

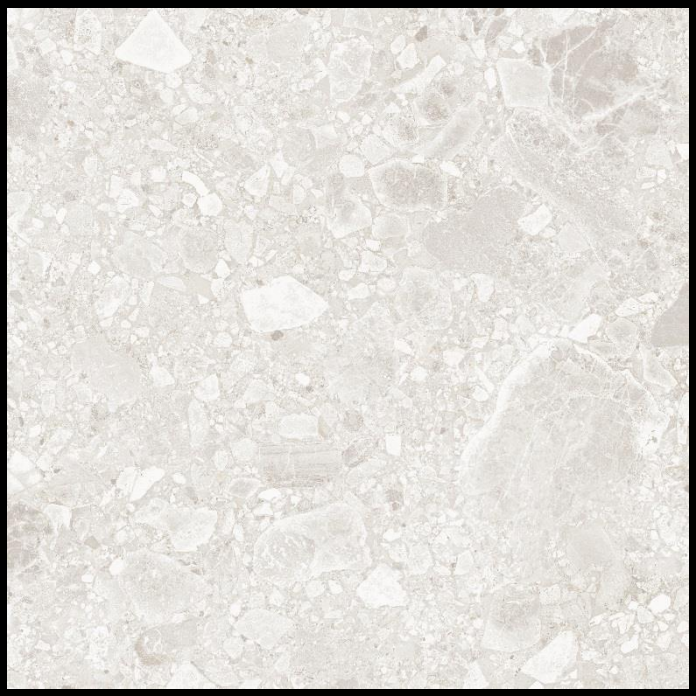
STUDIO TERRAZZO

When it comes to a gorgeous tile that has a stunning individual look, Terrazzo is the right selection for you. Studio Terrazzo has been inspired by the beauty of Venetian Terrazzo and is an ideal choice for indoor or outdoor areas. Perfect for adding to new or existing decor schemes, Terrazzo won't fail to impress no matter the environment it is featured in. Now available in three sizes 300x600, 300x300 and 450x450.

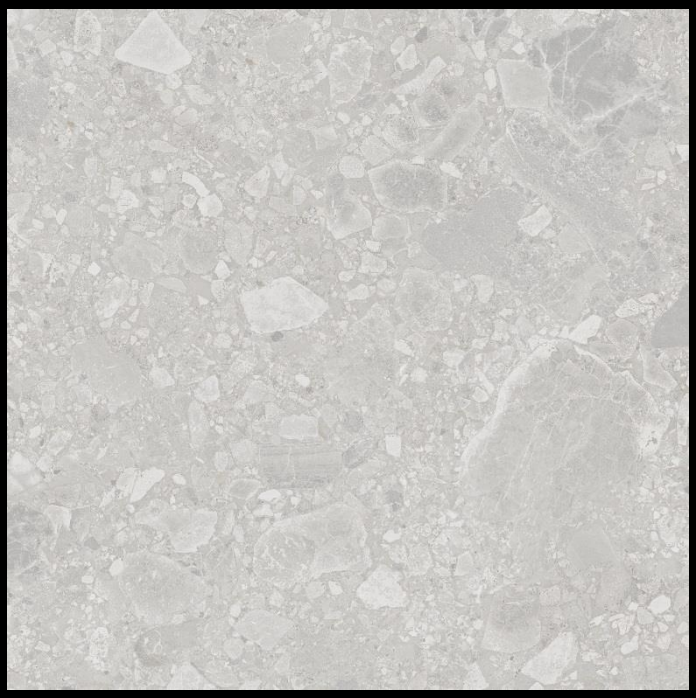
STUDIO TERRAZZO

GNS CERAMICS
EXCLUSIVELY WHOLESALE

White



Grey



Natural



300x300mm
Matt (P3)

450x450mm
Matt (P2)
External (P5)

300x600mm
Matt (P4)

AUSTRALIAN MADE

Glazed Porcelain

V2 Variation

Cushioned Edge

Floor Cat. 4

P3 300x300

P4 300x600

P5 External

GNS Ceramics recommends that our retail shops pass on the following information to the installer and end-user.

Click or Scan for Installation Instructions

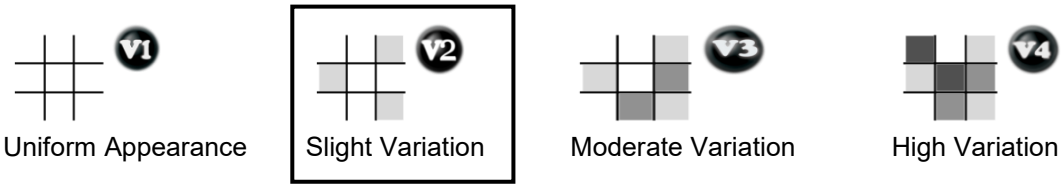
Ceramic tiles are only one component of a much larger building system. It is our experience that failure of any tiling system is very often the result of a combination of factors. For example; inappropriate design, type of substrate, surface preparation, temperature during installation, adhesives, incompatibility of products, product failure, environmental factors skill and knowledge of the installers etc; the latter being supplied or controlled by a variety of manufacturers and tradesmen. GNS Ceramics has no involvement in the design, selling and installation processes and once goods have been dispatched from our warehouse we have no control over where and how these products are used. As a result the project manager, and or the tiler are the only people in a position to ensure that all the components used in a project are compatible and that the product is installed in accordance with the Australian Building Code and the Australian Standards.

Installation Instructions for all types of tiles can be found in the GNS Ceramics Price List, and on our website. We suggest these are followed at all times.

Cleaning and Maintenance

Do not use abrasive cleaners and chemicals which could permanently scratch and damage the surface of the tile. For daily cleaning we recommend the use of a mild PH Neutral detergent. Should a more vigorous cleaning programme be required we recommend the use of a proprietary tile cleaner from a specialty tile supplier.

Colour & Pattern Variation Guide



Slip Resistance

The best way to minimise the risk of slipping is through safe design principals. This involves a risk management approach which evaluates the likelihood and consequence of an incident to occur. Slip resistive flooring is only one of the design components to consider, other design features should also be considered, including awnings, airlocks, matting and a suitable cleaning regime to reduce the extent of contaminates. Visual aids, warning signs, handrails and lighting, along with the footwear to be worn, should also be considered.

All ceramic tiles can be slippery, particularly when wet. This includes tiles, commonly used in wet areas such as bathrooms. It is important that customers be aware of the potential danger of wet ceramic tiles and seek advice from the retailer as to the level of slip-resistance of any particular tile, and its suitability for the intended application. If there is any doubt, tiles should be tested for slip-resistance immediately after being laid, under the conditions that they will be subject to during use. While tiles may achieve an acceptable standard in a laboratory test, it is quite probable that the performance in-situ will be less than expected, due to installation methods, wear & tear, cleaning regimes and unforeseen circumstances. Test results should therefore to be seen as a relative guide to estimate the merits of one tile versus another and should be used in conjunction with the Australian Building Code and the relevant Australian Standards. Further information on slip resistance is provided in the Australian Standards HB198:2014 - An Introductory guide to the slip resistance of pedestrian surface materials.

There are many factors beyond the control of the supplier that can affect the level of slip-resistance of tiles, or contribute to the incidents of injury through slipping. Consequently, the laboratory test results presented here must not be viewed to mean that GNS Ceramics Pty Ltd, is providing any warranty, nor will accept any liability for personal injury or accidents arising from the selection or installation of tiles under any circumstances.

Classes of Use

The classification has taken into account the recommendations of the Australian Standards; however, they are given for general guidance only. They are valid for the given application under **NORMAL CONDITIONS** and should not be taken to provide accurate product specifications for specific requirements.

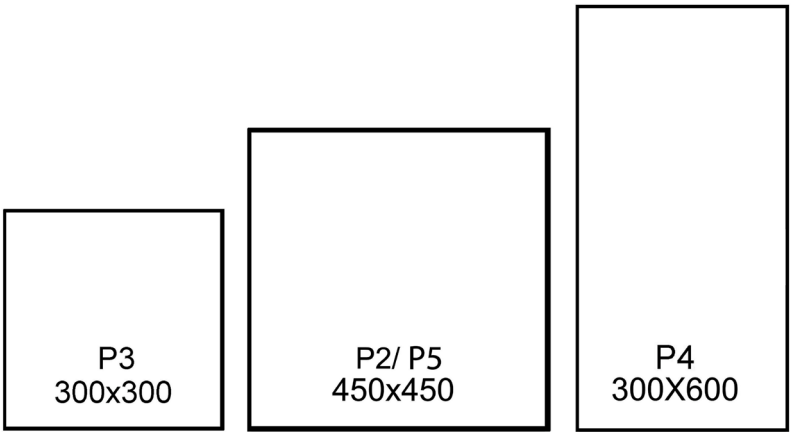
WARNING: Other standards and building code requirements may affect your selection of tiles.

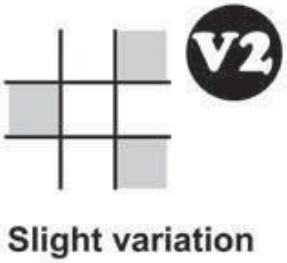
Consideration should be given to the footwear, type of pedestrian traffic and cleaning methods expected. Floors should be adequately protected against soiling from following trades during installation; they should also be protected against scratching dirt at the entrances to building by interposing footwear cleaning devices. For example, mats, shoe scrapers, static devices, etc.

CLASS 4 - Floor coverings that are walked on by regular traffic with some scratching dirt so that conditions are more severe than CLASS 3; For example, entrances, laundries with external access, living areas, entertainment areas, patio's, sales rooms, motels.

STUDIO TERRAZZO





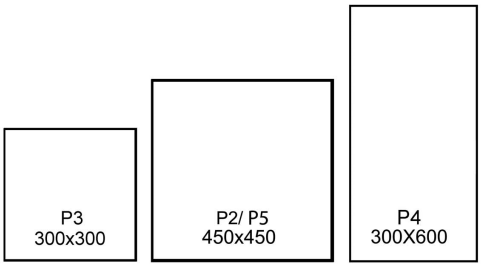


Slight variation



STUDIO TERRAZZO

RANDOM PRINTING 1980x1320



Australian Made Tiles

175 Racecourse Rd, Rutherford NSW 2320
PO Box 765 Maitland NSW 2320
Australia
Tel: 02 4931 8400 Fax: 02 4931 8499
www.ncia.com.au
ABN 83 100 467 267

NCIA Specification Sheet

Studio Terrazzo Range

NCIA Product Code	Description	Nominal Size (mm)	Nominal Thickness (mm)	Pendulum (slip) Rating	PEI Rating
ZST62522A	Studio Terrazzo Grey 300*300	300*300	6.3mm	P3	4
ZST62622A	Studio Terrazzo Natural 300*300	300*300	6.3mm	P3	4
ZST61522A	Studio Terrazzo White 300*300	300*300	6.3mm	P3	4
ZST12555A	Studio Terrazzo Grey 300*600	300*600	8.5mm	P4	4
ZST12655A	Studio Terrazzo Natural 300*600	300*600	8.5mm	P4	4
ZST11555A	Studio Terrazzo White 300*600	300*600	8.5mm	P4	4
ZST2045A	Studio Terrazzo Grey 450*450	450*450	7.5mm	P2	4
ZST2145A	Studio Terrazzo Natural 450*450	450*450	7.5mm	P2	4
ZST1045A	Studio Terrazzo White 450*450	450*450	7.5mm	P2	4
ZST2545A	Studio Terrazzo Grey External	450*450	7.5mm	P5	4
ZST2645A	Studio Terrazzo Natural External	450*450	7.5mm	P5	4
ZST1545A	Studio Terrazzo White External	450*450	7.5mm	P5	4

Product Specific Information

Screen Size	1980*1320mm
Variation Rating	V2 – Slight Variation (similar colour tones)
Print Mode: 300*300	Random Print within 6 600*600 faces
Print Mode: 300*600	Random Print within 6 600*600 faces
Print Mode: 450*450	Random Print within 6 600*600 faces

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NCIA Specification Sheet

NCIA products conform to Group B1b. NCIA tiles meet and exceed requirements under AU ISO 13006-2020.

NCIA tiles are classified as a low water absorption vitrified tile under Australian Standards.

Category	NCIA Standards	International/Australian Standards
Length and Width	+- 0.5mm(difference from work size)	+-2.0mm (difference from work size)
Thickness	+- 0.5mm(difference from work size)	+- 0.5mm(difference from work size)
Centre Curvature	+- 0.5mm	+-2.0mm
Straightness of Edge	+- 0.5mm	+-1.5mm
Edge Curvature	+- 0.5mm	+-2.0mm
Rectangularity	+- 0.5mm	+-2.0mm
Resistance to Surface Abrasion	Minimum PEI 3	
Stain Resistance	Minimum Class 4	Minimum Class 3
Resistance to Chemicals	Class A	
Water Absorption	Less than 3%	
Resistance to Crazing	No Crazing	
Resistance to Frost	Resistant	
Resistance to Fire	Non-Flammable	
Gaseous Emissions when Exposed to Fire	No Emission	
VOC Emissions	No Emission	
Fading in UV/Sunlight	Color Permanence	
Moisture Expansion	Less than 0.01%	Less than 0.06%
Modulus of Rupture (N/mm2)	Minimum 30N/mm^2	Minimum 30N/mm^2
Surface Quality	Minimum 98% Defect Free	Minimum 95% Defect Free

Work Size	Nominal Thickness
300*300	6.3mm
450*450	7.5mm
500*500	8mm
300*600	8.5mm
600*600	9mm

Work Size	M2 per pallet	Boxes per pallet	M2 per box	Pieces per box	Pallet weight kgs
300*300	95.04	48	1.98	22	1335
450*450	113.6	80	1.42	7	1800
500*500	72	48	1.50	6	1224
300*600	69.12	48	1.44	8	1248
600*600	69.12	48	1.44	4	1290

Chemical Composition (Average)	%
Na_2O	2.76
K_2O	3.95
MgO	0.69
CaO	0.58
Mn_3O_4	0.08
Al_2O_3	18.30
Fe_2O_3	1.40
SiO_2	70.00
- (Crystalline Silica)	- (15-25%)
TiO_2	0.66
P_2O_5	0.06
SO_3	<0.01
LOI	<1.70

Product Warranty	Term
Domestic Use	10 years
Commercial Use	7 years

Other	Reference
Operating in NSW under Environment Protection License	11956
MSDS	www.ncia.com.au
Cleaning/maintenance recommendation	www.ncia.com.au
Contact	sales@ncia.com.au
Raw materials	Sourced from NSW & Victoria
Employment	60 staff
Current Production Capacity	7million m2 per annum
Australian Made License	8934
Member of the Australian Tile Council	
NATA accreditation	20807

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY NAME: National Ceramic Industries Australia. ABN: 83 100 467 267.
https://www.nationalceramicindustries.com.au
COMPANY ADDRESS: 175 Racecourse Rd, Rutherford NSW 2320, Australia
EMERGENCY TELEPHONE NUMBER: (02) 4931 8400

PRODUCT NAME: NCIA Tiles
OTHER NAME: Ceramic Tiles
PRODUCT USE: Building Materials –used as floor covering and decoration

2. HAZARDS IDENTIFICATION SUMMARY

The manufacturing process of NCIA tiles involves mixing raw materials predominantly clays and other natural occurring minerals with water and the trace amount of organics, pressing into desired shapes, and then drying prior to glazing and decorating. After that the tiles are fired in a high temperature kiln. The organics are burning out during firing. All NCIA tiles are made in accordance with International and Australian Standards. The finished, fired tiles are odourless, stable, non-flammable, and pose no immediate hazard to health.

The fired tiles do not contain asbestos. They do not release hazardous materials after installation and are not considered hazardous waste should disposal be necessary under normal conditions. Respiratory, hand and eye protection may be needed to prevent excess exposure to airborne particulates if dust is produced by cutting the tiles during installation or if dust is produced by any other operations, including demolition/removal projects.

GHS Classification	Hazard Statements	Pictogram
Crystalline Silica: Category 3 (Respiratory tract irritation) (H335)	May cause respiratory irritation.	
Categories 1A(Carcinogenicity)(H372)	Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation).	
Carcinogenicity Category 1A (H350)	May cause CANCER (inhalation).	No

2.1. Definition

Term	Definition
NCIA	National Ceramic Industries Australia Pty Ltd
GHS	Global Harmonized Standard
OSHA	Occupational Safety and Health Administration
PEL	Permissible exposure limits. They limits are established by OSHA
IDLH	Immediately dangerous to life or health. It is defined by NIOSH as exposure to airborne contaminants that is "likely to cause death or immediate or delayed permanent adverse health effects or prevent escape from such an environment."

NIOSH	US National Institute for Occupational Safety and Health
TLV	Threshold limit value
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
LFL	Lower Flammable Limits
TB	Tuberculosis
IRAC	International Agency for Research on Cancer

3. COMPOSITION, INFORMATION OF INGREDIEN

Ingredient	**CAS Registry Number**
α-quartz as a major crystalline	14808-60-7
Mullite as a trace crystalline	1302-93-8
Glass (amorphous)	60676-86-0

The tile contains the following major elements:

wt%	**Na_2O**	**MgO**	**Al_2O_3**	**SiO_2**	**P_2O_5**	**SO_3**	**K_2O**	**CaO**	**TiO_2**	**Fe_2O_3**	**L.O.I**	**Sum**
Tile	2.46	0.43	18.51	70.44	0.07	<0.01	4.05	0.19	0.65	1.51	0.31	98.62

The tile contains the following trace elements:

Element	**ppm**	**Element**	**ppm**
V	50	Zr	416
Cr	59	Nb	22
Mn	492	Ba	808
Co	68	La	55
Ni	13	Ce	68
Zn	183	Nd	37
Ga	25	W	732
As	44	Tl	15
Rb	214	Pb	30
Sr	106	Th	22
Y	40	U	12

4. FIRST AID MEASURES

IF ON SKIN OR CLOTHING: Wash thoroughly after working with tiles.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Call a doctor for treatment advice.
IF INHALED: Remove to fresh air if exposed to large amounts of tile dust. Administer artificial respiration if breathing has stopped. Keep victim at rest. Call a doctor for treatment advice.
IF SWALLOWED:. Not applicable for intact tiles.
Have emergency eyewash station available in area where tiles are cut.

5. FIRE FIGHTING MEASURES

Flash Point (Method Used)	Not applicable
Autoignition Temperature	Not applicable
Flammable Limits (% by Volume in Air)	LFL - not applicable
Fire Extinguishing Media	None required Non-flammable
Special Fire Fighting Procedures	None required
Fire and Explosion Hazards	None

6. ACCIDENTAL RELEASE MEASURES

Avoid creating excessive dust during cutting tiles. Clean up dust with a vacuum system with a High-efficiency particulate air filter vacuum or damp sweeping. See Section 8 concerning personal protection information for clean-up.

7. HANDLING AND STORAGE

HANDLING: When cutting, grinding, use only in a well-ventilated area. Minimize dust generation and accumulation. Use wet cutting methods to reduce generation of dust. Use respiratory protection in the absence of effective engineering controls.

STORAGE: Do not store near acids. If tiles contact some acids, damage/discoloration to the surface may occur. Shelf life is unlimited.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Major Ingredient	OSHA PEL	NIOSH IDLH	ACGIH TLV*	Units
Crystalline silica as quartz -respirable fraction	$\frac{10}{\%SiO2 + 2}$	0.05	0.025	mg/m^3
Total dust	$\frac{30}{\%SiO2 + 2}$	No	No	mg/m^3

* 2006 Edition, respirable fraction to be determined as per Appendix D of ACGIH TLV.

ENGINEERING CONTROLS/. PERSONAL PROTECTION

VENTILATION: Use adequate ventilation to keep exposure to dust below recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs during installation using dry cutting methods or during removal of installed tile. Wet cutting methods are recommended.
EYE PROTECTION - Safety goggles or glasses with side shields.
CLOTHING - Long-sleeved shirt and long pants, Chemical-resistant footwear plus socks
GLOVES - Cotton or leather gloves,
RESPIRATOR – Not required when handled under normal conditions. When handling in enclosed areas with inadequate ventilation, use a dust/mist filtering respirator.

NOTE: Personal protection information in Section 8 is based on general information for normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the assistance

of an industrial hygienist or other qualified professional be obtained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brittle solid; colour may vary
Odour	Odourless
Melting Point	Not Available
Boiling Point	Not applicable
Vapour Pressure	Not applicable
Vapour Density (Air = 1)	Not applicable
Solubility in Water	Insoluble
Percent Volatile by Volume	Not applicable

10. STABILITY AND REACTIVITY

Stability	Stable in current form.
Conditions to Avoid	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Incompatibility (Materials to Avoid)	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	None

11. TOXICOLOGICAL INFORMATION

Primary Routes of Exposure	None for intact tile. Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken tile, and/or during procedures involving the cutting of tiles, and/or for operations involving the removal of installed tiles.
Acute Effects	No acute effects from exposure to intact tile are known.
Chronic Effects	No chronic effects are known for exposure to intact tile
Potential Adverse Interactions	Silicosis may be complicated by severe mycobacterial or fungal infections and result in tuberculosis (TB). Epidemiologic studies have established that silicosis is a risk factor for developing TB. Any existing respiratory or pulmonary diseases may be complicated by exposure to respirable crystalline silica. Smoking may increase the risk of adverse effects if done in conjunction with occupational exposure to silica dust at or above permissible exposure limits.
Carcinogen Status	Respirable crystalline silica is classified by the International Agency for Research on Cancer as a Group I Carcinogen (carcinogenic to humans). The National Toxicology Program (9th Report) lists respirable crystalline silica as “Known to be a Human Carcinogen”. NIOSH have recommended that crystalline silica be considered a potential occupational carcinogen.
Overview of Animal Testing	Short term experimental studies of rats have found that intratracheal instillation of quartz particles leads to the formation of discrete silicotic nodules in rats, mice and hamsters.

Oral (silica) Lethality
LD50 Rat oral >22,500 mg/kg
LD50 Mouse oral >15,000 mg/kg
LC50 Carp >10,000 mg/l (per 72 hr.)

12. ECOLOGICAL INFORMATION

No information available at this time.

13. DISPOSAL CONSIDERATIONS

Waste should be disposed of in a landfill certified to accept such materials in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

D.O.T Shipping Name	Not applicable
Hazard Class	Non-regulated (for disposal purposes material is non-hazardous Class III regulated material)
ID Number	Not applicable
Marking	Not applicable
Label	None
Placard	None
Hazardous Substance/RQ	Not applicable
Shipping Description	Ceramic Tiles
Packaging References	None

15. OTHER INFORMATION

Global Harmonization Identification System
Health: 3 Fire: 4 Reactivity: 4
Hazardous Material Identification System
Health: 1 Fire: 0 Reactivity: 0
National Fire Protection Association
Health: 1 Fire: 0 Reactivity: 0

16. REVISION HISTORY

Current Revision No.	Revision Details	Date
1	Initial release	28 November 2018
2	Replacement with new NCIA logo	25 August 2021