

TECHNICAL DATA

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MANUAL SECTION	ISSUE DATE	AUTHORISED	REPLACES	PAGE
Flooring	November 2007	PM	Jan 2007	1 of 5

INDUSTRIAL TERRAZZITE & Decorative Terrazzite

 (For Decorative Terrazzite colours refer to the web link [Decorative Terrazzite / colours](#))

DESCRIPTION:

Terrazzite is an industrial grade floor topping system specifically designed for the Australasian food industry. Terrazzite resin is blended with specially graded silica quartz aggregates to produce a floor system that is hard and durable, resistant to impact, abrasion, thermal shock and chemicals/food acids, yet is non porous, hygienic and easily cleaned. Terrazzite is fully bonded to the concrete to prevent water creep. **Decorative Terrazzite** is the same system but utilising colored aggregates.

TYPICAL PHYSICAL PROPERTIES/ FEATURES:



- Terrazzite is a heavy duty monolithic 6mm thick floor topping.
- Rapid Cure: Full system may be installed within a 24hr period.
- Excellent chemical resistance. See chart.
- Excellent abrasion resistance (6 times that of basalt concrete).
- Excellent impact resistance: water blast resistant.
- Excellent adhesion to properly prepared substrates.
- Easily cleaned. See comments at end.
- Excellent slip resistance. Confirm degree required in specification.
Steel trowel Finish: 0.46 ASTM3661.1
Glass Float Finish: 0.58
Aggregate Finish: 0.73
- Able to be formed into coving, plinths, sumps etc.
- Good resistance to thermal shock. When cured, will perform at all in-service temperature ranges. Range: -30°C to +90°C
- Will not support bacteria or fungal growth. Contains STERISHIELD to retard microbial growth. See Tech bulletin.
- Cured film is non-toxic.
- Not moisture permeable.
- Moisture absorption: 0.04% as per ASTM D570-63
- Flexural strength: 25Mpa
- Weight per m² @ 8mm thickness: 17-18kgs
- Co-efficient of expansion 2.23 x 10⁻⁵/C between 20°C and 60°C when heated at 1°/minutes.
- Minimum thickness: 6mm
- Minimum application temperature: +5°C
- Colour: Natural Gold; **Decorative Terrazzite colours use a coloured aggregate selection.**

RECOMMENDED USES:

- Meat works, abattoirs, butchery floors, bottling plants, breweries, food and beverage processing plants.
- Freezers, chillers, coolstores
- Dairy factory floors.
- Ablution blocks, Showers, Toilets, kitchens, laundries.
Supermarkets: Bakeries, Fish, Meat, deli etc
- Toilets, changing rooms, sports facilities for hard-wearability.
- Floors, walls, upstands, plinths etc where a high degree of chemical, mechanical and slip resistance is of prime importance.

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TERRAZZITE (cont'd)

- Food process floors where a high degree of hygiene is required. Approved by regulatory authorities.
- Interior/exterior use. Concrete repair and protection – resurfacing damaged or broken concrete with a more physical and chemical resistant surface.
- Can be applied to new or existing sound concrete, timber or other surfaces.
- Suitable for use in dry or wet situations including ramps.
- Will form coves to any required height or radius.
- Floors above work spaces: 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****

Special treatments may be required on some ramps in wet situations in order to comply with slip resistance requirements of AS/NZ 3661.1:1993. Specific advice must be sought from Nuplex Industries Ltd, Construction Products Division prior to specifying in this situation. See page 1

LIMITATIONS:

- Application to uncured concrete (minimum recommended cure 28 days). Application to damp surfaces. (Refer to Nuplex Bulletin on application options on wet or uncured concrete).
- Application to unstable or defective substrates without approved remedial treatment prior to installation.
- Application below +5C.
- Application where fumes may contaminate adjacent foodstuffs (refer to Nuplex Supascreed or Nuthane for odour free installations). This only applies in the installation stage (up to 3 hrs after laying).
- Application over existing coatings/toppings – refer to Nuplex.
- Over concrete cure or release agents without Nuplex approval.
- Over ceramic tiles without specific written Nuplex design specification.
- Refer to Nuplex chemical resistance data.

SUBSTRATES

All substrates shall be stable and solid.

Note: The ability of new or existing floors to take the loads as a result of the Nuplex Terrazzite must be checked prior to installing. All control joints junction cracks in the substrate etc are to be properly treated . Nuplex Industries should be consulted when installing Nuplex Terrazzite on any suspended floor slabs.

CONCRETE

Shall have a surface which has been mechanically trowelled to AS3610:1995 U3/NZ/3114:1987U3 finish or . Then preparation is achieved by captive shot blasting or other coarse abrasive methods. Eg Diamond grinding. Concrete shall be cured for a minimum of 28 days prior to laying Terrazzite. The moisture content shall be less than 75% RH. (Refer Nuplex Bulletin on application options on wet or uncured concrete).

Plywood or Timber: consult Nuplex for information

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

Ensure the floor is clean, dry and prepared as above.

Install Nuplex **cove** upper termination metal strips: **5.2mm, 8.8mm or 9.2mm rebated strip** are available (see separate details drawings). Use a rebated wall cut (see details) if the coving strip cannot be used.

PREPARATION

APPLICATION:

Install fibreglass CSM cloth in floor wall internal corners.

Prime the properly prepared floor areas with minimum one coat of STZ Primer. Coverage rate and number of coats will vary depending on the porosity of the substrate, Maximum coverage 6m²/litre/coat. STZ Primer and STZ Hardener are to be thoroughly mixed in the correct proportions (1-3% on STZ Primer weight).

Wait until STZ Primer has gelled/set before overcoating.

Nuplex Terrazzite must be applied in such a manner to achieve a minimum 6mm thickness. Use screed box, bars or install angle strips as a guide. Accurately weigh and power mix until homogeneous Nuplex Terrazzite Resin and STZ Hardener in the correct proportions:

	Approximate M ² coverage
Nuplex Terrazzite Resin	2.6 kgs
Nuplex STZ Hardener (on Terrazzite Resin weight).	1-3%

Add selected Nuplex Blended Sand at the ratio:

Floors - Nuplex STZ Floor Sand	21kgs
Coves - Nuplex STZ Cove Sand	21kgs

Note: Maximum Terrazzite Resin:Filler (sand) ratio 1:6 parts by weight Resin, Hardener and Sand are to be blended in an efficient mixer to ensure all ingredients are homogenously blended.

Apply Nuplex Terrazzite flooring to correctly prepared and sealed substrate using a spreader box and/or a suitable glass, steel trowels, power float etc. Ensure the matrix is well compacted and free of ridges or unevenness. Successive mixes must be homogeneously blended together into wet Nuplex Terrazzite mixes. Access to repair wet floor areas during installation can be achieved using crampons or special spiked shoes. Adequate lighting is to be provided to ensure defective surface finishing can be easily identified and corrected during the installation process. Lubricate tools and equipment used during the installation with sparing quantities of Styrene Monomer. Use Acetone only to clean tools and equipment.

Ensure all finished edges of the Nuplex Terrazzite are supported to avoid damage. Nuplex Terrazzite may be applied to skirtings, coves and upstands if required with the use of Nuplex STZ Coving Resin and specially formed trowels. Optional coves and skirtings can be completed as the main floor is installed however they are best installed following installation of the floor. Floors must be protected during cove/skirting installation.

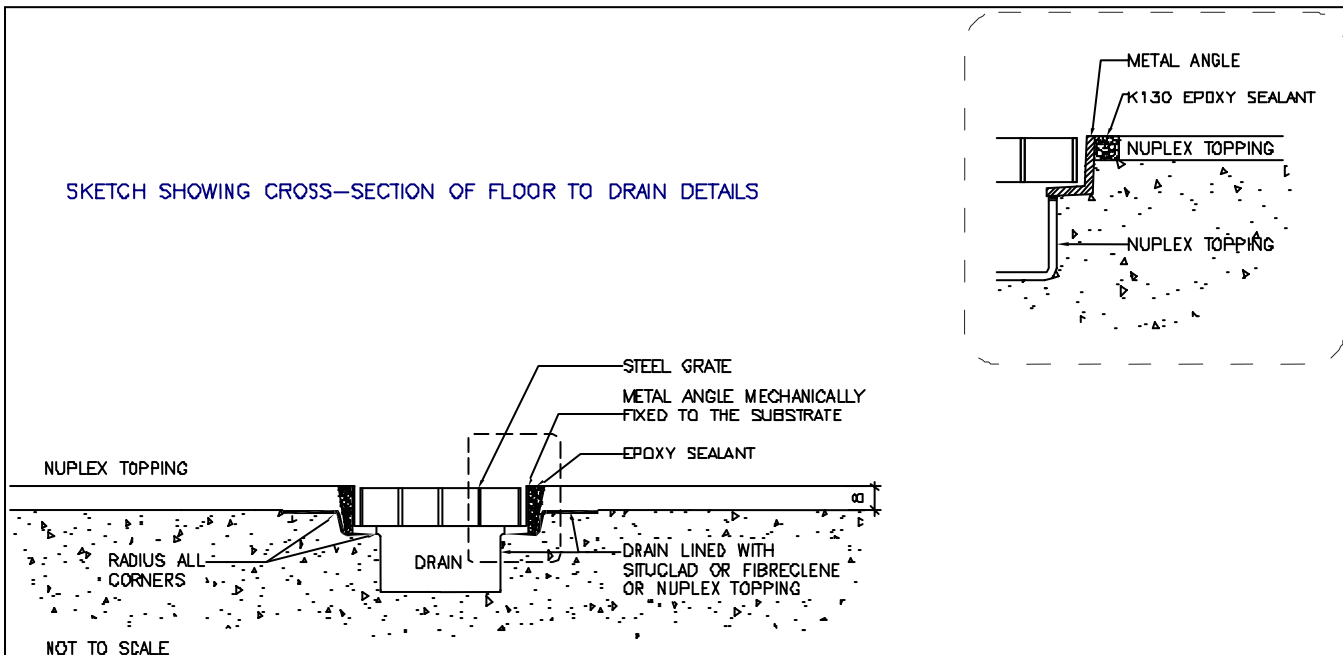
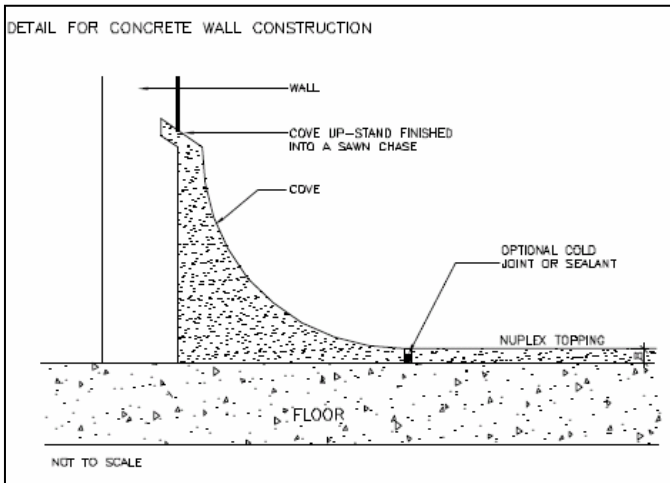
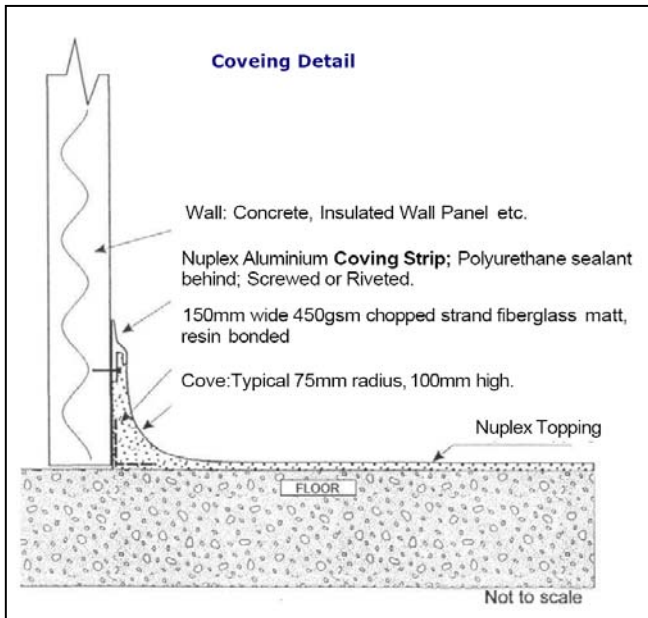
Topcoat: Once finished and hardened apply 1 coat of Nuplex STZ Topcoat at a spread rate no greater than 6m²/litre/coat. Topcoat must be applied only to clean and dry surfaces.

Optional: For greater Chemical resistance use Surechem VE topcoat applied at 3m²/lt in place of the STZ topcoat

Joints: All concrete control and construction joints should be carried through the Terrazzite using C81 for non-control joints and K130 Epoxy Gold for control joints.

Sample details

For more details see the website: resin floors /industrial toppings / details for more options.



TERRAZZITE (cont'd)

QUALITY ASSURANCE:

A log shall be kept by the licensed Nuplex Terrazzite contractor and made available to Nuplex Industries Ltd at their request. Information to be recorded daily is:

1. Material batch numbers used.
2. Sequence of mixing, ratios and quantities and formula.
3. Substrate moisture content.
4. Substrate temperature.
5. Ambient temperature.
6. Ambient relative humidity.

THINNING cleanup:

Do not thin. Lubricate tools with styrene monomer (mixer and barrows). Cleanup with acetone.

CURE AND DRY TIMES: (25°C 50% RH)

Workable pot life:	20-30 minutes
Hard Dry:	3 hours
Light foot traffic:	6 hours
Recoat:	within 24 hours
Full Use:	12 hours

HEALTH & SAFETY:

- Wear suitable protective respirator and clothing when using this product.
- Products are flammable.
- Erect "No Smoking" signs.
- No welding or naked flames permitted during installation.
- Have fire extinguishers readily available.

SHELF LIFE:

6 months in unopened containers. After this period suitability for use should be checked in consultation with Nuplex Industries Ltd.

PACKAGING:

Resin:	20Lt metal pails, 225kg drums
Catalyst:	5Lt plastic bottles

Maintenance and Cleaning

Repairs can be undertaken with new Terrazzite applied directly or use K20 Epoxy repair system.

Cleaning: A Terrazzite floor is cleaned with stiff bristled brushes and detergents. The stiff bristles will remove dirt from the non-slip surface that a soft mop will not.

Refer to the Cleaning document on our website.

Producer Statement

Nuplex Industries Ltd state that Terrazzite is compliant with E3 (internal water) and D1 (Access routes / slip resistance wet & dry).

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