

Pangæa®



POLISHED  
CONCRETE  
VENEER









# AN INNOVATIVE & SEAMLESS POLISHED CONCRETE FLOOR VENEER

Pangaea® offers a polished concrete flooring solution unique to the market, capable of being laid on a range of substrates and with a range of colours to choose from. Pangaea® is the future of polished concrete flooring.

- Can Be Installed Over Various Surfaces
- Consistency In Colour & Aggregate
- Only 10-12mm Thick
- Can Be Laid On Stairs
- No Screed Marks, Footprints Or Patching
- Environmentally Friendly
- Waterfall Edges
- Excellent Thermal Mass
- Easy To Maintain & Clean
- Durable & Hard-Wearing
- Seamless Flooring – No Grout Lines
- Wide Range Of Colours/Aggregate To Choose From
- Suitable For High Traffic Areas

Cover: NSW State Library  
Opposite: Private Residence  
(Park Orchards)

Pangaea®

# WHY CHOOSE PANGAEA®

Pangaea® polished concrete veneer is revolutionising flooring, making polished concrete as easy as laying tiles. Unlike engineered concrete slabs which need to be laid at least 60mm thick, Pangaea® gives the same stylish but more controlled finish but is able to be laid and finished to a thickness of only 10-12mm. It's the perfect product to use for your next commercial or domestic project.

With a selection of colour bases and aggregates to choose from, you can create a unique and seamless floor to compliment your design and with our uniquely thin veneer application it will effortlessly match up with other floor coverings such as tiles, timber and carpet.

Pangaea® can be installed on top of concrete, timber, tiles and other stable and sound substrates. Pangaea® is seamless and dimensionally stable, therefore no expansion joints or saw cuts are necessary (unless there are existing saw cuts or construction joints in the substrate). This allows for minimal maintenance with cleaning a breeze to do, just use a microfibre mop (such as Enyo mop) and/or quality steam cleaner.

The process of selecting your Pangaea® flooring is easy:

1. Select your colour base.
2. Select from our range of aggregates
3. Visit our showroom to view the range of sample finishes and discuss your project with our technical representative (we suggest making an appointment if you wish to discuss the technical aspects of your project)













# TECHNICAL DATA SHEET

## Product Description

Pangaea® PCV is a cement based polymer enhanced compound that is installed on top of existing sound substrates. It is mixed on site and hand troweled at an average thickness of 15mm. After a short cure time, Pangaea® PCV is then machine ground and mechanically polished which can if desired, achieve a high gloss finish. Pangaea® PCV is predominately installed indoors or in enclosed balconies or covered alfresco areas.

## Benefits

- Aesthetically Pleasing - Available in a range of colours and aggregates, Pangaea® PCV can also be customized for large commercial projects.
- Consistency – Aggregate exposure is consistent throughout the entire floor.
- Durable – Mechanically polished and sealed to provide high scratch and stain resistance that requires minimal ongoing maintenance.
- Curing Fast – Curing 3 hour turn around for foot traffic, 8 to 24 hours before grinding and polishing depending on ambient temperature.

- Strength - >30 MPa compressive strength after 28 days.
- Delivery – Easy and simple. Mixed on site in buckets, no trucks, pumps, traffic control or OH&S issues.
- Thermal Mass – Harnesses exposed temperature and slowly releases heat.

## Health Benefits

Pangaea® PCV is non allergenic and will not harbor dust mites as carpet, and to an extent tiles do. Pangaea® PCV cannot be damaged by moulds, dust, humidity etc., provided the correct maintenance is adhered to.

## Sustainability Advantages

Pangaea® PCV provides several Environmental advantages. Pangaea® PCV is poured in situ, which eliminates waste and off cuts. Approximately 50% of Pangaea® PCV is natural stone, therefore is inherently earth friendly. As Pangaea® PCV is seamless, it is simple to clean and does not require chemicals. A microfiber mop with neutral cleaner and/or a steam mop is sufficient enough for the upkeep of Pangaea® PCV. As Pangaea® PCV is cement based, its Thermal Mass is very high. This can contribute

largely on reducing the energy produced by home in the right zoning climate. Pangaea® PCV durability greatly exceeds its embodied energy, which in turn, provides a suitable fit for both the commercial and residential markets.

## Warranty

Pangaea® Australia Pty Ltd warrants its product to be of good quality, and warrants the material for 10 years. If in any situation the material is proven to be defective or faulty, Pangaea® Australia Pty Ltd will replace or refund the material price within 10 years from the date of purchase.

## Maintenance

Pangaea® PCV is very low on Maintenance

In comparison to other flooring products. The seamless design is greatly beneficial to the upkeep of the product. Regular use of micro-fibre mop and neutral based cleaner and/or a steam mop, will provide sufficient care to maintaining the product features. If Pangaea® PCV is exposed to acids, or solvents based materials, they are required to be cleaned up immediately.



# TECHNICAL DATA SHEET (Continued)

## Physical Data

Compressive strength at 28 days >30MPa (40 mm cubes cured at 25 degrees C 65% RH).

Flexural strength at 28 days > 7MPa (rectangular prisms cured at 25 degrees C 65% RH).

C & CA accelerated wear test at 28 days 1: Good Highest Rating.

BRE impact resistance at 28 days (BS 8204: part 1: 1987): Category A Highest Rating.

Maximum thickness: 15mm (pre grind).

Traffic time to be discussed with our Pangaea® Technical Representative.

## Standard Compliance

Pangaea® PCV complies with the requirements for a Class O surface, as defined in paragraph A8 (b) of Approved Document B 'Fire' to the building Regulations 1985.

BS 476: Part 6: 1989 "Method of Test for Fire Propagation for Products" – Fire Propagation Index, 1 = 20.

BS 476: Part 7: 1987 "Surface Spread of Flame Test for Materials" – Class 1 Surface Spread of Flame.

## Application

Installation must be carried out only by a trained, licensed applicator. The Substrate must be stable, clean and free from oil, dust and other objects that may interfere with Pangaea® PCV bonding to the substrate. The substrate must be prepared by mechanical methods, including grinding and/or sandblasting as well as the Pangaea® PCV water based acrylic primer. The surface must be dry and installed only in areas above 10 degrees Celsius, and prevented from freezing conditions.

## Cold Installation

Installing Pangaea® PCV in cold atmospheric conditions will prolong the cure time and may reduce the rate of strength. Installation below an atmospheric temperature of 15 degrees Celsius will require mechanical measures such as heating appliances to increase room temperature and to accelerate cure time. Warmer water used in mix may also accelerate cur time.

## Warm Installation

Atmospheric temperature above 25 degrees Celsius will accelerate cure time and may increase the strength ratio. To prevent

acceleration curing of Pangaea® PCV, Mechanical measures such as fans and air conditioning shall be utilized. The use of chilled water when mixing may prevent accelerated curing.

## Mixing

The Pangaea® PCV water ratio is nominated by the trained/ licensed applicator.

## Coverage

15kg Pangaea® PCV Powder.

15kg Nominated aggregate.

Approximate 1m<sup>2</sup> at 10-12mm thickness.

## Lifespan and Storage

Pangaea® PCV powder has a 6 month lifespan provided it is stored correctly.

To be stored on pallets in dry conditions, out of direct sunlight and moisture.

Do not store Pangaea® PCV in high humidity conditions.

## Warning

Do not inhale dust. Avoid contact with Eyes and Skin. The material must be used in well ventilated areas.

Excessive exposure may irritate eyes, nose, throat and upper respiratory system. The appropriate PPE including P2



masks, gloves, safety glasses and protective clothing is recommended to prevent excessive inhalation and irritation. Ensure all hands and bodily functions are cleaned prior to eating and drinking to avoid ingesting cement dust. In the case of skin irritation, breathing difficulties, or if material comes in contact with eyes, seek medical attention immediately.

**Use Responsibility**

Pangaea® PCV is a non structural overlay, it will not prevent or restrain movement to the substrate. Although it has a certain amount of flex, excessive movement, vibrations, and existing cracking joints to the substrate may result in micro cracking.

Before using Pangaea® PCV refer to the current SDS sheet. It is the users responsibility to review and adhere to the instructions and warnings.

**Manufacturer**

Pangaea® Australia Pty Ltd,  
35 Bridge Road,  
Richmond, Vic., 3121  
Australia

Contact: 0468 777 181

[www.pangaeafloors.com.au](http://www.pangaeafloors.com.au)





# FREQUENTLY ASKED QUESTIONS

## How close to edges does it go?

As Pangaea® PCV is a liquid-applied material, all cabinetry, furniture, skirting's, kitchen kickers, etc. should be removed. A 5mm edge tape is installed against all vertical surfaces due to the limitations of grinding/polishing equipment. This is either covered by the skirting or caulked over.

## Will there be dust?

Pangaea® licensed contractors will endeavor to minimize dust, however due to the nature of the initial polishing process some dust is inevitable.

## What will the finish look like?

As beautiful as Pangaea® PCV is, it is a hand-made and laid product and some minor imperfections may be noticeable under close scrutiny, i.e. uneven aggregate exposure, minor hairline scratches from the grinding/polishing process, pin holes from entrapped air in the mix. These are considered part of the product's character and design, which makes every Pangaea® floor uniquely attractive and desirable. Please consult your Pangaea® representative for samples that are indicative of the finish.

## Will it crack?

Pangaea® PCV is dimensionally stable, it will however crack if there is sufficient movement in the substrate (surface) that it is laid on. No warranty is expressed or implied for cracking of Pangaea® PCV due to substrate movement.

## Can it be repaired?

Pangaea® PCV is repairable and can be virtually invisibly mended if required due to unforeseen circumstances.

## Will Pangaea® PCV stain?

Depending on the sealer or coating selected, Pangaea® PCV is very stain repellent. Harsh chemicals should be avoided when cleaning and only neutral cleaners should be used. Vinegar, lemon juice, sauces, and all acid and high-alkaline chemicals should be cleaned up promptly to avoid etching of the surface.

## How often should Pangaea® PCV be sealed?

If you choose Pangaea® PCV, which is mechanically polished there are no coatings to wear off, however every 2-3 years a clean, buff and re-application of the penetrating sealer will lift and prolong the lustre and life of the floor. Pangaea® PCV can

have coatings applied much the same as traditional timber floors and should be cared for in much the same way, with the re-coat time dependent on the use of the floor. Generally a light sand and 1 coat is all that is required to return the floor to new condition.

## Can Pangaea® PCV be installed outdoors?

Pangaea® PCV has been designed primarily as an internal floor covering, however can be used in covered outdoor areas. It is not suitable for paths, ramps, pool surrounds and driveways.

## Can Pangaea® PCV be laid on substrates other than concrete?

Pangaea® PCV can be installed over virtually all floor surfaces as long as the substrate is dimensionally stable (installation methods would need to be fully discussed with our technical representative before proceeding with the installation)

# CARE AND MAINTENANCE

## Post Installation

The team on completing the installation will apply a penetrating sealer to provide stain resistance to most things that come into contact with the floor.... You will notice a fine dust will remain on it caused by the final stage of polishing.... We do not vacuum the floor through the polishing stages for technical reasons.... Do not attempt to wash the floor for at least 24 hours after completion.... This allows the sealer to properly cure in and on the surface of the Pangaea® PCV.

If the new Pangaea® PCV is to be protected we recommend the floor be covered with a breathable protection material such as MDF sheet, cardboard, woven poly tarp material etc..... never adhere the protection material directly to the floor with adhesive tape, the adhesive used in tape will etch the finish of Pangaea® PCV.

## Regular Cleaning Procedure

### First Clean

To remove residue fine dust use only cold water and microfibre pad (available at any Bunnings store in the cleaning section).... Rinse microfibre regularly in clean water.

## Ongoing Cleaning

Regular cleaning should be done using either microfibre mop or good quality "Steam Mop", warm water is fine with addition of two (2) tablespoons of "Pangaea® PCV Floor Cleaner" (a complimentary bottle provided after installation). Never use methylated spirits, vinegar or chemicals that have acid, caustic or alkaline additives... These products will etch the surface. Stubborn stains like grease, oil or sticky food substances can be cleaned by spraying a liberal amount of the diluted cleaner with hot water directly to the stain and gently rubbing with a soft sponge or microfibre cloth and rinsed thoroughly with clean hot tap water to remove residue, allow to air dry and repeat if necessary.

For commercial environments Pangaea® Australia Pty Ltd recommend the use of an auto scrubber with white scrubbing pad and "Pangaea® PCV floor cleaner" followed by our "Pangaea® Maintenance Polishing Pad" beneath a high speed commercial floor burnisher (1,500rpm or greater) this system should be implemented on a monthly basis to maintain the lustre of the finish.... If you are unsure of what to use please call our technical representative on 0468 777 181

## Products to Avoid Coming into Contact with the Floor

**Acidic Products** such as but not limited to – Vinegar, Lemon juice, Tomato sauce, red/white wine etc.... Some of these products are used as cleaners and there use should be avoided and if used or spilt should be cleaned up immediately and floor rinsed with clean water and a neutral cleaning solution.

**Alkaline Products** such as but not limited to – oven cleaner, shower cleaner, window cleaners etc. that have chlorine additives such as "Domestos, Windex Etc.". Some of these products are used as cleaners and there use should be avoided and if used or spilt should be cleaned up immediately and floor rinsed with clean water and "Pangaea® PCV Floor Cleaner".

**Oil Based Products** such as cooking oil, motor oil or any Low Viscosity mineral, vegetable or animal based oils should be immediately cleaned up with hot water and a couple of drops of neutral detergent. This step may need to be done more than once and finally rinsed with fresh cold water.

**Never scrubb the floor surface with abrasive cleaning products.**



# CARE AND MAINTENANCE (Continued)

**NOTE** – When any spills occur be sure to clean up to avoid any potential damage, this includes the use of the above products if used to clean adjacent surfaces. Pangaea® PCV is like any high end polished surface, like “Caesarstone” bench tops and natural stone floor products and will damage if exposed to the aforementioned chemicals.... A caring approach will avoid unnecessary damage and prolong the aesthetic life of the Pangaea® PCV.

## Maintenance – Long Term

### Mechanically Polished Finish

The Mechanically Polished Finish is our premium system for completing the Pangaea® PCV. 99% of installations are finished this way. Refer to your Pangaea® PCV installer to confirm your new floor has been finished this way.

### Domestic Use

If your new floor is in the home, long term maintenance is fairly minimal.... A clean, re buff and re application of the penetrating sealer is a quick and effective way to maintain the long term resilience and beauty of the product.... Pangaea® Australia Pty Ltd recommend this maintenance procedure every one-three years

### Commercial Use

In Commercial environments Pangaea® Australia Pty Ltd recommend this maintenance procedure every one-two years.

In both domestic and commercial environments Pangaea® PCV recommends a high speed buff with a Polishing Pad every six month to maintain its lustre. This service is available from your Pangaea® PCV installer.

### Polyurethane Sealer

Pangaea® PCV has a UV stable two part polyurethane, water

based sealer available in Matt, Satin and Gloss which provides high wear and chemical resistance. Normally applied to commercial, high traffic areas and where maximum chemical resistance is required. Normally re-applied every 2-3 years depending on wear and tear.... Residential applications may require reapplying every 3-5 years depending on wear and tear.... Note – As with all applied or topical sealers.... Scratching of the coating may occur.

### Topical Sealer

These are sealers that are generally used for commercial, high traffic areas and require regular cleaning, buffing. The sealers are stripped annually or sooner and re-applied and high speed buffed.

**All cleaning and maintenance issues can be answered by Pangaea® Australia Pty Ltd. – Direct on 0468 777 181**