load Test Results	13
Table 14 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference Test Results	14
Table 15 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference Test Results	15

BACKGROUND

TheSize Surfaces, S.L. requested physical, structural and durability testing of its exterior cladding systems of Neolith 100% natural Sintered Stone panels in accordance with International Code Council – Evaluation Service, LLC (ICC-ES) File Number 14-01-08.

An agreement was entered into March 19, 2015, between TheSize Surfaces, SL, and Home Innovation Research Labs, Inc.

DESCRIPTION OF THE PRODUCT

TheSize's Neolith façade is intended for use as a nonload-bearing exterior wall covering on nonfire-resistance-rated buildings of Type I, II, III, IV and V construction defined by the International Building Code (IBC) and nonfire-resistance-rated dwellings constructed in accordance with the International Residential Code. The system is to be installed over an approved water-resistive barrier.

TheSize's Neolith panels are fastened to an aluminum substructure with one of the following systems:

1. VM System (Visible Mechanical Fastening Fixation) – This system is a visible mechanical fastening system of T-shaped clips, which are installed at the edges of the panels. The clips are fastened to the aluminum rails on-site, and to L-shaped metal brackets which are anchored to the supporting structure. An elastic adhesive is applied along the T-shaped vertical profile.
2. Strongfix System (Mixed hidden longitudinal fastening system) – This system is a mixed (chemical and mechanical) hidden profile system. The panels are factory-grooved longitudinally at the top and bottom of their backside with a double 45° groove in the shape of a dovetail. Aluminum profiles are inserted in the grooves at the jobsite to secure the panels to the aluminum substructure. The aluminum profiles create the hanging mechanism for the panel to be set to a horizontal supporting profile anchored to the supporting structure. An adhesive putty is used to secure the aluminum profiles to the panels.

TEST SPECIMENS

This note applies to all specimens that were prepared for this qualifying evaluation. Per TheSize's request, 6mm thick panels were tested for both fastening systems, VM and Strongfix. The test specimens were submitted directly to Home Innovation by the client. No sampling of TheSize's Neolith material was conducted by Home Innovation.

I. PHYSICAL PROPERTIES TESTING

The physical properties were tested for nominal size, warpage edge, warpage diagonal, wedging, thickness, water absorption, color uniformity, crazing resistance, breaking strength and freeze-thaw cycling in accordance with Table 10: Porcelain Tile of ANSI A137.1 "American National Standard Specifications for Ceramic Tile."

A. Nominal Size and Thickness

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C499 “Standard Test Method for Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile.” Test procedure notes contained within the attached QAI report (See Appendix A) and ASTM C499 standard can provide specific details concerning the test protocol.

Test Results

ASTM C499 “Standard Test Method for Facial Dimensions and Thickness of Flat, Rectangular Ceramic Wall and Floor Tile” test results are summarized in the following table:

Table 1
ASTM C499 Standard Test Method for Facial Dimensions and Thickness of
Flat, Rectangular Ceramic Wall and Floor Tile Test Results

Tile	Average Length (in)	Average Thickness (in)
1	0.598	0.290
2	0.601	0.287
3	0.602	0.291
4	0.607	0.291
5	0.598	0.290
6	0.602	0.293
7	0.608	0.289
8	0.598	0.291
9	0.612	0.289
10	0.603	0.289

B. Warpage Edge and Warpage Diagonal

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C485 “Standard Test Method for Measuring Warpage of Ceramic Tile.” Test procedure notes contained within the attached QAI report (See Appendix B) and ASTM C485 standard can provide specific details concerning the test protocol.

Test Results

ASTM C485 “Standard Test Method for Measuring Warpage of Ceramic Tile” test results are summarized in the following table:

Table 2
ASTM C485 Standard Test Method for Measuring Warpage of Ceramic Tile Test Results

Tile #		Edge 1	Edge 2	Edge 3	Edge 4	Diagonal 1	Diagonal 2
1	% Warpage	0.033	-0.033	0.033	-0.017	0.073	0.086
		convex	concave	convex	concave	convex	convex
2	% Warpage	-0.017	0.050	-0.050	0.050	0.061	0.037
		concave	convex	concave	convex	convex	convex
3	% Warpage	-0.050	-0.017	-0.067	-0.017	0.000	0.012
		concave	concave	concave	concave		convex
4	% Warpage	0.033	-0.017	-0.033	-0.017	0.037	0.024
		convex	concave	concave	concave	convex	convex
5	% Warpage	0.017	-0.017	0.017	-0.017	0.024	0.037
		convex	concave	convex	concave	convex	convex
6	% Warpage	-0.017	0.000	0.033	0.000	0.037	0.024
		concave		convex		convex	convex
7	% Warpage	0.050	0.017	0.017	0.067	0.061	0.061
		convex	convex	convex	convex	convex	convex
8	% Warpage	0.033	-0.017	0.017	0.033	0.037	0.037
		convex	concave	convex	convex	convex	convex
9	% Warpage	0.033	0.017	-0.017	0.017	0.037	0.037
		convex	convex	concave	convex	convex	convex
10	% Warpage	0.050	0.017	0.000	0.017	0.024	0.037
		convex	convex		convex	convex	convex

C. Wedging

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C502 “Standard Test Method for Wedging of Flat, Rectangular Ceramic Wall and Floor Tile.” Test procedure notes contained within the attached QAI report (See Appendix C) and ASTM C502 standard can provide specific details concerning the test protocol.

Test Results

ASTM C502 “Standard Test Method for Wedging of Flat, Rectangular Ceramic Wall and Floor Tile” test results are summarized in the following table:

Table 3
ASTM C502 Standard Test Method for Wedging of Flat,
Rectangular Ceramic Wall and Floor Tile Test Results

Tile	Average % of Wedging
1	-0.029
2	-0.005
3	0.000
4	0.000
5	0.000
6	0.005
7	0.012
8	0.005
9	0.004
10	0.004

D. Water Absorption

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C373 “Standard Test Methods for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles.” Test procedure notes contained within the attached QAI report (See Appendix D) and ASTM C373 standard can provide specific details concerning the test protocol.

Test Results

ASTM C373 “Standard Test Methods for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles” test results are summarized in the following table:

Table 4
ASTM C373 Standard Test Methods for Water Absorption, Bulk Density, Apparent Porosity, and
Apparent Specific Gravity of Fired Whiteware Products, Ceramic Tiles, and Glass Tiles Test Results

Sample	Dry Mass (g)	Suspended Mass (g)	Saturated Mass (g)	Volume (cm3)	Volume of Open Pores (cm3)	Volume of Impervious Portions (cm3)	Apparent Porosity (%)	Water Absorption (%)	Apparent Specific Gravity	Bulk Density (g/cm3)
1	193.04	111.14	193.34	82.20	0.30	81.90	0.36	0.16	2.36	2.35
2	193.15	111.24	193.45	82.21	0.30	81.91	0.36	0.16	2.36	2.35
3	192.56	110.83	192.88	82.05	0.32	81.73	0.39	0.17	2.36	2.35
4	195.51	112.57	195.86	83.29	0.35	82.94	0.42	0.18	2.36	2.35
5	194.79	112.12	195.08	82.96	0.29	82.67	0.35	0.15	2.36	2.35
Average				82.5	0.3	82.2	0.4	0.2	2.4	2.4

E. Color Uniformity

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C609 “Standard Test Method for Measurement of Light Reflectance Value and Small Color Differences Between Pieces of Ceramic Tile.” Test procedure notes contained within the attached QAI report (See Appendix E) and ASTM C609 standard can provide specific details concerning the test protocol.

Test Results

ASTM C609 “Standard Test Method for Measurement of Light Reflectance Value and Small Color Differences Between Pieces of Ceramic Tile” test results are summarized in the following table:

Table 5
ASTM 609 Standard Test Method for Measurement of Light Reflectance Value
and Small Color Differences Between Pieces of Ceramic Tile Test Results

Sample		Average	Color Difference	Delta E
Reference	L	43.790		
	A	0.846		
	b	2.456		
1	L	44.180	0.390	0.393
	A	0.850	0.004	
	b	2.408	-0.048	
2	L	44.232	0.442	0.467
	A	0.808	-0.038	
	b	2.310	-0.146	
3	L	43.766	-0.024	0.038
	A	0.862	0.016	
	b	2.480	0.024	
4	L	44.278	0.488	0.507
	A	0.800	-0.046	
	b	2.328	-0.128	
5	L	43.778	-0.012	0.019
	A	0.850	0.004	
	b	2.442	-0.014	

F. Crazing Resistance

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C424 “Standard Test Method for Crazing Resistance of Fire Glazed Whitewares by Autoclave Treatment.” Test procedure notes contained within the attached QAI report (See Appendix F) and ASTM C424 standard can provide specific details concerning the test protocol.

Report No.: 4171-001_09282017 - DRAFT

Home Innovation Research Labs
Performance Testing for TheSize’s Neolith Cladding Systems
in Accordance with ICC-ES File Number 14-01-08

Test Results

ASTM C424 "Standard Test Method for Craze Resistance of Fire Glazed Whitewares by Autoclave Treatment" test results are summarized in the following table:

Table 6
ASTM C424 Standard Test Method for Craze Resistance of
Fire Glazed Whitewares by Autoclave Treatment Test Results

Sample	50 psi	100 psi	150 psi	200 psi	250 psi
1	Pass	Pass	Pass	Pass	Pass
2	Pass	Pass	Pass	Pass	Pass
3	Pass	Pass	Pass	Pass	Pass
4	Pass	Pass	Pass	Pass	Pass
5	Pass	Pass	Pass	Pass	Pass
6	Pass	Pass	Pass	Pass	Pass
7	Pass	Pass	Pass	Pass	Pass
8	Pass	Pass	Pass	Pass	Pass
9	Pass	Pass	Pass	Pass	Pass
10	Pass	Pass	Pass	Pass	Pass

G. Breaking Strength

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C648 "Standard Test Method for Breaking Strength of Ceramic Tile." Test procedure notes contained within the attached QAI report (See Appendix G) and ASTM C648 standard can provide specific details concerning the test protocol.

Test Results

ASTM C648 "Standard Test Method for Breaking Strength of Ceramic Tile" test results are summarized in the following table:

Table 7
ASTM C648 Standard Test Method for Breaking
Strength of Ceramic Tile Test Results

Sample	Peak Load
1	299
2	304
3	275
4	292
5	285
6	275
7	290
8	300
9	289
10	284
Average	289.3
Standard Deviation	9.9337

H. Resistance to Freeze/Thaw Cycling

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C1026 “Standard Test Method for Measuring the Resistance of Ceramic and Glass Tile to Freeze-Thaw Cycling.” Test procedure notes contained within the attached QAI report (See Appendix H) and ASTM C1026 standard can provide specific details concerning the test protocol.

Test Results

ASTM C1026 “Standard Test Method for Measuring the Resistance of Ceramic and Glass Tile to Freeze-Thaw Cycling” test results are summarized in the following table:

Table 8
ASTM C1026 Standard Test Method for Measuring the Resistance
of Ceramic and Glass Tile to Freeze-Thaw Cycling Test Results

Specimen #	Dry WT. (Wi)	Dry WT. (Wf)	Observations After 300 Cycles	Total WT. Loss (%)	Pass or Fail
1	169.06	169.04	No Damage	0.012	Pass
2	168.40	168.39	No Damage	0.006	Pass
3	168.99	168.96	No Damage	0.018	Pass
4	168.62	168.61	No Damage	0.006	Pass
5	168.72	168.70	No Damage	0.012	Pass
6	168.19	168.17	No Damage	0.012	Pass
7	168.14	168.14	No Damage	0.000	Pass
8	165.13	165.11	No Damage	0.012	Pass
9	165.26	165.24	No Damage	0.012	Pass
10	168.30	168.26	No Damage	0.024	Pass

II. DURABILITY TESTING

The durability was tested for temperature cycling in accordance with ICC-ES File No. 14-01-08. Flexural-strength tests require testing to be conducted in accordance with ASTM C880 “Standard Test Method for Flexural Strength of Dimension Stone.”

A. Temperature Cycling

Test Method

Testing was conducted, observed and documented by Home Innovation staff. A set of three (3) VM system samples and a set of three (3) Strongfix system samples, each with Neolith panels measuring 12” x 24”, were subjected to twenty-five (25) consecutive thermal cycles in accordance with ICC-ES File No. 14-01-08. A cycle consisted of one (1) hour of water exposure at room temperature, six (6) hours at $-40 \pm 5^{\circ}\text{F}$, two (2) hours at $70 \pm 5^{\circ}\text{F}$, fourteen (14) hours at $180 \pm 5^{\circ}\text{F}$ and one (1) hour at $70 \pm 5^{\circ}\text{F}$. Between cycles, such as on weekends, the samples were maintained at an ambient temperature of $70 \pm 5^{\circ}\text{F}$. Spray nozzles for the water exposure were located approximately 7 feet away from the panels and delivered 6 inches of water per hour at a water temperature of 40 to 60 °F.

The test lab ambient environment was controlled at $70 \pm 5^{\circ}\text{F}$ and $50 \pm 5\%$ relative humidity during the testing. All testing was conducted in the same location and lab ambient environment.

Report No.: 4171-001_09282017 - DRAFT

Home Innovation Research Labs
Performance Testing for TheSize’s Neolith Cladding Systems
in Accordance with ICC-ES File Number 14-01-08

Test Results

The results are based on visual performance criteria. The surface of all test specimens were visually examined for defects at the end of temperature cycling. All test specimens were examined for cracking, checking, crazing, erosion, blistering, spalling, delamination or other characteristic that might affect performance as an exterior wall cladding. Additionally, all fastener locations were examined for any failure or distress. Test results are summarized in the following table:

Table 9
Temperature Cycling Test Results

Specimen	Observations
VM System 1	No cracking, checking, crazing, erosion or other deleterious effects were observed after 25 thermal cycles.
VM System 2	No cracking, checking, crazing, erosion or other deleterious effects were observed after 25 thermal cycles.
VM Sytem 3	No cracking, checking, crazing, erosion or other deleterious effects were observed after 25 thermal cycles.
Strongfix System 1	No cracking, checking, crazing, erosion or other deleterious effects were observed after 25 thermal cycles.
Strongfix System 2	No cracking, checking, crazing, erosion or other deleterious effects were observed after 25 thermal cycles.
Strongfix System 3	No cracking, checking, crazing, erosion or other deleterious effects were observed after 25 thermal cycles.

B. Flexural Strength

Test Method

The testing was subcontracted to QAI Laboratories and conducted in accordance with ASTM C880 “Standard Test Method for Flexural Strength of Dimension Stone.” Test procedure notes contained within the attached QAI report (See Appendix I) and ASTM C880 standard can provide specific details concerning the test protocol. A set of five (5) dry conditioned samples and a set of five (5) wet conditioned samples, each measuring 4”x15”x0.272”, were tested.

Test Results

ASTM C880 “Standard Test Method for Flexural Strength of Dimension Stone” test results are summarized in the following tables:

Table 10
ASTM C880 Standard Test Method for Flexural Strength of Dimension Stone Test Results
Condition: Dry

Specimen	Width in.	Thickness in.	Ultimate Load, lbs	Flexural Strength, psi
1	4.011	0.275	168	5192
2	4.011	0.268	176	5750
3	4.011	0.271	196	6261
4	4.014	0.265	186	6186
5	4.010	0.271	190	6048
Average	-	-	183	5887
Standard Deviation	-	-	11	435

Table 11
ASTM C880 Standard Test Method for Flexural Strength of Dimension Stone Test Results
Condition: Wet

Specimen	Width in.	Thickness in.	Ultimate Load, lbs	Flexural Strength, psi
6	4.010	0.268	164	5359
7	4.014	0.269	161	5197
8	4.015	0.260	161	5314
9	4.013	0.268	162	5270
10	4.012	0.273	163	5111
Average	-	-	162	5250
Standard Deviation	-	-	1	98

III. STRUCTURAL PERFORMANCE TESTING

The structural performance was tested for allowable shear load and transverse wind load, per individual anchor-to-panel connection, in accordance with ASTM C1354 "Standard Test Method for Strength of Individual Stone Anchorages in Dimension Stone." The structural performance of the VM and Strongfix cladding systems under uniform static air pressure differences, using a test chamber, was tested in accordance with ASTM E330, Procedure B "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference."

A. Shear (Gravity) Anchor-to-Panel Load Test

Test Specimens

A set of five (5) VM system test assemblies and a set of five (5) Strongfix test assemblies were built by Home Innovation and in accordance with the manufacturer's published installation instructions. The panels were installed and attached to supports with anchors in a manner representative of end-use.

The test lab ambient environment was controlled at $70 \pm 5^{\circ}\text{F}$ and $50 \pm 5\%$ relative humidity during the assembly construction and testing. All testing was conducted in the same location and lab ambient environment.

1. Test Specimen Size

The test assemblies built and tested contained panels measuring 4" x 12".

2. Test Specimen Construction

A set of five (5) VM system test assemblies were constructed with four (4) T-shaped clips, one (1) at each corner of the panel, fastened to aluminum rails.

A set of five (5) Strongfix test assemblies were constructed with aluminum extrusions inserted into full-length grooves on the back face of the panel. Adhesive putty is used between the extrusions and the panels.

Test Method

Structural tests to determine the allowable shear load of the VM system and Strongfix system, cladding assemblies consisting of panels with mechanical anchorage, were performed in Home Innovation test lab and concluded August 28, 2017. Testing was conducted, observed and documented by Home Innovation staff. The test method and equipment used was done in accordance with Section 7.3 of ASTM C1354 "Standard Test Method for Strength of Individual Stone Anchorages in Dimension Stone."

Test loads were applied in the gravity load direction, parallel to the surface of the panel and parallel to the direction of gravity, when the panel is in the installed condition.

Test Results

Allowable shear load shall be the average ultimate test load divided by a safety factor of 4. Test results are summarized in the following table:

Table 12
Shear (Gravity) Anchor-to-Panel Load Test Results

TheSize Shear (Gravity) Anchor-to-Panel Load Test Results		
Test	Ultimate Load (LBF)	Allowable Load ¹ (LBF)
VM 1	1617.61	404.40
VM 2	1904.67	476.17
VM 3	1598.39	399.60
VM 4	1759.13	439.78
VM 5	1667.87	416.97
Average	1709.53	427.38
Strongfix 1	3743.07	935.77
Strongfix 2	1806.81	451.70
Strongfix 3	4170.95	1042.74
Strongfix 4	1130.47	282.62
Strongfix 5	1281.53	320.38
Average	2426.57	606.64
Note:		
¹ The values are based on testing per ASTM C1354, and represent the capacity of the assembly to resist failure using a 4.0 safety factor.		

B. Transverse Wind Load Anchor-to-Panel Load Test

Test Specimens

A set of five (5) VM system test assemblies and a set of five (5) Strongfix test assemblies were built by Home Innovation and in accordance with the manufacturer's published installation instructions. The panels were installed and attached to supports with anchors in a manner representative of end-use.

The test lab ambient environment was controlled at $70 \pm 5^{\circ}\text{F}$ and $50 \pm 5\%$ relative humidity during the assembly construction and testing. All testing was conducted in the same location and lab ambient environment.

1. Test Specimen Size

The test assemblies built and tested contained panels measuring 4" x 12".

2. Test Specimen Construction

A set of five (5) VM system test assemblies were constructed with two (2) T-shaped clips, one (1) at each near-side (closest to test machine load) corner of the panel, fastened to an aluminum rail. The far-side of the panel does not have T-shaped clips and is not fastened to an aluminum rail.

A set of five (5) Strongfix test assemblies were constructed with aluminum extrusions inserted into full-length grooves on the back face of the panel. Adhesive putty is used between the extrusions and the panels.

Test Method

Structural tests to determine the allowable out-of-plane wind load of the VM system and Strongfix system, cladding assemblies consisting of panels with mechanical anchorage, were performed in Home Innovation

test lab and concluded August 28, 2017. Testing was conducted, observed and documented by Home Innovation staff. The test method and equipment used was done in accordance with Section 7.2 of ASTM C1354 "Standard Test Method for Strength of Individual Stone Anchorages in Dimension Stone."

Test loads were applied in the negative load direction (outward), perpendicular to the surface of the panel, when the panel is in the installed condition.

Test Results

Allowable out-of-plane wind load of the panel shall be the average maximum test load divided by a safety factor of 4. Test results are summarized in the following table:

Table 13
Transverse Wind Load Anchor-to-Panel Load Test Results

TheSize Transverse Wind Load Anchor-to-Panel Test Results		
Test	Ultimate Load (LBF)	Allowable Load ¹ (LBF)
VM 1	201.52	50.38
VM 2	205.7	51.43
VM 3	182.68	45.67
VM 4	233.05	58.26
VM 5	237.17	59.29
Average	212.02	53.01
Strongfix 1	343.96	85.99
Strongfix 2	337.21	84.30
Strongfix 3	667.16	166.79
Strongfix 4	146.88	36.72
Strongfix 5	283.26	70.82
Average	355.69	88.92
Note:		
¹ The values are based on testing per ASTM C1354, and represent the capacity of the assembly to resist failure using a 4.0 safety factor.		

C. Transverse Wind Load Test

Test Specimens

A set of six (6) test wall assemblies per system, for three (3) replicates per positive load and three (3) replicates per negative load, were built by TheSize Surfaces, S.L. and in accordance with ASTM E330 for testing. Home Innovation witnessed and documented the construction of the VM and Strongfix cladding systems by TheSize in the test lab of Home Innovation. All the materials used to build the test wall assemblies was provided by TheSize Surfaces.

The test lab ambient environment was controlled at 70 ± 5°F and 50 ± 5% relative humidity during the assembly construction and testing. All testing was conducted in the same location and lab ambient environment.

1. Test Specimen Size

The test wall assemblies built and tested were 10'-0" x 20'-0", each containing four (4) full-size panels measuring 5'-0" x 10'-0".

2. Test Specimen Construction

A set of six (6) VM system test walls were constructed in accordance with the manufacturer's published installation instructions. The panels were installed and attached to supports with anchors in a manner representative of normal installation.

A set of six (6) Strongfix system test walls were constructed in accordance with the manufacturer's published installation instructions. Adhesive putty is used between the extrusions and the panels. The panels were installed and attached to supports with anchors in a manner representative of normal installation.

Test Method

Structural tests to determine the allowable negative and positive pressures that may be imposed on the cladding and anchorage system were performed in Home Innovation test lab and concluded June 8, 2017. Testing was conducted, observed and documented by Home Innovation staff. The test method and equipment used was done in accordance with ASTM E330, Procedure B "Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference." There was no deviation from this standard test method.

Test Results

Allowable wind pressures shall be the average maximum load achieved divided by a safety factor of 3. Test results are summarized in the following tables:

Table 14
Standard Test Method for Structural Performance of Exterior Windows, Doors,
Skylights and Curtain Walls by Uniform Static Air Pressure Difference Test Results

TheSize VM		
Test	Ultimate Load (PSF)	Allowable Load (PSF)¹
Negative Test 1	50.6	16.9
Negative Test 2A	66.8	22.3
Negative Test 3	30.6	10.2
Average	49.3	16.4
Positive Test 1A	51.3	17.1
Positive Test 2	32.2	10.7
Positive Test 3	18.1	6.0
Average	33.9	11.3
Notes:		
¹ The values are based on testing per ASTM E330, and represent the capacity of the assembly to		

Table 15
Standard Test Method for Structural Performance of Exterior Windows, Doors,
Skylights and Curtain Walls by Uniform Static Air Pressure Difference Test Results

TheSize StrongFix			
Test	Ultimate Load (PSF)	Allowable Load (PSF)¹	Additional Notes
Negative Test 1	67.9	22.6	
Negative Test 2	81.6	27.2	
Negative Test 3	79.4	26.5	
Average	76.3	25.4	
Positive Test 1	107.2	35.7	
Positive Test 2	108.7	36.2	
Positive Test 3	106.4	35.5	
Average	107.4	35.8	
Notes:			
¹ The values are based on testing per ASTM E330, and represent the capacity of the assembly to resist failure using a 3.0 safety factor.			

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Rainscreen Guide Specification
with Sintered Stones

RAINSCREEN WITH SINTERED STONES

Neolith Rainscreens, manufactured by TheSize Surfaces, combine beautiful Neolith Sintered Surface panels with a support system to provide versatile, high performance, ventilated wall cladding.

While water will enter through joints between panels, the ventilated cavity in a Neolith rainscreen is based upon the pressure equalization principle and allows water to drain and vapor to vent. (Behind the rain screen, a building's wall may still require protection against vapor and air infiltration.)

For most projects, Contract Documents should show design intent and delegate project engineering - such as size and layout of rainscreen support elements and connections to building wall -- to the rainscreen fabricator and installer.

DRAWING COORDINATION: Show size and orientation of panels; distance from inside face of rainscreen panels to building wall; air gap, insulation, and other items located within rainscreen system; and details of interface between rainscreen and work specified in other sections.

Please, go to www.neolith.com/en/downloads and download the editable .docx file for creating a project specific Specification.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Rainscreen support system.
 - 2. [_____]
 - 3. Sintered compact surface panels.
- B. Related Requirements:
 - 1. [Section 072100 - Thermal Insulation.]
 - 2. [Section 072500 - Weather Barriers]
 - 3. [Section 076000 - Flashing and Sheet Metal.]
 - 4. [Section 079200 - Joint Sealants.]
 - 5. [Section 084000 - Entrances, Storefronts, and Curtainwalls.]
 - 6. [Section 08500 - Windows.]
 - 7. [Section 089000 - Louvers and Vents.]
 - 8. [_____]

1.2 REFERENCE STANDARDS

- A. AAMA 508 - Pressure Equalized Rain Screen Wall Cladding Systems.
- B. [ASTM B117 - Salt Spray (Fog) Apparatus.]
- C. ASTM C920 - Elastomeric Joint Sealants.
- D. ASTM C1026 - Measuring the Resistance of Ceramic and Glass Tile to Freeze-Thaw Cycling.

- E. ASTM C1184 – Structural Silicone Sealants.
- F. ASTM E283 - Determining Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors under Specified Pressure Difference across the Specimen.
- G. ASTM E330 - Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- H. ASTM E331 - Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference.
- I. ASTM E1233 - Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Cyclic Air Pressure Differential.
- J. [CAN/ULC S134 - Fire Test of Exterior Wall Assemblies for the Determination of Combustibility Parameters of Building Material.]
- K. [NFPA 285 - Evaluation of Fire Propagation of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components.]
- L. [_____]

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meetings: Require attendance by installer, manufacturer, architect, [_____] and others affected by work.
- B. Discuss schedules and coordination with related work.

1.4 SUBMITTALS

- A. Delegated Design Submittals:
 - 1. Provide shop drawings showing:
 - a. Attachments to Building: Indicate types, sizes, spacing, and other requirements necessary to attach support system to building.
 - b. Support System: Show materials, dimensions, locations, adhesives, fasteners, and other requirements for components to support panels.
 - c. Panels: Show products, colors, sizes, joint spacing, typical details, and coordination with related work.
 - d. Loads for which system is designed, including wind speed, seismic force, [_____] and other conditions for which system is designed.
 - 2. Shop drawings shall be signed and sealed by professional engineer registered in state where project is located and shall state that design complies with requirements of Contract Documents, manufacturer, and authorities having jurisdiction.
 - 3. Submit copy of ICC-ES Evaluation Report.
- B. Submit product data and manufacturer's installation instructions for:
 - 1. Support system.
 - 2. Sintered compact surface.
 - 3. Fasteners.
 - 4. [_____]

C. [Field-Applied Adhesive: Submit letter from adhesive manufacturer stating that proposed adhesive is acceptable for use on Project. Include product data and installation instructions.]

D. Samples: Submit [2] [____] samples of following:

1. Sintered Compact Surface: Submit [each] color specified. Samples shall be 20 sq.in. or larger.
2. [Paint: Samples of paint for color evaluation.]

1.5 CLOSEOUT SUBMITTALS

A. Record Documentation: [_____]

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Extra Stock Materials:

1. Quantity: Provide [five] [ten] [____] pieces of each color of sintered compact surface used on project.
2. Sizes: Largest size provided for Project.
3. Packaging: Pack in accordance with manufacturer's instructions for long-term storage. Clearly mark contents of each package.
4. Deliver to location indicated by Owner.

1.7 QUALITY ASSURANCE

A. Qualifications:

1. Fabricators and Installers: Firms with 10 years experience on projects of similar size and nature and acceptable to rainscreen manufacturer.
2. Professional Engineer: Licensed in state where project is located.
3. Manufacturer: Support system and panels shall be manufactured by same company.

B. Mock-Ups:

1. Construct mock-up [as shown on Drawings.] [at least [100] [____] sq.ft. in size.]
2. Locate on site in location acceptable to Architect.
3. Show proposed appearance and means of construction.
4. Coordinate with mock-ups specified in other sections that are to be installed in or adjacent to of work that will be installed in or adjacent to rainscreen.
5. After acceptance of Work, mock-up [shall be removed.] [may remain part of Project.]

1.8 DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturer's instructions.

1.9 WARRANTY

A. Manufacturer Warranty: Provide sintered compact surface manufacturer's 10-year limited warranty.

PART 2 - PRODUCTS

2.1 RAINSCREEN SYSTEMS

- A. Manufacturer:
1. Basis of Design: Provide Neolith Rain Screen by TheSize Surfaces, S.L. (www.thesize.es, info@thesize.es, phone +1 416-471-9082.
 2. Substitution:
 - a. [None allowed.]
 - b. [Manufacturers whose products comply with specifications will be considered if substitution request is submitted prior to bidding and in accordance with Division [00] [01].]
- B. Performance/Design Criteria: Comply with ICC-ES Evaluation Report Number 14-01-08 unless greater criteria are stated below: NUMBERS ARE GIVEN.
1. Structural Loads: [_____] [As shown on Drawings.] [Comply with authorities having jurisdiction.]
 2. Pressure Equalized Rainscreen Performance per AAMA 508: 0.13 cfm/sf maximum leakage at 1.57 psf.
 3. Air Leakage per ASTM E283: 0.62 L/sm² maximum at 300 Pa for 15 minutes.
 4. Structural Performance per ASTM E330: No permanent deformation at 0.01 cfm/ft².
 5. Water Penetration per ASTM E331: No leakage at 15 psf for 15 minutes with 5 gal/sf/hr.
 6. Structural Performance per ASTM E1233: Pass cyclic pressure loading from 5 psf to 25 psf for 100 three-second cycles at 0.08 seconds or less.]
 7. Fire Performance per [NFPA 285] [CAN/ULC S134]: 20.3 kW/m² maximum heat flux during 45 minutes of exposure.]
 8. Thermal Expansion and Contraction: $5.2 - 6.3 \times 10^{-6} \times ^\circ\text{F}$.

2.2 SUPPORT SYSTEM WITH CONCEALED ADHESIVE

- A. Product: Neolith HC System with concealed adhesive and vertical furring.
- B. Description:
1. Brackets: Extruded aluminum with vertical and horizontal adjustment slots.
 2. Adjustable Furring:
 - a. Material: Extruded aluminum.
 - b. Configuration: L-shaped or T-shaped with ribbed face flange for improved bonding.
 3. [Non-Adjustable Furring: Cold formed steel with [G90] [____] galvanized coating.]
 4. Mounting Tape: Adhesive on both faces; factory-applied.
 5. Structural adhesive.

2.3 SUPPORT SYSTEM WITH VISIBLE MECHANICAL FASTENING

- A. Product: Neolith VM System with visible mounting clips and vertical stiles.
- B. Description:
1. Brackets: Extruded aluminum with vertical and horizontal adjustment slots.
 2. Adjustable Furring:
 - a. Material: Extruded aluminum.
 - b. Configuration: L-shaped or T-shaped with ribbed face flange for improved bonding.
 3. [Non-Adjustable Furring: Cold formed steel with [G90] [____] galvanized coating.]
 4. Mounting Clips:
 - a. Clips:
 - 1) Material: Extruded aluminum.
 - 2) Finish:
 - a) [Mill finish.]
 - b) [Anodized: [[Black] [Clear].]
 - c) [Painted: Baked-on 70% PVFD, color to match panels.]
 - b. Resilient pads.
 5. Structural adhesive.

2.4 SUPPORT SYSTEM WITH FACTORY-INSTALLED CLEATS

- A. Product: Neolith Strongfix System with, vertical stiles, horizontal rails, and factory-installed mounting cleats.
- B. Description:
 - 1. Brackets: Extruded aluminum with vertical and horizontal adjustment slots.
 - 2. Adjustable Furring:
 - a. Material: Extruded aluminum.
 - b. Configuration: T-shaped.
 - 3. [Non-Adjustable Furring: Cold formed steel with [G90] [_____] galvanized coating.]
 - 4. Rails:
 - a. Material: Extruded aluminum.
 - b. Configuration: Channels with flanges to engage panel cleats.
 - 5. Cleats:
 - a. Material: Extruded aluminum.
 - b. Locations: Full length of panel, at top and bottom of panels.
 - c. Each cleat shall have two aluminum extrusions.
 - 1) The upper extrusion engages in a downward slanted groove in panel; the lower extrusion part engages upward slanted groove in panel. The extrusions shall be adhered in grooves.
 - 2) The two extrusions snap together to trap panel.

2.5 ALUMINUM

- A. Alloy and Temper: As required by shop drawings.
- B. Finish:
 - 1. Visible Surfaces and Substrates for Adhesives: [Black] [_____] anodized.
 - 2. Other Locations: [Mill finish.] [Clear anodized.]
- C. Recycled Content: 20% post industrial and 30% post consumer.

2.6 SINTERED SURFACE PANELS

- A. Product: Neolith by TheSize Surfaces.
- B. Properties:
 - 1. [_____]
 - 2. [_____]
 - 3. [_____]
 - 4. Composition:
 - a. Quartz, feldspar, silica, and pigments sintered under heat and pressure.
 - b. Ceramic or porcelain products are not acceptable
 - 5. Backing: Glass fiber mesh in polyester resin.
 - c. Size:
 - 1. Length and Width: As shown on Drawings.
Use 12 mm thickness where wall is subject to abuse.
 - 2. Thickness: [6 mm] [12 mm] [12 mm within [8] [_____] feet of grade and 6 mm elsewhere].
- D. Finish:
 - 1. Matte: Neolith Satin finish.
 - a. Gloss: [_____]
 - 2. Glaze: Neolith Silk finish.
 - a. Gloss: [_____]

3. Raised Texture: Neolith Riverwashed finish.
 - a. Gloss: [_____]
4. Polish: Neolith Polished finish
 - a. Gloss: [_____]

E. Color:

1. As shown on [Drawings.] [Schedules.]
2. Neolith Colorfeel [Arancio.] [Artic White.] [Avario.] [Chocolate.] [Cobalto.] [Humo.] [Mela.] [Nero.] [Nieve.] [Perla.] [_____]
3. Neolith Fusion [Arena.] [Barro.] [Basalt Beige.] [Basalt Black.] [Basalt Grey.] [Beton.] [Belgium Blue.] [Pierre Bleue.] [Cement.] [Lava.] [Nero Zimbabwe.] [Phedra.] [Pietra di Luna.] [Pietra di Osso.] [Pietra di Piombo.] [_____]
4. Neolith Iron [Ash.] [Blue.] [Copper.] [Corten.] [Frost.] [Grey.] [Moss.] [_____]
5. Neolith Textil [Black.] [White.] [_____]
6. Neolith Timber [La Boheme.] [Ash.] [Ice.] [Night.] [Oak.] [_____]
7. Neolith Classtone [Calcatta.] [Calcatta Gold.] [Estatuario.] [Marfil.] [Onyx.] [Pulpis.] [Stata Argentum.] [Travertino Clasico.] [Traertino Navona.] [_____]
8. Neolith Steel [Marengo.] [_____]

- F. Recycled Content: Not less than [____] pre-consumer recycled content.

2.7 ACCESSORIES:

- A. Fasteners: Types and sizes shown in shop drawings, [stainless steel] [or] [steel with coating providing 800 hours of salt spray resistance without red rust or visible corrosion per ASTM B117.] [_____]
- B. [Stiffeners for Unsupported Edges and Corners: Aluminum.]
- C. [Structural Adhesives: One-part, neutral-cure, RTV silicone sealant, complying with ASTM C920 Type S, Grade NS, Class 50 and ASTM C1184 type S.]
- D. Shims: [Load bearing plastic.] [_____]
- E. Thermal Breaks: [Load bearing plastic [1/8] [____] inch thick.]
- F. Joint Backer: Paper.
- G. [_____]

2.8 FABRICATION:

- A. Cut panels to size.
- B. Edge Tolerance: 1 mm.
- C. Edge Finish: Lightly sanded and free of sharp edges. [Edges that will be visible at corners shall be finished to match] [_____] adjacent surfaces.]
- D. Panels with Cleats: Cut panels to size and install cleats in factory.

PART 3 - EXECUTION

3.1 INSTALLERS

A. Installer List:

1. [_____]
2. [_____]
3. [_____]

3.2 EXAMINATION

A. Verification of Conditions: Verify that items that will be covered by rainscreen are in acceptable condition prior to installing work of this Section.

3.3 INSTALLATION

A. Install in accordance with manufacturers instructions and approved shop drawings.

B. Brackets: [Use thermal breaks at thermally-insulated locations.]

C. Furring:

1. Insulated Walls: Install adjustable furring.
2. [Uninsulated Walls: Install non-adjustable furring.]

D. Adhered Components:

1. Surfaces to which adhesives or tapes will be applied shall be clean, dry, and free from contaminants.
2. Prime substrates where required in accordance with adhesive [and tape] manufacturer's requirements.
3. Apply adhesive [and tape] in accordance with manufacturer's instructions.

E. Install Panels.

1. Panel Layout:

- a. Install panels with direction of manufacture consistent on each facade [unless otherwise required.
- b. [Layout [as shown on Drawings.] [with [Book match] [slip match] [diamond match] [random] [checkerboard] [_____] pattern.]
- c. [Panels with Bleed Direction: Install with bleed downward.]

2. Joints between Panels and Between Panels and Adjacent Materials:

- a. Vertical Joints: [1/8] [1/4] [____] inch.
- b. [Horizontal Joints: [1/8] [1/4] [____] inch.]
- c. [Horizontal Joints: [1/2] [____] inch. Panels shall be installable and removable non-progressively.]

F. Do not bridge building expansion or movement joints.

G. Unsupported Edges: Do not exceed 4 inches from nearest support. [Support all edges within [eight] [____] feet of grade.]

3.4 TOLERANCES

A. Out of Plane: [_____]

B. Plumb and Level: [_____]

C. Width of Joints: [_____]

3.5 CLEANING, REPAIR, AND PROTECTION

- A. Remove excess sealant and other contaminants on surface.
- B. Repair or replace damaged panels to satisfaction of Architect.
- C. Protect installed work from damage.

3.6 CLOSEOUT ACTIVITIES

- A. [_____].

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Almazora (Spain), October 2017

Neolith Sintered Stone becomes part of the CEU Program with 2 Certified CEU Courses:

- **Design Basics for Sintered Stone: ISFA14SC4101**
- **Sintered Stone for Building Facades: AIACE4012016**

In the future, more courses will be added to our education program.

Please, contact your local Neolith Distributor to request a CEU course.