## 9.4. Fibreglass Pools:

Most pools will have a degraded, whitish surface, which responds well. Any small (hairline) cracks may be safely ignored as the Epotec will usually fill them. However, if you see any of:

- Larger cracks, holes or defects
- Fibreglass fibres or "brown" stains

## then contact us first

- Osmosis, bubbles, blisters etc.
- Black spot may also be present

**NOTE**: Fibreglass pools come in different levels of quality and may be structurally weak from a range of issues during their life. If the pool seems in poor condition seek advice from a fibreglass or pool professional, before proceeding to empty. See Section 6 above also.

Safety Tread Areas: Some pools have these on steps and / or bottom. It is difficult to get good adhesion to bottom of the depressions, as one cannot clean or abrade these parts so either sand completely smooth (And apply non-slip surface within the EPOTEC application, Section 11) or clean and prepare with rest of pool surface, knowing that long term adhesion of EPOTEC may be an issue on these surfaces. A wire brush will help clean out the depressions. (Soda blasting recommended – see below)

Osmosis, (if in a pool and some older pools have it), is there for the life of the pool. 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 pools. 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.

Heavily worn areas (Fibres visible) means 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 EPOTEC 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.

- ✓ 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 recommended
- ✓ Need to remove oxidised gel coat ONLY. Abrade by Soda Blasting (recommended) or machine disc sanding / orbital sander (#60 grit wet / dry paper or ZEC disk) the entire pool 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 EPOTEC NT Epoxy. Be careful not to dig into surface beyond gel coat level. (Gel coat is usually 1 2 mm thick).
- ✓ Osmosis (and Black spot) maybe an issue and can be treated as follows:
  - To check, prick any blisters and note if water runs out. If so, then make sure all blisters broken and allowed to dry out before application.
  - As part of the overall sanding process sand off the tops of these, digging into any larger ones, allowing the dirty smelly water (if any) to run out. Get back to sound edges on larger holes. Let dry for several days.
  - You will need to consider how interested the client is. Osmosis, once in a pool is there for life. It's a slow process so will come back over time. Generally dealing with the worst is what most people do, however if client wants a nicer looking pool for longer, seek out all bubbles and sand them out.
  - We have a separate document on this if you wish to be more thorough, please ask.
  - Repair these plus any small surface irregularities / holes with suitable epoxy

filler, (Megapoxy or similar) or if not available a Polyester Filler may be used, (usually available from most hardware shops). Follow directions of manufacturer. Sand smooth when cured, 3 – 7 days, (see comments below)

✓ If holes through or the fibreglass fibres (white strands) are visible before repairs start, contact us.

## 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 re built areas) can have unreacted styrene resin and

- /or waxes that cause a failure with Epotec 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) & scrub down with detergent and water using a stiff bristled brush or water blaster.
- ✓ If necessary, apply algaecide to kill algae / black spot roots. See Section 9.9 Thoroughly rinse off all detergent/residues with clean fresh water and allow to dry.
- ✓ Acid etching is NOT needed, however see 9.8.
- ✓ NOTE: Apply ample Epotec to all areas above the waterline, as these get a lot of wear and UV attack. Ensure coating applied as uniformly as possible so as to get maximum life. Can apply a 3rd coat if desired.
- **NOTE**: If you have a fibreglass lined pool ask for our INFO Sheet on how to deal with this.

## 9.5. Marblesheen or Pebblecrete and Mineral Finishes (See Section 9.10):

These surfaces over time become dirty, cracked and even soft, with missing areas however with care can be upgraded successfully.

- ✓ It is necessary to carefully check all areas, tapping to find "drummy" areas and digging into soft areas, to understand the extent of the condition. Refer to beginning of Section 9 for more detail.
- ✓ Remove all such material with hammer, cold chisel to expose sound surface underneath and nearby. Abrasive Blasting is NOT recommended. **IB**
- ✓ Any weak, unsound or friable areas should be removed by grinding as they may fail later on once coating has been in service for a period. Repair is best done as per Section 9.10. In some pools up to 40% has been found to be faulty and replaced. Also Cement Aid's Diamite (o2 9810 0725) has been found to be suitable to strengthen friable Marblesheen, before EPOTEC application and to reduce possible delamination issues.
- ✓ Any rust spots also need to be dug out to solid non-rust stained concrete and all around rusty steel. Wire brush to remove flakes of rust. Treat exposed steel with an anticorrosive or rust converter primer. (From hardware or paint shop). 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 Section 9.2. IB

- ✓ Rebuild surfaces to match existing with Epoxy if small or use a sand cement mix (see Section 8 above for materials to consider), for larger areas. Also see Section 9.10 about repairs to larger areas. You may be able to purchase some aggregate/pebbles to provide a profile like the original and imbed into wet filling material.
- ✓ You may want to consider reducing the profile of the pebbles and also any general depressions etc may be filled with MasterEmaco N 5100 as a skim coat to 3 mm max thickness. This will save on EPOTEC usage on VERY rough or porous surfaces.
- ✓ Make sure no grease, suntan or body oils on surfaces. Wash down with warm water/detergent (Commercial Degreaser) and stiff brush. 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 recommended.
- ✓ If necessary, apply algaecide to kill algae roots. See Section 9.9 for details.
- ✓ Thoroughly rinse off all detergent/residues with clean fresh water and allow to dry.
- ✓ Acid etching recommended, to better prepare the surface. See Section 9.