Technical Data Sheet

Architectural Terrazzite Floor Topping System

DESCRIPTION:

Architectural Terrazzite is a thin set (6mm) synthetic resin bound Terrazzo floor finish featuring a colour resin base and numerous aggregate types. The final effect is determined by both the resin base colour and the choice of Marble chips |aggregates. This offers the designer an unlimited choice of colour, chip appearance and overall layout.

The floor may be laid with colour patterns, borders, metal (brass) dividing strips or in any effect required.

Architectural Terrazzite is a hard wearing, jointless (not tiles), thin set polished Terrazzo that may also emulate the look of Polished Concrete

TYPICAL FEATURES | BENEFITS:

- Excellent aesthetic appeal.
- No odour during installation (Use the ***ZV system*** in this situation). The standard grade has an installation odour for 3-6 hours).
- Can incorporate detailed inlays, designs, logos and patterns within the floor topping.
- Non-yellowing
- Good exterior weathering resistance and durability
- Very good abrasion and scuff resistance.
- Excellent adhesion to properly prepared substrates.
- Excellent impact resistance.
- Easily cleaned and maintained with the correct polishes.
- Not moisture permeable.
- Excellent resistance to thermal shock.
- Slip resistant option available for wet areas – refer to allnex Industries.
- Colour: Available in a wide range of colours.

Environmental rating:

Architectural Terrazzite is supplied in two forms:

Architectural Standard and Architectural ZV versions. Both emit, on curing, less than one gram / lt of emitted materials .

These therefore are both considered to comply with Green Star or LEEDS systems for a star for applied coatings for low emission of solvents.

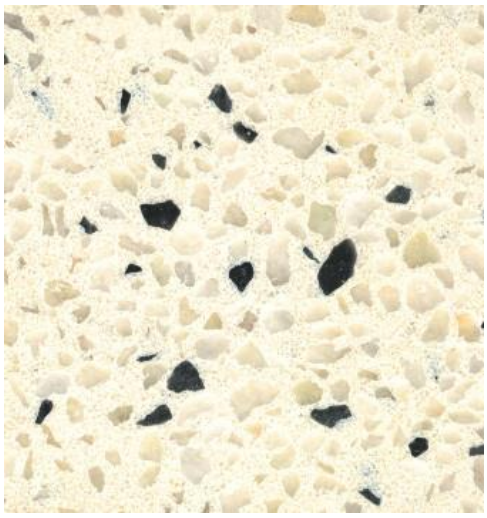
The standard version has an odour during application (but still emits far less than 1gram/litre).

The ZV (zero VOC or zero volatile organic compounds) has no odour during installation.

This latter system would have enhanced ratings for lower workplace impact.

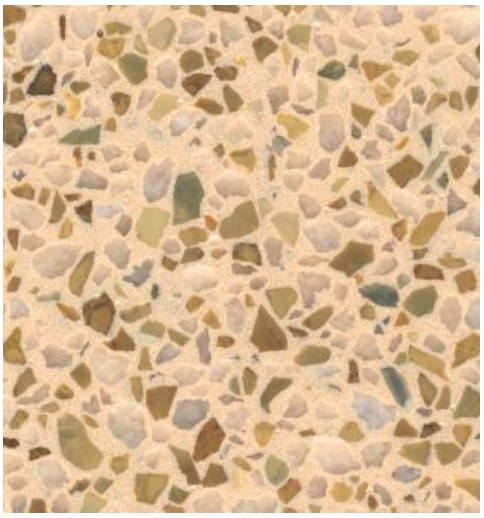
The resin is mixed on site with NZ sourced marble aggregates. Around 80% of the system is marble aggregate and only 20% resin.

COLOURS:
The Architectural Terrazzite has a range of base (resin) colours.
The addition of marble, first fired glass, mirror glass etc. makes up the desired effect.
See sample colours below:



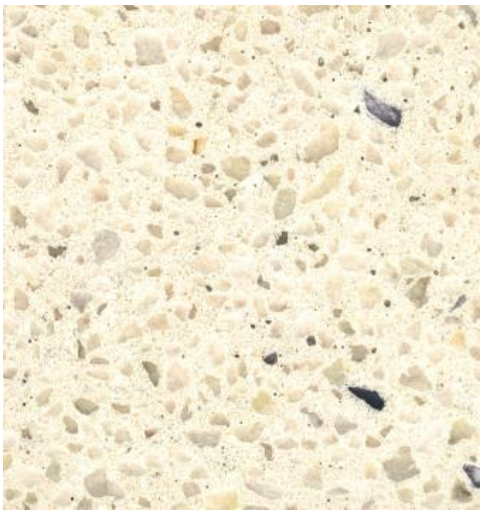
10A01

08B17 – 50%

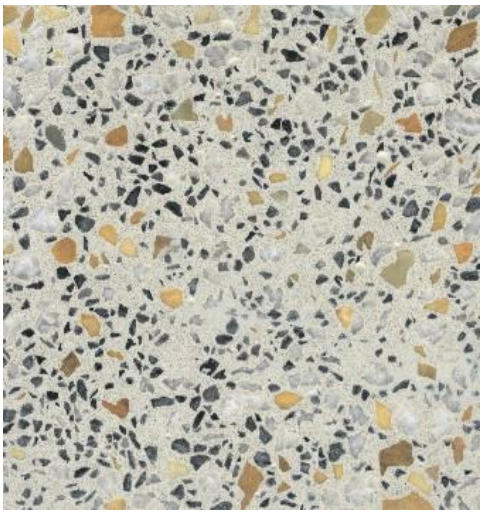


08B17

AT5 ref: 1129



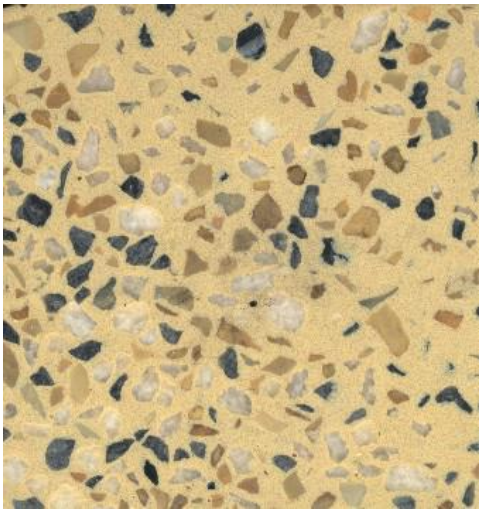
10A01 White : no black chip



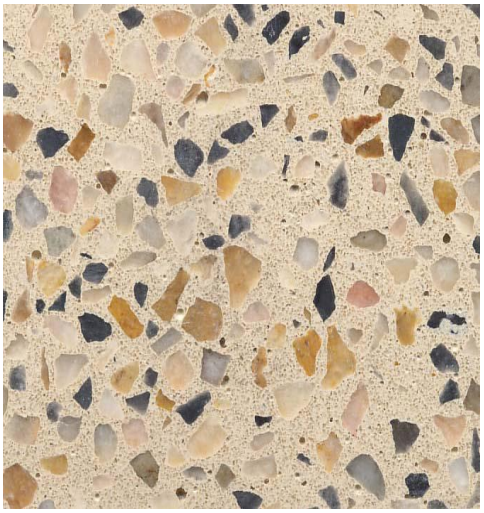
AT15

NC4

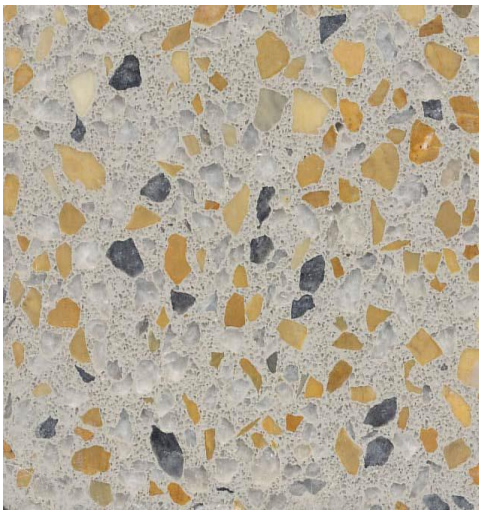
NC5



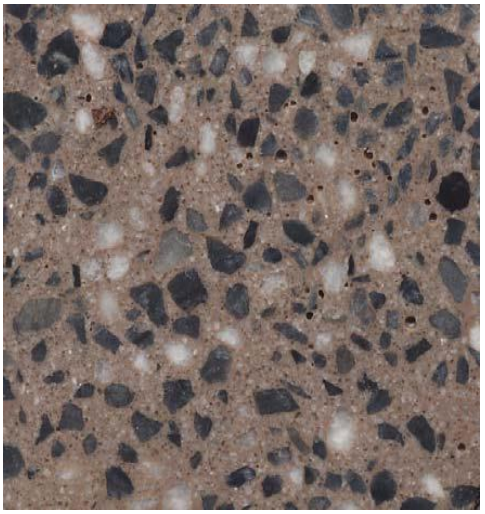
Hay ref: 1129



6.5B06



1139



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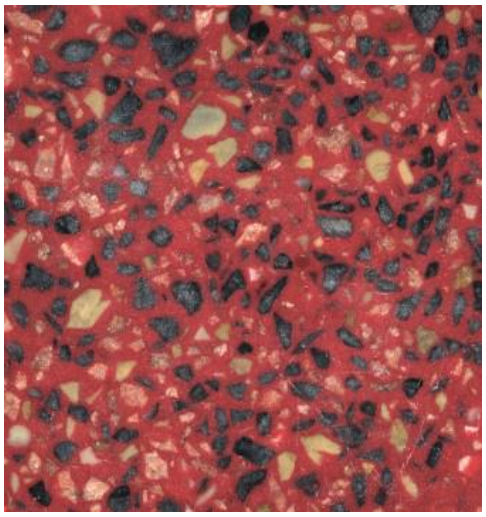
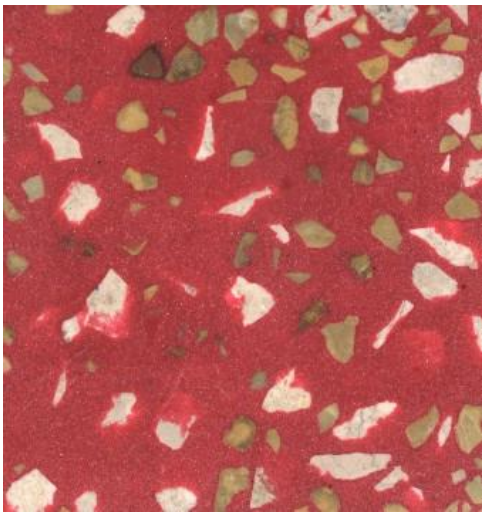
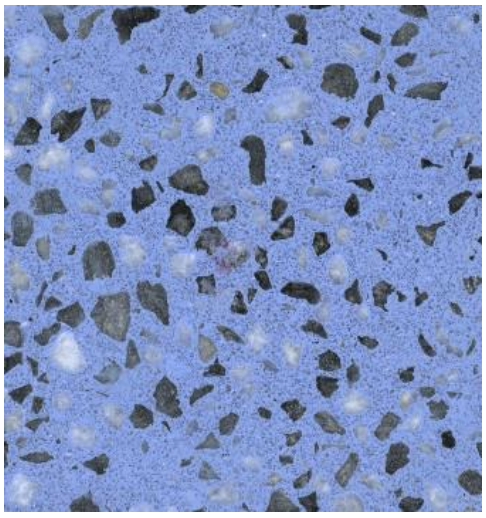


1BR53 ref: 1108 Jazz

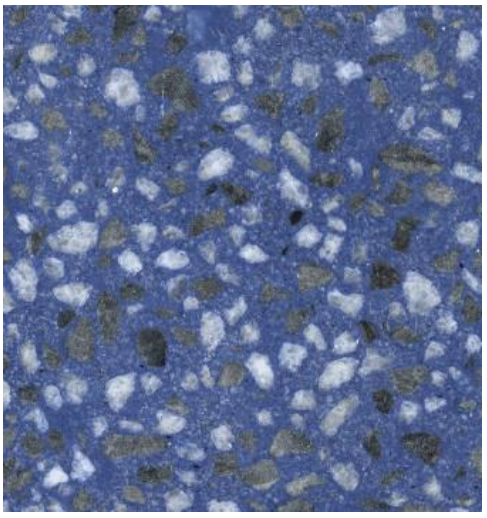


1BR53 ref: 1108 Jazz - no black chip

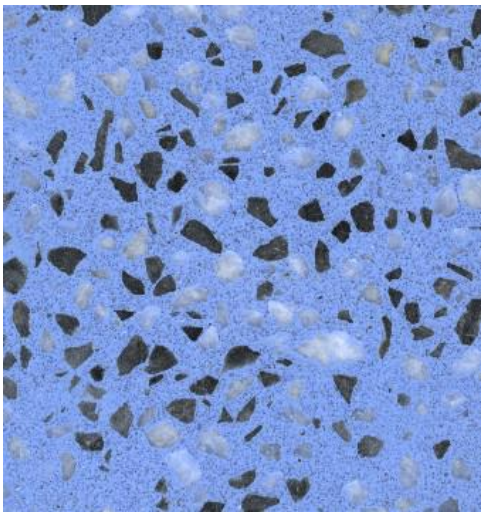
04C40



20D43

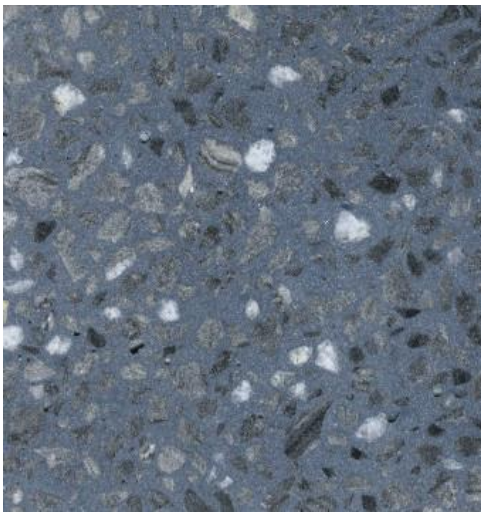


20D45

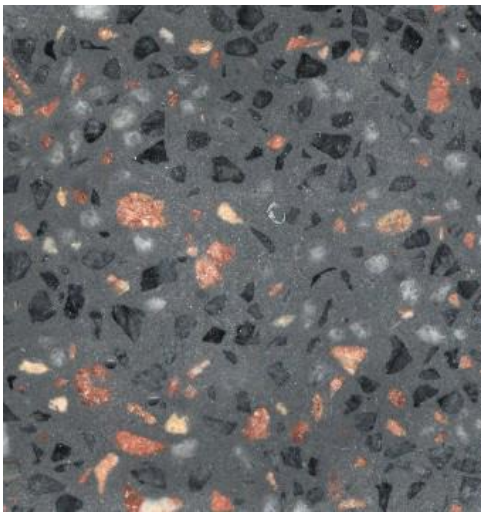


20E51

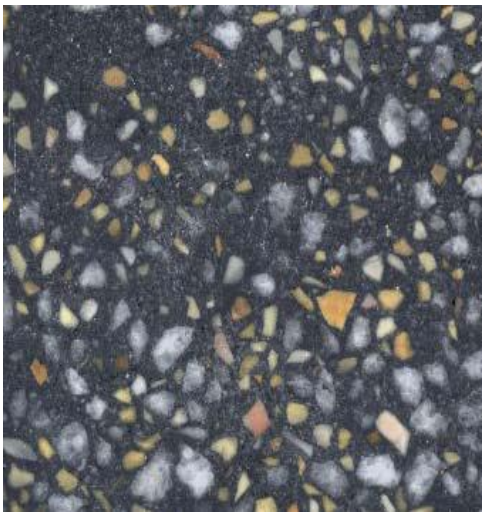
30B07 041 ref: 1129



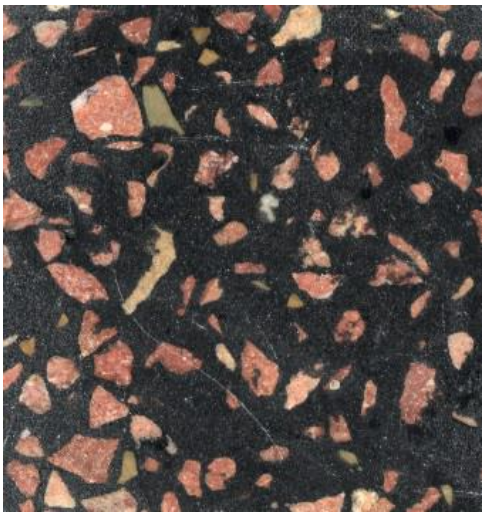
5405C



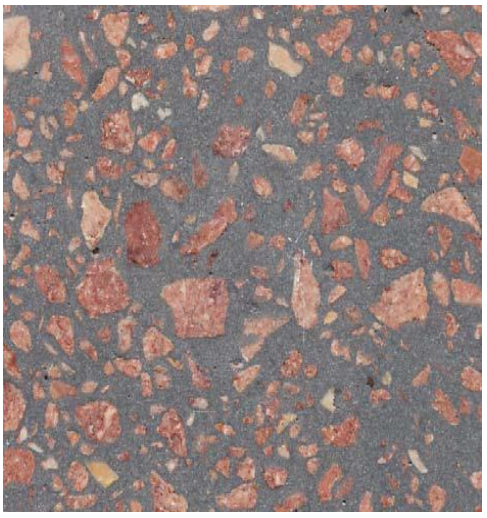
Charcoal



DMJ3



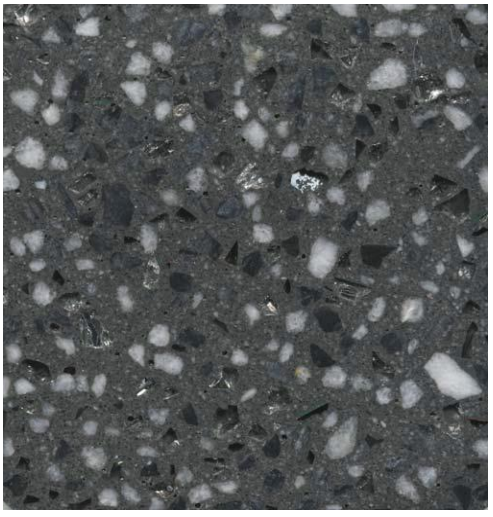
Black red 1112



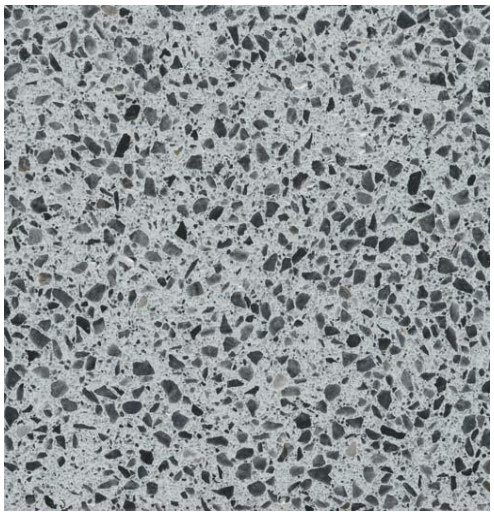
Embers

1625 / 10A07

1748 / 00A07



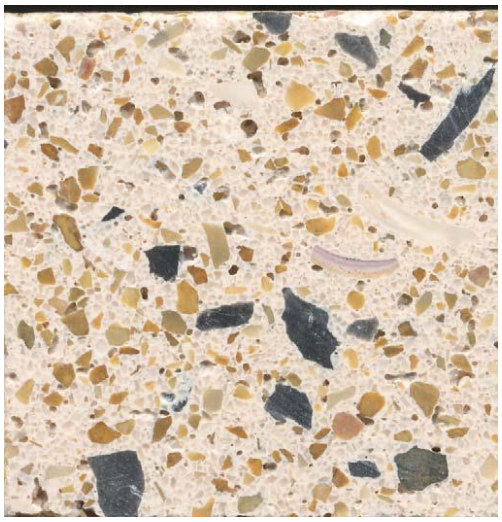
1760 with crushed mirror



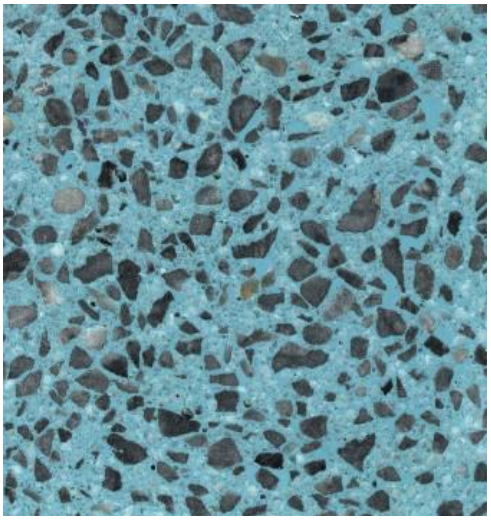
1764 / 18B17

1765 / 10A03

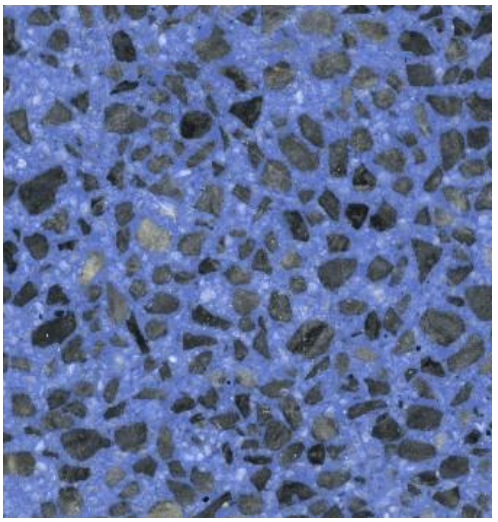
1626 / 08B27



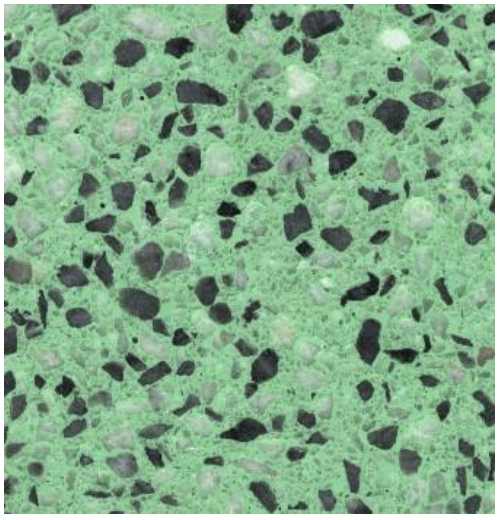
Half Beige - with shell



US5

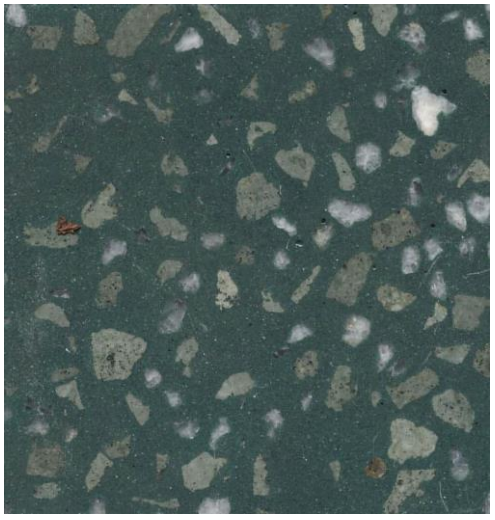


US7

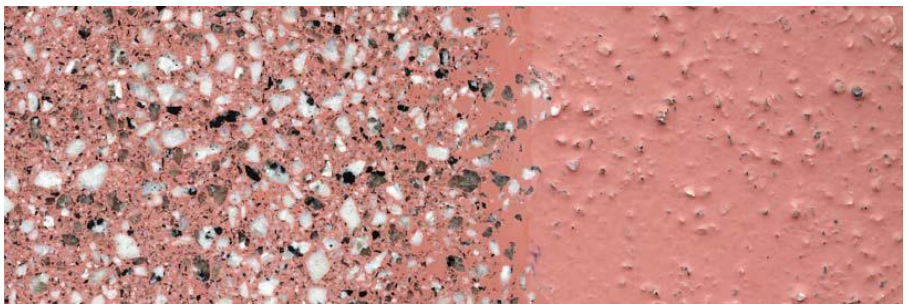


US8

US9



US10



Granite based red Architectural Terrazzite showing how the aggregate effect is exposed after diamond grinding of the applied surface

PERFORMANCE DATA:

Minimum Application Temperature: Air		$^{+}$10°C
Maximum Application Relative Humidity: Air		85%
In-service temperatures:		$^{-}$30 to $^{+}$80°C
Abrasion Resistance ASTM C501 (H22 abrasive wheels and 1000gm load)		Abrasive wear index 22
Fire properties: Critical radiant flux: TEST METHOD AS/ISO-9239-1		7.4KW/m²
Flammability AS 1530.3-1989:	Ignitability Index (0-20)	10
	Spread of Flame Index (0-10)	6
	Heat Evolved Index (0-10)	3
	Smoke Developed Index (0-10)	6
Ignitability: Tested in accordance with BS4790:1987		Pass:
	Time till flame extinction:	30 seconds
	Time of after-glow:	4 seconds
	Containment radius:	15mm
Co-efficient of thermal expansion: ASTM C531		1.49 x 10-5/°C
Shore D hardness:		38
Cohesive failure of the concrete		1.3Mpa
Compressive strength:		62Mpa
Flexural strength:		17.6Mpa
Tensile strength: ASTM C307		10.1Mpa
Slip resistance: NZ/AS 3661 1993	Dry	Complies
Slip resistant option available for:	Wet areas	0.65 – refer allnex Industries
Minimum thickness:		6.0mm
Weight: m²@ 6.0mm thick		12.88kgs/m²

RECOMMENDED USES:

- Floors where aesthetic appeal and wear resistance is a prime requisite.
- To give a cleanable attractive floor in areas subject to excessive foot traffic.
- Shopping Malls
- Supermarkets
- Company logos in entrances or foyers
- Retail: shops, offices.
- Food Halls
- Showrooms, display areas.

LIMITATIONS:

- Application below $^{+}10^{0}$C.
- Application to green (uncured) concrete. Allow 28 days.
- Application over existing coatings – remove.
- Application where fumes may contaminate adjacent foodstuffs (only applies during and for 3 hrs after application). (Refer allnex Industries: - Architectural Terrazzite ZV for no-odour installations).
- Application to unsound substrates.
- Application to incorrectly prepared surface.

HEALTH & SAFETY:

Refer safety data sheets (SDS).

SUBSTRATE:

All substrates shall be stable and solid.

Concrete: New

Shall have a surface which has been mechanically trowelled to AS3610:1995 U3/NZ/3114:1987U3 finish.
Concrete shall be cured for a minimum of 28 days prior to the installation of the Terraflake.
Minimum Compressive Strength at 28 days cure: 25 MPa. (25 N/mm^2)
The moisture content shall be less than: 75% RH.
Have a suitable vapour resistant membrane beneath the concrete.

Concrete: Old

Minimum Compressive Strength: 25 MPa. (25 N/mm^2)
The moisture content shall be less than: 75% RH.
Have a suitable vapour resistant membrane beneath the concrete.

QUALITY ASSURANCE:
The allnex Licensed Contractor shall ensure all QA checks have been undertaken prior to the installation process and subsequently during the installation process. The completed documentation must be made available to allnex and the client/clients authorised personnel.
The product is to be installed within the required control range to ensure a fully cured hard wearing monolithic floor coating system.

Information to be recorded daily is:

- Concrete sub-base or prefill mix.
- Material batch numbers used.
- Sequence of mixing, ratios and quantities and formula.
- Substrate moisture content & Substrate temperature.
- Ambient temperature | Ambient relative humidity.
- Daily detail of licenced contractors on-site.

PRODUCT PROPERTIES:

Pot Life	25^{0}C - 50%RH	20 – 30 minutes
Hard Dry	25^{0}C	3 hours
Light Foot Traffic	25^{0}C	3 hours minimum
Full Use	25^{0}C	> 4 hours
Recoat	Anytime within 24 hours. After 24 hours: Severe mechanical abrasion	
SG kg/litre Resin | Hardener | Aggregate	2.148	
Clean up	Acetone	
Dangerous Good Class <u>Standard System</u> ~STZ Primer ~Architectural Terrazzite Resin ~STZ Hardener <u>ZV System</u> ~Intafloor ZV Primer ~Architectural Terrazzite ZV Resin ~M100 Hardener	 Hazard Class 3 | Packing Group III Hazard Class 3 | Packing Group III Hazard Class 5.2 Hazard Class 9 | Packing Group III Hazard Class 9 | Packing Group III Hazard Class 5.2	
Packaging <u>Standard System</u> ~STZ Primer ~Architectural Terrazzite Resin ~STZ Hardener <u>ZV System</u> ~Intafloor ZV Primer ~Architectural Terrazzite ZV Resin ~M100 Hardener	 20 kg Open top metal container 20 kg Open top metal container 3.6 kg Plastic Bottle 20 kg Open top metal container 20 kg Open top metal container 5 kg Plastic Bottle	
Shelf life	6 months from date of manufacture (After this period consult with allnex)	

SURFACE PREPARATION:
Prepare concrete by mechanical abrasion method to CSP7-8.
Remove all concrete curing agents, contaminants and any other material likely to affect the adhesion of the Architectural Terrazzite.

STZ PREFILL: (for adding falls, slope modification and floor angles)
Where required:
STZ prefill system types: See STZ technical literature. http://www.allnexconstruction.com/pdf/stz_prefill.pdf
The falls must be specified pre-tender. (Architectural Terrazzite is medium build floor topping and prefill may involve significant extra materials).
The quantities of materials required to raise the floor height at wall perimeters is often underestimated. To do this may involve significant extra costs and should be discussed and agreed. It is a very common for STZ prefill system to be used under Architectural Terrazzite to create falls | Levels and other filling applications.
Normally for new work falls and the correct levels are laid in the concrete.

SLIP RESISTANT FINISHES:
Refer: allnex Industries.

CONCRETE CONTROL JOINTS:
All control joints are to be reflected through the Architectural Terrazzite. These may be used / incorporates as part of the design/pattern of the floor.

SURFACE FINISHING OF THE ARCHITECTURAL TERRAZZITE:
Once installed, Architectural Terrazzite is progressively finished with finer grinding stones until an even aggregate effect is obtained. All areas must be evenly treated.

Prior to handing over, two coats of **CRYSTAL SEAL** are applied to prevent contamination.

Wet areas: To more fully seal the surface apply two coats of Revathane non-yellowing glaze in place of the Crystal seal.

*****Note*****
If the solvent based Crystal Seal or Revathane cannot be used because of fumes, then use three coats of non-yellowing Aquaglaze UV.

The floor owner should then immediately treat the floor with multiple coats of a normal water-based floor polish. This should be repeated on a normal basis as part of the floor maintenance. (Refer: Cleaning |Maintenance section below)

CLEANING | MAINTENANCE:
Always use a sealer and a polish with Architectural Terrazzite

The Architectural Terrazzite is maintained by the use of a Sealer & Polish regime.

Sealer | Floor Finish & protection materials
Approved systems are: **ADVANCE International cleaning systems**

Basecoat: Pioneer Eclipse Sealer – First step sealer
Topfinish: Pioneer Eclipse Equinox – Sta Brite 20
Maintainer: Pioneer Eclipse - Extend Autoburnish
Cleaner: Pioneer Eclipse Neutral Cleaner.

Plan Daily, Weekly and Quarterly cutbacks to maintain top appearance and life.
(Refer to specific product recommendations).

Note
Do not use strong acidic, alkaline or chlorine-based cleaners on Architectural Terrazzite as they will attack or discolour the marble composition of the Architectural Terrazzite or metal strips.

Ensure all detergent materials, dirt etc. is thoroughly rinsed from the surface following cleaning.

FIXING OF PLANT AND MACHINERY:
Mechanical fixings into the floor must be resin fixed. This is to ensure that there is no water migration into the substrate. Conventional expanding plugs, screws or anchors <u>are not</u> an acceptable fixing method.

CHEMICAL RESISTANCE:
Chemical spillages should be cleaned up immediately.

PRODUCER STATEMENT
The products, systems and application of allnex Architectural Terrazzite comply with the requirements of the Building Industry Authority and related acts. Two items of key importance are complied with. These are slip resistance and durability. The warranties implied by the "Durability" code are accepted and complied with. The factors required by the slip resistance code are also complied with.

Floors above work spaces:
Architectural Terrazzite forms a watertight barrier and is compliant with E3 Internal water 3.1.1e. (Use full fibreglass laminated floor and Joint safe tape in these situations).

*****Note*****

If the substrate is an above grade slab and waterproofing is required to comply with NZBC E3, then tank the floor and cove upstands with a layer of 450gsm CSM fibreglass prior to the Architectural Terrazzite application.
This will provide a seamless waterproofing layer.

Complies with D1 Access routes.

FULL SPECIFICATION:

A full and highly detailed specification is available on request from allnex Industries Ltd.
This specification is to be read in conjunction with relevant technical data sheets.
If in doubt please contact allnex Industries Ltd, Construction Products Division.

Installation of Brass Strip

Architectural Terrazzite has been installed

Grinding Process underway

Completed Floor

Date: April 2020
Replaces: Nov 2019

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Wellington - 19A Jamaica Drive Grenada North phone: 04-240-0305. **Christchurch** – 112 Carlyle Street Sydenham phone: 03-366-6802
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