

# **Application Instructions**

# FOR FIBREGLASS LINED POOLS and SPAS

Make sure you have the correct Application Notes for your pool surface.

Pool Type	Surface	Application Notes To Use
Concrete	Concrete / Paint	For Painted Pools
Concrete	Marblesheen	For Marblesheen Pools
Concrete	Pebblecrete + Quartzon Type	For Pebblecrete + Quartzon Pools
Fibreglass	Fibreglass	Fibreglass Pools
Concrete	Fibreglass Lined	Fibreglass Lined Pools
Concrete	Other Finishes	Misc Finishes

We have laid out these Application Instructions in several easy-to-follow Chapters. Make sure you have the correct Chapters for your type of pool and the work to be undertaken.

1.0 Introduction	Outline of process, weather items and materials needed, ground water, emptying of pool
2.0 Preparation	How to prepare surface inc localised repairs
3.0 Application	Mixing and Application
4.0 Curing	How to ensure complete curing
5.0 Management	Looking after pool when completed (for pool owner)

# 1. Introduction + Items Needed

## 1.1 Overall Process

- 1. Empty pool, brace if needed.
- 2. Wash surface with detergent, rinse thoroughly.
- 3. Survey surface and mark any defects/osmosis etc.
- 4. Remove any defective areas/osmosis.
- 5. Repair areas that have been seen as defective inc worn surfaces
- 6. Apply skim coat (if necessary and allow to cure)
- 7. Apply an Acid and / or Algaecide wash (if necessary)
- 8. Allow pool to dry.
- 9. Apply Primer E2100.
- 10. Apply Topcoats (2-3 coats of PaintNForget Or E4115.
- 11. Allow to cure correctly, 7 days summer and 14 days winter.
- 12. Refill, balance and use.

## 1.2 More Information

These pools present complex issues, so read carefully and if not sure call us for advice before you start

When the surface is prepared correctly, the application is carried out in accordance with these instructions and allowed to cure in required conditions, we expect it to perform beyond any other known coatings available.

Please visit the website: **poolpaint.com.au**. for more details including the **INFOBANK** for added help and application ideas.

Refer to website **INFOSHEETS** for lots of added details.

Also see the video training at: <a href="https://poolpaint.com.au/info-bank/video-tutorials/">https://poolpaint.com.au/info-bank/video-tutorials/</a>

This set of notes includes the use of E4115 hi build epoxy. So, look for the relevant parts covering this

product as a TOPCOAT instead of PAINTNFORGET (PnF). The surface preparation is identical for both as is the use of E2100 Primer.

PAINTNFORGET is a great and durable coating but requires consistent dft (Dry Film Thickness) of 100 - 120 microns (in minimum 2 coats) to perform and this can be achieved with minimum of 2 coats. Consider applying full third coat, to achieve thickness consistency. Therefore, don't be tempted to spread it out. If you do, it won't last. We can't stress this enough!

Surface preparation is a key aspect in getting the best performance from the pool coating. It probably represents 90% of the overall success. So, spend time and do it once and do it well.

# 1.3 Before you Start: (Leaks, Weather, Other Repairs)

- Look at the overall project and plan it in easy to manage stages.
- Carry out any borderline tiling, paths, decking etc before the resurfacing.
- Check weather conditions for the next 7 14 days. (dry, warm, with low humidity)
- Check tools, and products on hand for repairs, application.
- Check health and safety.

# 1.4 Leaking Pools

If the pool has been leaking, then it's important to determine the cause. To make sure it's leaking and not just evaporation, fill pool to its normal level and also fill a bucket of water and place close to pool edge. Mark water levels on both. Wait 24 or 48 hours and compare changes. If same decrease in levels, then its evaporation and if pool water has gone down more than bucket water, indicates a possible leak in the pool.

It may be best to let pool continue to lose water till it stops. Then determine cause.

✓ If at bottom of skimmer box, infers leaks here or in plumbing.

- If at a level where pipes leave or enter pool, then leaks there or in plumbing.
- ✓ If at some other level may mean cracks in concrete or fibreglass pool.
- ✓ If to nearly empty, then probably hydrostatic valve leaking.

Due to recent drought and then floods, some pools have moved slightly, and the pipe work has fractured. This has been reported in areas of clay type soils. So, if in doubt get pipework pressure tested, See "Leak Detection" on the web. Have pipework issues attended to before paint.

## 1.5 Weather

Check weather forecast before applying PAINTNFORGET (PnF) and E4115 to have the best conditions. Wait for the right conditions.

<u>NOTE:</u> PAINTNFORGET and E4115 are MOISTURE SENSITIVE products and require completely dry substrate to adhere to. It also requires dew free (8 hours / 20 C) period to cure so the process is not affected. E2100 primer also needs a dry FIBREGLASS surface. PAINTNFORGET and E4115 require dry surfaces. Make sure they are.

- ✓ Surface preparation can be done when weather is hotter or cooler than for application, so you are prepared in good time The best time to apply is when the ambient temperature is between 15 28 C, warm and sunny, with light winds.
- ✓ DO NOT apply if surface temperature is below 10 C or going to fall below this within 4-6 hours. (At below 10 C surface temperature, the curing hibernates, till it reaches above 10 C. again).
- ✓ Consider a cover and gas or electric (inside) heaters to warm up if need be.
- ✓ Best not to apply when ambient temperature is over 30 C, as it will significantly shorten the working life and too hot for you to work effectively, and the solvent might evaporate too fast for consistent thickness.

- ✓ If rain is expected within 12 18 hours of completing the application, DON'T start. (A waterproof cover excepted)
- ✓ Apply in early mid morning in summer and when the dew has dried out. In winter make sure you finish before midday and giving enough time for the product to be on its' way to cure before the dew arrives. Protect from dew, if possible.

A well-fixed tarpaulin / marquee can help mitigate some bad, wet, cold, or hot weather and

**Pool Cover**: if used make sure it's anchored to prevent being blown away or rain running into the pool. It will help prevent dust blowing onto wet coating. (Windblown dust leads to rough/hard/gritty finish which is uncomfortable to touch). If in a leafy area, consider a temporary shade cloth to prevent leaves falling on wet paint.

# 1.6 Health and Safety

Working around a pool requires care. Make sure you or children (and pets) do not fall in while you have the gates open and are working in the pool.

- $\checkmark\,$  Be aware of where the pool edge is at all times.
- ✓ Move pots, ornaments, and furniture away from the pool.
  - ✓ Give yourself plenty of room.
- ✓ Do NOT mix electricity and water, use electric tools with a ground-fault detection system.
- ✓ When using equipment follow safety procedures
- ✓ When using cleaning chemicals protect skin, eyes, hands, and clothes.
- ✓ If grinding or sandblasting, protect eyes, ears and breathing with suitable products.
- ✓ When using PAINTNFORGET/E4115 protect yourself properly. (See details later)

## 1.7 Emptying The Pool

To empty, use a siphon (takes about 24hrs), a submersible pump (usually about 10 – 12 hrs) or sometimes the backwash feature on the pool. A submersible pump, from a hire company, (Kennard's) or you can purchase a submersible pump for about \$150- 250.00 from Bunnings or good plumbing suppliers.

You will usually need to keep the hire pump for several days to empty out the cleaning residues.

When emptying the pool note the following:

✓ A Hydrostatic valve should be in the bottom of pools (If not proceed with caution)

- ✓ This valve is to release any water that is under the pool, into the pool, so as to relieve pressure. Replace this valve if in any doubt about effectiveness.
- ✓ Such groundwater is pumped away as the pool is nearly or completely empty.
- ✓ You may choose to empty the pool in 1/3rds to see if any issues. (1/3 each day and monitor result and watch to see it does not "lift up pop out", and if it does refill quickly).

If pool on hillside, at bottom of dip, in wet soil or near sea or lake, then ground water levels may be an issue. This is known as hydrostatic pressure and if present can cause the pool to be unstable in the ground.

Some pools may have an inspection point (standpipe) near pool to check ground water level, before emptying. Usually, it shows as a grating near the pool in the surrounding paving. It may be connected to a porous/aggregate drain around the pool bottom. If water table high, insert flexible hose and attempt to pump the excess water and lower water table, using this feature.

Hydrostatic valves may leak after pool is empty, this can be dealt with by using a 1 Metre x 50 mm standpipe screwed into an Iplex 50 mm Press Adapt

Valve, (see a good plumbing supply) which is screwed into your pools Hydrostatic valve fitting. Or fit a hose or build a dam and pump out as needed.

(See INFO SHEET Hydrostatic Valve and Standpipes)

For concrete pools bracing is not usually needed. If in doubt contact us, before emptying your pool.

Consider replacing the Hydrostatic valve when pool empty. (See a pool shop).

Most pools in "dry" Australia are fine when empty though should not be left too long in this state. If heavy rain is imminent when pool empty, its suggested to fill about  $1/3 - \frac{1}{2}$  full to give stability.

As a general guide leaving a pool empty for longer than 2-3 weeks is not recommended.

Use common sense and be ready for any issues which may arise.

# 1.9 Equipment Needed

Having the right equipment for the job at hand will make for a better result.

**Empty Pool**: Submersible Pump (hire) or hose for siphon and wastewater outlet from property.

**Surface Preparation:** 

General: Brooms, 3kg clean, white rags, buckets, sponges and old towels, respirator, and

suitable filters.

Grinding- Sanding: Angle grinder (hire) and plenty of discs, (Flex O vit from ZEC), (Norton Sanding Discs),

(Josco Flapper or Bluestrip) or Orbital Sander, goggles, dust masks, overalls. (ALL from

Bunnings) NB: Use dustless / vacuum sanders.

Water blaster (1500 psi for general cleaning, 5000+ psi for old paint removal) (hire),

overalls, gloves and full-face mask or goggles. Consider Ultra High-Pressure Water

blasting at about 40,000 psi, (contractor)

E 2100 /E4115 epoxy / PAINTNFORGET: Overalls, gloves (disposable), goggles and barrier cream (to make it

easier to wash your skin)

Mixing: Electric hand drill and stirrer. (450 - 600 rpm) Bunnings, DTA 80mm ribbon mixer.

Application: Roller Trays, (a spare one) Handles and Extensions. 270 mm wide is suitable (wider

makes corner work difficult) 7L straight sided bucket(s). Local Paint shop. Bunnings.

Brushes: 35-50 mm, professional quality (\$10 – 15) Paint Shop.

Roller Sleeves: (e.g. Draylon, Mohair or similar, solvent tolerant). Use 8/10/12/18 mm nap (Use short

nap for smooth and longer length nap for rougher/uneven surfaces) Buy good (\$15 – 25) quality. ALSO, 3ins (75mm) sleeve for corners. Can use lamb's wool sleeves on

rough/uneven surfaces.

Spray Application: Airless unit, 2500 – 3000 psi, 519 – 515 tips.

Masking tape: Painters Green Masking Tape - Paint shop.

**Line Marking:** Texta Jumbo Liquid Chalk.

Surface Temperature: Infra-Red Thermometer, from Jaycar QM7218, \$35

Wet Film Thickness Gauge: Dulux Protective Coatings Wet Film Thickness Comb \$8.00

Measuring Scales (for small amounts): 1kg Digital Bench Scale Jaycar QM 7264 \$199 (for accurate measuring of Resin & Catalyst and to prevent under or over cure)

# 1.10 Materials (for surface preparation and application)

**Grout:** For concrete type pools, as needed for repairing drummy areas, holes and fibreglass liner holes etc:

- Bostik's Patchfix Paste or similar, ph. 1800621221
- Megapoxy PM or P1, Vivacity Engineering. Pty. Ltd's, ph. 02 9875 3044
- Sika's Sikadur-31 ph 1300 22 33 48
- Selleys Aqua Knead it. (Smaller areas, cracks) (Bunnings)
- Polyester based: For fibreglass pools, for worn areas & holes, use fibreglass repair kits. See Bunning's
   Cement based fillers:

## (For concrete type pools, repairing drummy areas and (blow) holes etc: (must be suitable for water immersion).

- RLA Just 2 Easy and RLA Uniprime (from Tile Shops) Use in thin layers.
- Maxplug (for deeper holes)
- Davco SMP EVO (From Bunnings and Tile shops)
- Bostik Findley Patchfix Structural\*\* HB or FS, 03 9279 9222
- Sika Mono Top 620\*\* 1300 22 33 48
- MasterEmaco N 5100\*\* BASF 1300 227 300.
   Usually at Mitres 10's.
- \*\* For larger areas as more cost effective.

## Skim Coats: For uneven surfaces. To flush up.

- Dunlop Fine coat render + Bondcrete
- Also, from above, Sika Monotop 610 and Master Emaco N5100

## Sealants: For moving joints, cracks.

- Emerseal CR (from Parchem 1800 624 322)
- Sika sil- Pool. From Bunnings
- Sika flex 291, 11FC or Pro from Bunnings
- If painting over sealants use Urethane, NOT silicone-based sealants.

## **Leaking concrete: (Inc Hydrostatic Pressure)**

- Drizoro Maxplug, Quickset Watercrete or similar from Bunnings, for stopping leaks.
- Ardex WPM 300 dealing with Hydrostatic pressure (Ardex Australia 02 9851 9199)
- Vandex (Parchem) or Krystol or similar before the skim coat / primer coat. Use as per manufacturer's instructions.
- Contec-C1
   (https://www.conpro.com.au/product\_items/c ontec-c1/)

#### **Rusted steel work:**

• Anticorrosive primer such Rustgard, Cold Gal, Quit Rust or Kill Rust, from paint shop.

### Cracks in concrete: (Small cracks non-moving) Good hardware shops.

- Araldite Super strength
- Bostik Titan bond

- Selleys Ultra clear
- Larger non-moving see grout, above.

## Cleaning:

• Acid Etching: Hydrochloric acid – from pool shop

• Cleaner/Degreaser: Water based Degreaser 5 L e.g. Diggers, Kenco, Pearless,

from Bunnings

• Algaecide Treatment: Such as Lo Chlor Tropiclear / Tropical Pool Algaecide (or

local recommended type, from most pool shops)

#### **Coating:**

**THE PRIMER**: **E2100 WB** Primer 4L packs, please add up to 30% of water to each supplied E2100 x 4L

pack.

PAINT N FORGET: PAINTNFORGET packs (Part A Base 4L & Part B Hardener 1L) Total 5L in selected

colour(s),

OR Topcoat of E4115 Epoxy 100% solids epoxy. 5kg kit (4kg Base, 1 kg Hardener)
PAINT N FORGET: Booster Curing kits (as needed – for FINAL coat only)

**Non Slip Media:** PTEX20 (supplied with your order)

THE THINNERS: PAINTNFORGET - 4L V112 for summer application. E 4115 Topcoat: 4L V122 or

Methylated spirits. **E2100** - water.

# 2. Chapter Surface: Preparation

# 2.1 Surface preparation: (clean, repair, dry and then paint)

All surfaces **must be** clean, dry, sound, and stable, before application.

IMPORTANT: PaintNForget Fluoropolymer & E4115 epoxy, are moisture sensitive and require both dry surfaces and conditions to cure.

**NOTE:** the fibreglass liner maybe badly damaged, split and dis-attached to the concrete underneath. If so best to remove ALL liner, if possible, to end up with unform concrete surface and then treat as per concrete pools. If all Fibreglass cannot be removed will need to treat those areas per a fibreglass pool. Contact us for more detailed advice. These pools can be tricky to deal with.

Refer also to INFO Sheet "Discussion re concrete pools with fibreglass liner".

# 2.2 Surface preparation: (clean, repair, dry and then paint)

All surfaces **must be** clean, dry, sound and stable, before application.

- ✓ PaintNForget/E4115 will not bond to contaminated surfaces. (NOTE: Acid DOES NOT clean surfaces ONLY detergent will.)
  - ✓ Make sure not subject to hydrostatic water movement (seeping water from behind). May damage pool.

# 2.3 General Surface Preparation (Full details in relevant sections below)

Heavily worn Fibreglass areas (Fibres visible) mean the coloured gel coat has been worn away and the colour usually goes a brown-whitish hue to show you. Depending on the extent of wear, re coating with fibreglass mat and resin may be needed to rebuild the surface. In less worn areas, using just the PNF may be sufficient. Usually, you will need to wait till pool empty to decide best approach. NOTE: Areas above the water line, gutters, and curves etc, get a lot of wear, so make sure you coat them well.

Holes, cracks etc, will need substantial repairs and can only be fully assessed when pool is empty. See detailed info below.

#### **All Surfaces:**

Make sure no grease, suntan or body oils on surfaces. Wash down with warm water/detergent (Commercial Degreaser) and stiff brush. Rinse well to ensure all detergent is removed. Water blast (mild) is better. Repeat treatment if in ANY doubt, especially at water line (top 300mm) and on steps or where people sit. Can use Tri Sodium Phosphate as alternative cleaner. Sugar soap is NOT to be used.

Then carry out repairs inc to concrete surfaces, see below.

Osmosis, (if in a pool and some older pools have it), is there for the life of the pool liner. It's not common in FG lined pools, fortunately. It's a slow process which creates blisters on the inner pool surface (gel coat) and over time these break becoming holes into which algae may colonise. (Black spot). Generally, though unsightly osmosis will not be a structural issue with most pool liners. NO matter what you do to treat it, osmosis will slowly come back as it's a fundamental result of the method of construction. A lot has been written about Osmosis. If the pool liner has Osmosis, contact us for advice.

**Expansion Joints/Stress Cracks/ Random Cracks:** If the pool has any control joints or cracks, contact us for advice before proceeding. Refer to: **INFOSHEET Control Joints In Swimming Pools** 

Tiles: (at waterline) see Chapter 2.9 and contact us for advice before proceeding. Refer to: INFOSHEET Discussion about Tiles and Coatings Applied Over.

Already a Painted Fibreglass surface: contact us for advice before proceeding.

Leaking Concrete (incl. HYDROSTATIC pressure) contact us for advice before proceeding.

Refer to Info Sheet: Assessing Pools for Ground Water Issues

# 2.4 Detailed Surface Preparation:

The Fibreglass liner needs to be clean, well adhered and any loose areas removed (repaired if applicable) or smoothed over, before you start any PaintNForget /E4115 application.

It's vital you remove ALL loose liner (as if left it will probably fail within a few years and come away, bringing the PaintnForget with it) We cannot stress this enough. Remove all potentially failing liner.

- ✓ With the pool empty, thoroughly detergent wash to remove all dirt, algae etc, so you can clearly see all the surface details. Can use TSP as the cleaner also. NOT Sugar Soap.
- ✓ Begin a very thorough inspection of the pool surfaces, and the Fibreglass liner (FG). Look for blisters, bubbles, worn areas, and those that are poorly or not adhered at all. Mark as you go, so as to come back and attend to each issue.
- Check for areas where the liner has come away from the concrete shell, as these will need to be carefully removed. Use chisels, or trowels to gently left and be sure not to remove well adhered areas, unless it's your intention to do so.
- ✓ Removal of the liner surface:
  - Large areas: lift carefully and when getting to well adhered parts, then cut the piece to be removed, with sharp (Stanley) knife. Be careful not to reduce the adhesion of the well adhered parts.
  - o Small areas; cut these out with a sharp knife.
- ✓ All edges where the liner is well adhered after removing the loose areas, are best HAND sanded to create a 45-degree angle (if not cut that way already).
- ✓ If you want to remove all Fibreglass liner, you may find the use of a gas touch to heat and soften (not burn) the liner allows it to be pulled off. (Have fire extinguisher handy) Often this is the preferred result as it will leave a uniform surface which requires less detailed repairs. Also, it reduces the possibility of the remaining FG liner delaminating in the years ahead.

**Note**: worn areas that remain, where the liner finish is worn, and the fibres are visible. These will need to be repaired and bought up to an acceptable standard before coating. Contact us for details, but generally treat as a worn Fibreglass pool surface. (see below - **Repair of worn fibreglass liner surface**.

Now machine disc sanding / orbital sander (#60 grit wet / dry paper or ZEC disk) the entire **pool liner** surface to be painted paying particular attention to all discoloured and degraded surfaces. Finished surfaces should be an evenly roughened, matt surface all over the pool. Any missed areas will result in blistering of the PaintNForget/E4115. Be careful not to dig into surface beyond gel coat level. (Gel coat is usually 0.5 to 1 mm thick).

- ✓ Completely remove all sanding residue (wet vac etc). This is vital.
- ✓ You then need to make sure all exposed concrete surfaces are clean and free of oils, dirt, algae etc.
- ✓ Then fill the bare areas (up to say 100 mm across approx.) with an epoxy filler, thoroughly mixed and bedded in. Slightly over fill. NOTE: to stop the epoxy sticking to trowel, gloved hands etc, dip into a mixture of water and dishwashing detergent (80 to 20% approx.). Allow epoxy to cure 24 hours or till hard. The sand flush with adjoining areas.
- ✓ Bare areas (greater than 100 mm across approx.) still make sure the edges are cut to 45 degrees approx. and the remaining lining is well adhered right to the exposed edge. If not cut back carefully till it is. This is vital, (to prevent loss of adhesion in the future)
- ✓ If holes through or the fibreglass fibres (white strands) are visible before repairs start, contact us for the repair process. Basically, as per a **Worn fibreglass liner surface**, as detailed below.

**NOTE:** if there are large areas of removed Liner and you want to minimise the change in levels and feel on your feet, then you need to be sure you have filled the areas with epoxy or cement-based fillers first and sanded flush.

#### One Fast Preparation Option Is: (For fully intact and fully adhered Fibreglass liners ONLY)

- Use 3000 4000 psi water blaster with fan nozzle about 150 mm off the surface and slowly clean surface. Rate 20 sqm/Hr no faster. VERY THOROUGH. Wastewater will be dirty, pump out.
- Sand all surfaces thoroughly with #40 grit and allow 20 - 30 sq M/Hr as a work guide.
- Water blast again, with nozzle about 300 mm off surface, allow 50 sq M/Hr
- Vacuum (wet) up all water.
- Allow pool to dry out for 2 3 days.
- Apply E2100 Primer as per below.

## Repair of worn fibreglass liner surface

General approach is:

- ✓ Holes, splits, cracks, can feel white fibres: Will require a bandage of chopped strand matt (CSM) and resin to repair area. Need to remove any water from the area first. Get fibreglass repair contractor to do this work. Can consider using fibreglass repair kit from Bunnings.
- ✓ Worn areas, but not feel fibres: Ideally apply one layer of resin from fibreglass repair kit.
  - ✓ In all cases follow repair kit instructions.
- ✓ Note that NEW fibreglass repairs (or rebuilt areas) can have unreacted styrene resin and /or waxes that cause a failure with PNF adhesion. This may not show for 1-2 years, however.
- ✓ Once ALL Fibreglass repaired areas cured (24 72 hrs +) then sand thoroughly, (60-80 grit and then 100 -120) & wash with Acetone, to remove unreacted styrene monomer, (Vital). Then scrub down with detergent and water using a stiff bristled brush or water blaster and dry off.

# 2.5 Old Concrete/Plaster Surfaces: (after removing liner)

**Note:** Any areas where fibreglass remains MUST be well adhered to concrete, sanded carefully to give a feather edge. Then if using some means to fill the concrete areas to be flush with the remaining fibreglass, need to feather edge the filler over the edges of the remaining fibreglass. See below for ideas on what to use.

#### **Cracks etc:**

Cracks in concrete pools are due to some movement either expected or unexpected and their cause needs to be considered. Expansion (Control) joints are designed to allow for movement and need to be treated as such.

If you see these contact us for advice. (And refer to Application Notes for Concrete Painted Pools Chapter 2.7 for ideas.)

- ✓ These surfaces will usually harbour many fats, algae and mould if not protected while pool has been in use. They may be stained, cracked and drummy. However, if well prepared and coated will provide a long lasting, attractive, easy clean finish.
- ✓ Make sure no grease, suntan or body oils on surfaces. Wash down all areas with warm water/detergent (Commercial Degreaser) and stiff brush. (Medium pressure water blaster with detergent feed okay). Thoroughly rinse well to ensure all detergent is removed. Repeat cleaning treatment if in ANY doubt, especially at water line (top 300mm) and on steps or where people sit. Can use Tri Sodium Phosphate as alternative cleaner. Sugar soap is NOT to be used. Check surface conditions as you go.
- ✓ Carefully check all surfaces, tapping to find "drummy" areas and digging into soft locations, to understand the extent of the condition.
- ✓ Some surfaces, such as concrete/plaster/render, may have drummy areas. (That is, areas where the surface has become detached from the underlying concrete. When tapped sounds hollow or drummy! Use a coin, screwdriver, old brick, stone, hammer, or broom handle to tap your way around the pool, mark "hollow" areas as you go). Remove anything bigger than about 40 50 mm across, with cold chisel to expose sound surface underneath and nearby.
- ✓ Any rust spots also need to be dug out to solid concrete and around rusty steel to fully expose including to the rear. Wire brush to remove loose flakes. Treat exposed steel with an anticorrosive primer. It is not likely you can stop rust coming back in adjacent areas as water runs along re bars and the rusting will start nearby again and break through a few years later.

#### See **INFOSHEET** Rust Stains.

✓ Rebuild any removed surfaces to match existing, with mortar if areas small. Other wise use a Cement based Filler (Chapter 1.10), Allow to cure. Sand flush to match adjacent areas.

#### Repair options for old concrete surfaces.

#### Local repairs only: Davco SMP EVO - Option

✓ Apply Ultraprime to bottom of holes or depressions. Allow to dry. Add 3 parts water to 1-part Davelastic. Take about 1/3 L of this into a plastic bucket and add about 1 kg of Davco SMP EVO. Mix into paste. Allow to stand 5 mins, remix. Knife in and slightly over fill holes. Allow to dry overnight. Sand flush next day. Use on large or small areas no more than 10mm deep per layer. Use between 5 – 35 C. OR;

- ✓ Any general depressions etc may be filled with MasterEmaco N 5100 as a skim coat to 3 mm max thickness or refer Chapter 1.10.
- ✓ This is because the PAINTNFORGET is "thin" coating and does not hide surface irregularities, undulations and rough surfaces, "sand" particles and so forth. They will be seen still, if not covered and smoothed over with a local repair or skim coat.

**Note:** if using E4115 as the topcoats, it is still recommended to skim coat the concrete surface if you want a smooth surface. This will provide a smoother finish than relying on multi coats of E4115.

#### Skim Coat Option.

✓ We recommend applying a skim coat over all clean (mould and algae free), concrete surfaces, to make smooth. You need to cover the "mountain" tops by 1 mm at least. Can use MasterEmaco N 5100 as a skim coat to 3 mm max thickness or refer Chapter 1.10, for other options. If using Dunlop Fine coat render, (to create smoother – uniform surface) then make a gauging liquid with Bondcrete and water, (1 / 10 respectively) to aid application. Trowel on, slightly overfill, and wet sponge finish smooth.

Finally: (if not done already)

- ✓ If necessary, apply algaecide to kill algae roots. See Chapter 2.7, below.
- ✓ Then Acid Etch, see refer Chapter 2.6
- ✓ Allow to dry. (2- 3 warm / windy days.)

## **2.6 Acid Washing.** (For "new" exposed concrete and ALL calcium-stained pools too)

Before priming (and Algae removal), to remove laitance, (a fine cement powder on surface) and open the pores, plus neutralise the alkali surface, Acid etch with Hydrochloric Acid, and water. (if required)

- Concentration to be 10%, no more. (1-part acid, (As bought 33% conc) mixed with 2 (or more) parts water). Mix in a plastic bucket. Always add Acid to Water, **not** the other way around.
  - Wear protective clothing, goggles, and gloves.
  - Broom or brush onto surfaces, (about 2 sq M per L mixed).
- When fizzing stops (2 5 minutes), thoroughly wash all acid etched surfaces to remove all traces of the reaction. (Can neutralise surface with Bicarbonate of Soda and rinse away all residues).

## Don't allow ACID etching to dry out.

Acid etching does not remove oils, fats, grease. Only detergent or sand blasting etc will remove oils, grease.

# 2.7 Algae removal:

Many pools will have algae growing in the surface pits and crannies. (black stains are a good indicator). When you come to skim coat (or paint it), it's important to kill the roots (to stop re growing through the new surface and paint) and an algaecide treatment can do this, as part of the cleaning process. After prepping the pool and having it ready to skim coat, an algaecide treatment is almost the last thing to do. (Unless acid washing)

- Late in afternoon/early evening mix up a 5% solution of Algaecide, such as Lo Chlor Tropiclear / Tropical in clean water. (That is about 250 ml per 5 Litres water).
- Broom / brush it on all previously stained areas (or anywhere you think algae may have been can do entire pool)
  - Leave over night to react.
- Thoroughly rinse off residues and allow pool to dry.

# **Refer INFOSHEET** Assessing Pools for Ground Water Issues

Sometimes you will find water (ground) seeping into the pool and this maybe from high water table, leaking water pipes (check these and fix), underground streams and generally comes through cracks or weak /porous areas of the concrete. **Issues**, to understand more fully what to look for and save yourself expensive trouble later on.

It will be necessary to stop this otherwise the PAINTNFORGET may not adhere to the surface. If the water comes from cracks etc, dig out, check on the cause and if need be, stop water using something like

Drizoro Maxplug (Bunnings) Or Vandex waterproofing or similar. Follow their instructions. Flush surface off with same or Just to Ezy. Or refer Chapter 1.10. Consider the prospect of water application seepage after too. (Poor drainage/construction) Try to prevent by sealing surface - Contec C1 or Ardex WPM 300. If pool previously painted and has bubbles or blisters in the old paint, it's a sign that hydrostatic pressure may be at work.

# 2.9 Tiles: (water line)

• Refer to: INFOSHEET Discussion about Tiles and Coatings Applied Over. Water line tiles may need to be upgraded as part of the pool renovation process as some tiles are missing and cannot be replaced, or the old tiles will not match up with the new PAINTNFORGET (Or E4115). Generally, it is not desirable to apply PAINTNFORGET (Or E4115) to tiles, however if there is no alternative it may be done.

The reason for NOT favouring this approach and no warranty is offered, is due to getting good adhesion of PAINTNFORGET (Or E4115) to the tiles and grout. Also, the fact water can get behind the tiles and grout, pass through the grout causing the coating to blister and fail. Finally, leaching water running over tiles may cause staining to the PAINTNFORGET(Or E4115) below.

The result is an unsightly mess and difficult to resolve. For a whole pool this is even more of an issue and should not be painted.

- Ideally existing tiles if generally okay are best cleaned and re grouted as necessary. See a tile shop for suitable cleaners.
- Any tiles to be coated need to be in sound condition and well adhered. Remove the glazed tile surface using grinding or sandblasting. All grout needs

to be flush (repair if needed) with tiles as much as possible.

• All surfaces to be clean and free of oils, fats, algae, and mould. Follow directions in Chapter 2.1 as a general guide. Refer to: **INFOSHEET** Discussion about Tiles and Coatings Applied Over.

# 3. Chapter. Application

# 3.1 Prepare to APPLY - For whole system

Before commencing application if there are any concerns about the condition of the surface, consult Hitchins Technologies Pty Ltd, Technical Department.

Commencement of application indicates acceptance of the substrate.

Start about 7– 9 am in Summer and 9 – 11 am in Winter (after dew dried out). Allow about 4 hours for one coat to 70-80 sq M with one person. Don't be tempted to paint (late) in afternoon when evening dew will fall on still curing PAINTNFORGET (Or E4115) and will affect the curing. Surfaces to be completely dry. E2100 is the exception and maybe applied on damp\*, not wet surfaces (See Chapter 3.1 below for more details) \* on concrete surfaces only.

Ensure surface to be coated is thoroughly clean and dry to touch. Generally, you may start a **E2100** primer coat (not topcoats!) even if light dew\* is still on concrete surface, providing a warm sunny day follows.

Ponded water needs to be removed. Use sponges, old towels, blowers, heaters etc. Any areas that still have a moisture can be wiped with acetone which should help it to dry.

The <u>surface</u> temperature should be above 10 C for best curing and do not apply if surface temperature is below 5 C or is going to fall this low within 6-8 hours of application, as curing will stop.

## **Spray Application: PAINTNFORGET** (only) may be spray applied.

Use an airless unit of 2500 - 3000 psi and tip of about 519 size. May find a 515 tip better. Pressure at

Nozzle: 15 Mpa min (150 kp/cm<sup>2</sup>,2100 psi)

Tip size: 11 - 17 thou

For small areas it is suitable to use a conventional

pressure pot with the following settings:

Tip size: 1.8mm

Pressure to the gun: 50 psi Pot Pressure: 15 PSI

Wet on wet application, generally means applying the second coat as soon as the first coat has tacked off up until its dust free

Keep spray lines as short as possible to reduce clean up. Also add up to 5% thinners to aid application. PAINTNFORGET may pin hole if not sprayed correctly. Watch coverage rates. (See Chapter 3.5) Generally even on the biggest projects roller application provides a good, labour efficient finish. (As a guide a 5-man spray team (one sprayer, 4 support) can apply one coat on about 600 sq M per 6 hr day).

(touch dry). Don't walk on uncured PnF though.

## Masking:

It's always better to use masking tape to get straight line against tiles etc., rather than relying on a good brush technique.

You can remove masking as soon as last coat applied, avoiding stepping on wet PAINTNFORGET.

## Painting Smaller Areas; PAINTNFORGET only

Sometimes you may want to paint smaller areas, (eg Spas, Swimming lines) and normal kit is too much material. With care smaller amounts can be mixed in a clean plastic container (2 Litre Ice Cream Container) in the same manner as described below.

E2100 see 3.3 below. E4115 see 3.4 below. PAINTNFORGET see 3.5 below.

#### **Batch Numbers:**

PAINTNFORGET (And E4115) is made in batches and to ensure you have a uniform final colour make sure the batch numbers on the Resin tin (large one) are all the <u>same for the final coat</u>. Different batch numbers may be used in first coat. Batch number is on white printed label and will be a set of 6 -10 digits.

## Non-Slip Areas:

PAINTNFORGET (And E4115) may be somewhat slippery for the first few months as it settles down. If this may be an issue on steps and ramps there are 3 approaches you can use.

- 1. Lightly sand with wet and dry paper any affected areas, to leave a slightly roughened surface, without sanding through the coating! This would normally happen after pool has been put into service. NOT Recommended.
- 2. For a more definitive non-slip finish at time of application (On therapy pools, ramps etc), apply first colour coat as per normal instructions, then while still wet, "Blind Out" with the supplied PTEX20 so you see only the media and no grinning through. Let cure overnight. Then sweep / vacuum up loose
- media and apply second coating as per normal instructions. It may need a 3rd coat of to provide sufficient film build, and not wear off prematurely and to provide the right "roughness". This process recommended for E4115 but not for PnF.
- 3. Preferred Process PnF: Mix the supplied nonslip material (usually provided with every order) PDEX20 Anti Slip Media into the last coat of PAINTNFORGET at 25 gms per L of mixed product. Apply to steps, ramps etc. Stir often to keep consistency uniform.

We do not recommend using PAINTNFORGET (or E4115) on pavers and pool surroundings as it is quite slippery. Consider Megatreat Liquid stone or Tredgrip products (<u>Call us for more information</u>)

## Murals and the like:

Your client may like to have murals on the pool walls using PAINTNFORGET (And E4115) in selected colours. (See Website, Project Gallery for ideas) These can be done in the following method. Prior to painting, draw out tracing paper tacked to the surface, what you want and where. Then remove and cut to shape. Transfer shape to heavy grade clear plastic film. Once pool painted, and within 72 hours of last coat, tape up pre-cut stencils and draw or paint in outline etc. Remove stencil and complete painting. Good at free hand, or have an artist friend, then do so without the use of stencil.

As a comment keep murals near upper 1/2 of wall to see to best effect. On floor anywhere seems fine. If too deep in water effect is often lost. To make different colours mix up sufficient PAINTNFORGET (And E4115) Resin and Hardener (touch up kits) in the key colours and then mix in any colour mix you require much as for oil paints. You have about 60 minutes working life. (don't forget to mix resin and hardener first, before mixing different colours together to get the colour you need). There are a good range of colours in touch up kits to create a wide range of colours and images.

# Is Surface Really Dry?

Some areas <u>can seem dry</u> on the surface, such as concrete and Marblesheen/Pebblecrete yet in cooler winter weather may be quite wet inside. So do check for Hydrostatic pressure issues. If too wet, once painted with PAINTNFORGET it will draw moisture under the coating and may cause blisters to develop. This will be more likely with darker PAINTNFORGET (And E4115) colours. Such blisters will break when pool full and require recoating. Best deal with it when pool empty and they show up after first coat. Cut back, allow to dry out for several days and recoat.

## For remaining Fibreglass areas (if any)

Some areas can seem dry on the surface, even Fibreglass yet in cooler weather may be quite damp still (dew).

With E2100 surface moisture can be trapped under the curing coating, causing adhesion issues, so do the following:

- Make sure the surface is repaired and sanded well. Remove ALL sanding residues.
- On the morning of E2100 application, use ample clean, dry white rags (Bunnings) to wipe up any overnight dew etc. Do not try to use damp rags. (Allow around a 1 kg of rags per normal sized pool)
- Use ample white paper towels to check the surface is dry, on selected areas of walls and floor. (if dry proceed to #4). Re dry any areas still with moisture.
- 4. Use Acetone soaked and well rung out clean white rags over the entire surface to remove any remaining traces of moisture.
- 5. Note dew may reform on the surface if ground temperature is low, even after this treatment. So do check.
- 6. Apply E2100 as per below.
- 7. Before applying E4115 or PnF, recheck and redry if needed.

**To check** any surface; if sufficiently dry, tape a piece of clear or black, polythene sheet (400 x 400 mm) and leave for at least 16 hours. Do this over several areas of the surface. If there is moisture (droplets) on the underside of the plastic sheet, then it indicates there is too much moisture for good adhesion. Allow pool to dry out before application. **Recheck again.** 

Application of PAINTNFORGET (And E4115) on damp – wet surfaces may result in loss of adhesion and coating failure. ALSO applies to E2100 when applied to Damp Fiberglass surfaces.

Before application check weather conditions. What is expected over the next day or so?

PAINTNFORGET (And E4115) is normally applied in 2-3 coats. On porous, friable or fibreglass surfaces a Primer coat of WB epoxy E2100 is used. This binds and seals the surface to provide a longer lasting finish. On rough, uneven surfaces and smooth uneven textured substrates should be skim coated before application of E2100-Primer, to provide suitable surface. Note: PAINTNFORGET is a "thin" coating and does not hide surface imperfections or rough profiles. A 3<sup>rd</sup> coat of PAINTNFORGET in high wear areas is recommended. A 3<sup>rd</sup> PAINTNFORGET coat will add life to the coating in high wear areas, by giving greater thickness. E 4115 is thicker coating and will tend to hind surface imperfections, more so than PNF.

- Most pools are about  $9 \times 4 \text{ M}$  and 1-2 M deep and will give an area of about 75-80 Sq M. HOWEVER do measure your pool and work it out correctly. Contact us if not sure. Under measuring will lead to insufficient PAINTNFORGET (And E4115) and a shortened life.
- Porous, rough, and high wear areas need more material than smooth surfaces or (low wear areas) like at the deep end.
- Dew, mist, drizzle, rain, frost, cool moist air, or contaminated run off water will cause a partial PAINTNFORGET (And E4115) cure, meaning inferior performance and lower gloss level and discolouration/ fading. This is more so in cool

climates with low ground temperatures, and shaded areas or below leaking pipes. Dark colours will make any such issues more noticeable.

• Before starting application check Chapter 3.1.

Apply only in early mornings, from 7-9 am summer (9-11 am in winter) till noon, **and no later**. Dew, mist, drizzle, rain, frost, cool moist air, or contaminated run off water may cause a white film (or stains) to form on the coating, before its cured. This is more so in cool climates with low ground temperatures, and shaded areas or below leaking pipes. Dark colours will make any such films more noticeable.

## Set up:

Select an area where you can mix materials (On flattened carton, old sheets) away from the pool edge and traffic areas. Often the shallow end of the pool works well. Avoid any spillage of solvents/thinners over previous coat this can affect adhesion.

## 3.3 Primer E2100 Required under PnF and E4115.

Surface to be clean, sound, and dry (damp acceptable on concrete surfaces, only), NO Ponded water.

- ADD all of PRIMER Part B (Hardener) into PRIMER Part A, (Resin), there's plenty of room.
- Scrape out remnants of Part B into Part A.
- Mix for several minutes until uniform by hand or slow speed mechanical mixer.
- When FULLY mixed, ADD clean water about 1L for each 4L pack.
- If using smaller amounts, then the ratio is: 1:1:0.3 of Part A to Part B to Water all by weight or add 50% water to the already mixed A and B.
- Apply by brush roller working well across surface to get as uniform cover as possible in up down, left right pattern (See diagram below, Chapter 3.7)
- Note that on vertical surfaces it will tend to run so do not try for a high film build but be consistent. Make sure no surfaces unprimed as will cause loss of adhesion of topcoats.
- **Working life**: 0.5- 1 hour at 20C. Do not use after this OR when it starts to go stiff in the container but discard safely. **Min application surface** temp; 5 C
- If air temp around 28 -30C plus it will become sticky quickly if not enough water added initially. Do not try to add more water. Discard. Otherwise, variable thickness and curing is likely.
  - To prolong working pot life, leave packs in shade on hot days.
    - Surface to be clean, sound, and dry (damp acceptable), NO Ponded water.
    - Max RH 80% Pot life 1 hr at 25C (do not use if goes "stringy", but discard safely)
    - Primer E2100 Coverage rate 4 Litre pack (when mixed with up to 30% water)
    - See Chapters 3.6, 3.7, 3.8 for application details.

<b>Coverage Rates</b>	"Smooth" Concrete - Fibreglass	Rough Surface
Sq M / L Mixed	8 - 10	6 - 8
Sq M / 4 L Pack	32- 40	24- 32

Note: apply 2 coats if very rough or absorbent surface.

Curing times	Touch Dry	Light Foot Traffic	Full Cure	Recoat Min
Substrate temp 10C	6 - 8hrs	48 hrs	7 days	7 + hrs
Substrate temp 25 C	3-5 hrs	24 hrs	7 days	4+ hrs

Clean up use: water+ mild detergent or Methylated spirits.

See section 3.7 Applying for the best methods.

# 3.4 E4115 (As Topcoat over E2100 and no PNF)

# E 4115 May be used as a Topcoat in its own right as 100% Hi Build Epoxy Topcoat. Needs to go over E2100 Sealer / Primer.

- Power stir Part A (Resin) then add ALL of Part
   B, Hardener into resin tin.
- Scrape out ALL remnants of Part B into Part A. •
- Mix for several minutes until uniform by hand• or slow speed mechanical mixer.

Do not entrain air as this will cause aeration leading to porosity of the cured coating. (see the online video for more detail)

https://poolpaint.com.au/info-bank/video-tutorials

While mixing, scraping sides and bottom to get a completely homogenous mix.

 $\underline{\text{Use immediately}}, \, \text{don't wait. No induction period.}$ 

Pour about half into your roller tray or other vessel to apply from.

Be careful not to add any unmixed material (upper insides of large tin) into the roller tray etc. as this will leave partly cured material on the pool surface. Will not fully cure.

(If mixing several packs at a time, write on each one the time, so as to use sequentially, and note time of pot life. See Videos: https://poolpaint.com.au/info-bank/video-tutorials/

See Chapters 3.6, 3.7, 3.8 for application details.

Surface to be clean, sound, and dry, NO water or dampness.

Max RH 80% Pot life 1 hr at 25C

Topcoat Coverage 5 kg pack (4kg Resin, 1 kg Hardener)

Coverage Rates	"Smooth" Concrete - Fibreglass	Rough Surface
Sq M / Kg Mixed	6 sq M /kg / coat	5 sq M /kg / coat
Sq M / 5 kg Pack	30 sq M /kg / coat	25 sq M /kg / coat
Film Build (WFT/DFT)	160u / coat	250u / coat (nominal)

Note: apply 3 coats if very rough surface

## Curing details at 25 C Substrate temperature

<b>Curing times</b>	Touch Dry	Light Foot Traffic	Full Cure	Recoat time
Std Hardener	6 hrs	24 hrs	7 days	16 hrs

Clean up use: Methylated spirits or Diggers Premium Grade All Purpose Thinners.

## Mixing small amounts (Murals etc)

Measure by weight in the ratio of 4 parts resin to 1-part hardener. E.g. **800 gm** Resin, **200 gm** Hardener. This will cover approx. 4-6 sq M per coat. Mix well and use immediately. DO NOT guess but **measure** out amounts. Incorrect ratios will result in brown staining or uncured E4115. We (may) also have available a touch up kit available which covers about 1.5 Sq M in ONE coat.

PAINTNFORGET MIXING See Videos: https://poolpaint.com.au/info-bank/video-tutorials/

# An imperfect surface (uneven – lumps etc) will not be hidden by the PnF coating. Smooth the surface more or try an extra E2100 or PNF topcoat.

- Pour the content of part A (Polymer) and part B (Hardener) into a clean 8L pail.
- Power mix with the stirrer, max 600 rpm. Use slow steady action mixing up from the bottom and try not to get onto the upper insides of the tin.
- Do not entrain air as this will cause aeration leading to porosity of the cured coating. (see the online video for more detail)
- Mix for about 3 4 mins, scraping sides and bottom to get a completely homogenous mix.
- <u>Use immediately</u>, don't wait. No induction period

- Pour about half into your roller tray or other vessel to apply from.
- Be careful not to add any unmixed material (upper insides of large tin) into the roller tray etc. as this will leave partly cured material on the pool surface. Will not fully cure.

(If mixing several packs at a time, write on each one the time, so as to use sequentially, and note time of pot life.

## PaintNForget curing Booster: For the FINAL coat of PNF only.

Don't use in any other coats or products, may cause adhesion issues.

Power mix Part A, Resin to uniform consistency. Then pour ALL (and scrape out residues) into a 7-8 Ltre\* clean mixing bucket. Then add all of Part B, Catalyst. Then power mix thoroughly for 2 minutes to make into homogeneous consistency. Do not entrain air.

#### Add Booster as detailed below.

PNF 5 L pack	100 ml
PNF 20 L pack	400 ml

Add the required amount of Booster and remix again for 1 min. Then use immediately. Pot – Working Life remains the same (see below for details) The Booster speeds up the curing, meaning shorter time to initial cure in cooler conditions.

THINNERS: Supplied thinners V112 are to be added to the mixed product in the process, as the solvent premixed with part A will evaporate fast. Add it when you feel that the polymer on the brush or roller is starting to get thick (muddy) and hard to apply. IT IS IMPORTANT TO MAINTAIN CONSISTENT THICKNESS FOR THE BEST RESULT. We suggest no more than 5% (250ml) put into 5L pack at one time. Although they can be added in a process "as you go" when they start to evaporate.

Note: avoid spill of thinners over FP coated surface if it is cured for less than a week. This will affect adhesion and the topcoat to peel off.

#### Mixing small amounts (Murals etc)

Measure outby volume (not by weight) in the ratio of 4 parts resin to 1-part hardener. E.g. **800 ml** Resin, **200 ml** Hardener. This will cover approx. 4-5 sq M per coat. Mix well and use immediately. DO NOT guess by volume but **measure** out amounts. Incorrect ratios will result in brown staining or uncured PAINTNFORGET. We (may) also have available a touch up kit available which covers about 1.5 Sq M in ONE coat.

Topcoats PAINTNFORGET Coverage rate 5 Litre pack
Surface to be clean, sound and dry, NO water or dampness.

Max RH 80% Pot life 2 hr at 25C (Standard Hardener)

See Chapters 3.6, 3.7, 3.8 for application details.

<u>Do not apply</u> if surface (ground) temperature is below 10 C. Will not cure well. And is surface DRY? Max humidity at application is 80% RH

<sup>\*</sup> use 25 Litre bucket for 20 Litre batch

Coverage rates	Concrete - Fibreglass Smooth / Rough	Pot Life, Temp	Pot Life, Time
Sq M / L	8-9/6-7	15C	3 hrs
Sq M / 5 L pack 1 <sup>st</sup> coat	40 -45 / 35 - 45	25C	2 hrs
Sq M / 5 L pack 2 <sup>nd</sup> & 3 <sup>rd</sup> coats	45 – 50/ 40 - 45		
Film Thickness (wet)	100 - 120 microns /coat		

Desirable thickness (film build), per coat 60 microns dry approx. 120 microns dry with two coats. About the same thickness as housepaint.

Cure time, 50% RH,				
Touch Dry	5C / 15C / 25C	10 / 8 / 4 hours resp.		
Recoat	5C / 15C / 25C	Min; 24 / 16 / 8 hours resp.		
Full Cure	5C / 15C / 25C	14 /10/ 7 Days respectively.		

Clean up use: V111 / V112 thinners or Diggers Premium Grade All Purpose Thinners.

**Note:** If you see bubbles forming in wet coating, especially when in sun, this signifies moisture from below breaking through the curing coating. If feasible stop and check substrate is really dry. Otherwise continue but you will need sand back "craters" that form, before applying second coat. Also check to see that they don't reform in second coat. A concern as water is still in substrate and may in time cause the coating to lift off. Refill pool promptly after cured, to minimise problem.

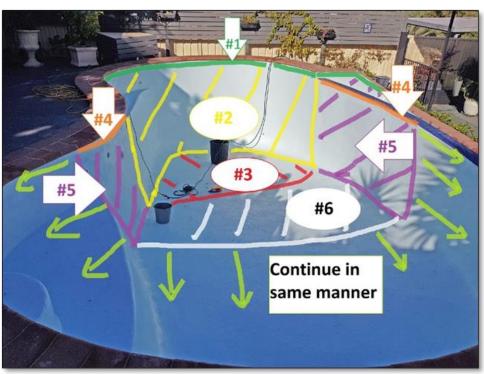
Sometimes DRY bubbles form due to air being trapped in pockets beneath the curing coating and these cause blisters as the air heats and expands, (dark colours). When applying a second coat use a small (artist) brush loaded with paint to fill the open craters.

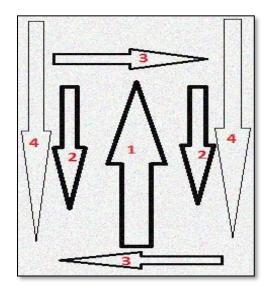
## 3.6 APPLICATION TECHNIQUE for all coats:

Generally, start on the wall at the deep end and cut in to the top or tile line, (#1 green) and move around to the 2 long sides, cutting in till around ¼ along. Then Stop. Then coat the end wall (#2 yellow) and coat the floor (#3 red).

Cutting in again, (#4 orange, for a few M) then walls (#5 purple) followed by the floor (#6, white). Then continue in same manner (#7) to the end. Cutting in as you go, where needed, followed by walls then floor. Don't forget to paint you way up the steps.

## Follow sequence #1 - 7.





#### For each area:

• To apply by roller, load it up evenly, and apply to the middle of about a 1-2 sq M area, and apply in one direction, then roll across at 90 degrees to spread out. Like an "H" pattern. (1, then 2 then 3 then finish with 4)

See video at: <a href="https://poolpaint.com.au/info-bank/video-tutorials/">https://poolpaint.com.au/info-bank/video-tutorials/</a>

- Then "lay off" in **one direction** so as to get a uniform finish. Lay off all walls and floors in the same direction such as downwards on walls and towards you on the floor.
- To get a uniform film build, apply evenly and spread out well, **but follow coverage rates** for the type of surface you are working on. See above tables for coverage

rates.

Do not go back over any "laid off" area, though slight overlapping when applying adjacent panel

# 3.7 Added Notes about Application

- Keep roller (or brushes) wet during application.
- The correct coverage rate is important for long term life, so use markers (Stones on top of coping) etc to figure out about how far one pack should cover. In an average pool, markers about 5 M apart on the long sides, will mean an area of 25-35 sq M, BUT measure the pool to be sure.
- In some pools you will use say a total of 5 packs, so make it 3 packs on first coat and 2 on second coat.
- To help you decide where each pack starts and stop place some markers on the side of the pool such as stones or bricks, where you need to stop pack one and start pack 2 etc. Then in the case above with 5 packs, move markers to reflect the changes for each coat. That is just move them a bit farther apart and remove one set.
- If you end up with a pack left over after 2 complete coats then apply the last pack on the next day to the shallow areas, steps, swim outs etc as these get all the wear and need a thicker coating to last.

Please note this is an example, look at your own pool and determine the correct size. It's only a guide to help you see how far each pack should go. We just want you to have more material at the shallow end and not use it all up at the deep end!!

- The nominal film thickness for PnF per coat is 60 microns (dry) or 120 (wet). And for E4115, 160 250 microns wet or dry, per coat. Use the Plastic Wet Film Comb to check as you go along. By doing so you will ensure correct film build. You will get variations but aim to get at least this amount per coat.
- Cured material will be difficult to remove from any surface (or skin) so wipe up immediately with a cloth.
- Allow to cure overnight (16 hours or longer if very cool) before applying further coats.
  - Do not walk on painted surfaces until cured.
- If more than 72 hours between coats a light sand with #60 grit paper to remove the gloss, will be required before applying the next coat.
- Wash up rollers, brushes in Thinners Supplied (Or discard correctly).
- Do not use thinners to remove paint from skin, but rags and water/ detergent. Chapter 1.9

• Remove any spilt paint from paths, tiles, slates immediately. Once cured hard to remove.

## 3.8 ADDITIONAL COATS:

- PAINTNFORGET (and E4115) is designed to require 2 coats at the correct coverage rates.
- Apply 2<sup>nd</sup> coat in the same manner at the first full coat.
- A 3<sup>rd</sup> coat needs to be applied if you have material still left over after 2<sup>nd</sup> coat, as not enough film build, (thickness), reached so far. Apply as per the 2<sup>nd</sup> coat. Focus on shallow end, steps etc.
- Consider applying the last coat in 2 separate applications a day apart, if concerned about short time prior dew setting in. Remember it is important to give the coating time to settle before it can be affected by the moisture.
- Pay attention to the outside corners and ridges, maybe apply additional coat over those areas as they are naturally thinner with the application and will show wearing off very soon, if too thin.
- 4. Chapter. Curing
- Allow the PAINTNFORGET to cure for 7 days in summer and 14 days in winter before refilling with water and chemicals.
- Keep moisture, rain, drips and running water off the curing surface during this time as his may affect the curing. Pump out the rainwater when practically possible.

- Shallow areas, beaches, swim outs, gutters handholds, ledges, and shelves, should a get a bit more material as high wear areas, relative to the bottom at the deep end, which has less wear and tear generally.
- Any leaves, insects etc that have fallen onto the wet PAINTNFORGET (and E4115) should be carefully removed as soon as possible after the coating is cured and before succeeding coat(s) applied. Any well adhered organic matter in the last coat, will usually dissolve over time.
- Line markings: can be done after the last coat is cured and use masking tape to set out the areas to be painted. Apply Black or Navy Blue (White also) by brush or small roller. Apply within 72 hours of last coat being fully applied.

Ideally 2 coats should be applied for maximum life Coverage rates for PnF about 6-7 Sq M /L /Coat, and for E4115, 6-8 sq M / kg/coat.

- The rate of curing (and final colour) will be affected by surface temperature, humidity and overall weather conditions and may be hastened or retarded as a result.
- See the ATTACHED "Maintaining your pool water and coating for maximum life" for complete details. If you don't have, please ask for a copy.

## To determine if cured enough to fill pool: (for PnF only)

Get a clean white cloth or paper towel and make into a pad about the size of 50C coin. Well saturate the pad with IPA (Iso Propyl Alcohol. From chemist) Rub the wetted area over the dry paint, in a up down motion (say 50-100 mm, stroke) and remove. Any paint - colour on the pad indicates it is NOT cured and no water should in the pool. Repeat, if necessary, until no color is on the wetted pad surface

# 5. Chapter. Management of the Pool

# **Looking After The Pool**

- Once the pool coatings are fully cured it can be filled with potable water.
- Any and ALL chemicals inc salt, MUST be dissolved and then pour into the pool, NOT dumped in and expect the pool pump to circulate, though pump should be functioning as the diluted chemicals are added.
- Bring pool to balance and maintain it in the correct ranges continuously. (24/7) for best results, less costs and better coating performance.

рН	7.2 – 7.6	Temp	5 – 36 C
Total Alkalinity (TA)	80 (min)–180(max)	Chlorine Levels	1 – 3 ppm (not higher)
	ppm		
Calcium Hardness	250-350ppm	Watch CA carefully	
(CA)			

- Pool regularly cleaned, brushed (at least each 2 weeks in summer and monthly in winter).
- Check water balance at least twice weekly in summer and monthly in winter.
- Pool chemicals to be correctly mixed and not dumped into pool,
- Pool remains full of water (unless winterized)
- If using a Cu/Ag system monitor and keep ion concentration low to prevent staining.
- Get an LSI result each time you have pool water tested for better indication of the pool water balance. Needs to be <u>always</u> -0.3 to + 0.3. Discuss with pool shop if outside this range.

Full details in Separate "Looking After Your PaintnForget Pool" from Applicator or HT. Contact us via email to request. info@poolpaint.com.au

FOR MORE INFORMATION, PLEASE REFER TO OUR WEBSITE POOLPAINT.COM.AU

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