

A&I Coatings FAQ Sheet No. 5
Anti-graffiti Coatings
Envirothane 8075 Sacrificial and
Envirothane 8480 Non Sacrificial Anti-Graffiti Coatings

- 1. What is the difference between a sacrificial and a non sacrificial anti graffiti coating?**
A sacrificial coating withstands one or two graffiti removals, whereas according to the Australian Standard a non sacrificial has to be able to withstand 10 plus removals of graffiti.
- 2. What is E8075 Sacrificial anti graffiti coating?**
It is a highly crosslinked new generation acrylic, available in clear or pigmented. The clear version has the best graffiti resistance by far.
- 3. What is E8480 Non sacrificial anti graffiti coating?**
It is a Fluoropolymer Modified Two Pack Polyurethane. It is ultra durable, very hard, and very graffiti resistant.
- 4. What primers should be used?**
This depends on the substrate being protected. Refer to the A&I Coatings Website (www.aicoatings.com) or to the A&I Coatings Tech Support Team (helpdesk@aicoatings.com)
- 5. What other coatings can E8075 and E8480 be applied over?**
They are both very effective anti graffiti topcoats over an acrylic system provided it is sound. They are suitable for use over most other coatings, normally after a light sand if the coating is very smooth. When an existing coating is being protected, an on-site test for adhesion and coating compatibility is necessary.
- 6. How important are the mixing ratios of base (pack A) to hardener (pack B) in E8480.**
The mixing ratio of 5 : 1 very important. So mix 5 litres of E8480 pack A with 1 litre of E8480 pack B.
- 7. How should the two packs be mixed?**
The best way to mix the two components is by a power stirrer. Mix thoroughly (for about 2 minutes) until the combined product is consistent and thoroughly blended, and then allow

the paint to sit for 5 minutes. Thin with water if needed after mixing the A&B together. In lower temperatures, stir again briefly prior to use

8. How critical is pot life?

Very – if it isn't observed, colour and gloss variation will occur and ultimately, the mixed product will become unusable.

9. How critical or influential is the weather conditions to the curing and performance of this system?

Temperature and humidity are both important, although E8480 will cure at relatively low temperature. Relative humidity must be no greater than 85%.

10. What is the best method of application?

This depends on the circumstances. In large areas, spraying by airless may be the best option. Spraying is faster and traditionally provides a better finish (no roller 'lap marks' or stipple), but it requires expensive machinery and overspray needs to be controlled.

Some helpful hints here are:

- a. Both E8480 and E8075 may be thinned with water to spraying viscosity – try 5% first (thin only after mixing Pack A and B together.)
- b. Use a medium/fine gun filter and a fine spray tip
- c. Pump pressure approximately 1750 psi
- d. Take care to adequately mask nearby sensitive and finished surfaces
- e. Work fast to maintain a nice 'wet-edge'.
- f. Make sure you thoroughly purge the machine and line with water before introducing E8480 or E8075, and again afterwards.

Roller and brush are also fine and probably the more suitable method for small areas. Use a tight weave microfiber roller with a 12mm nap length. For large areas, 460mm rollers may be useful.

11. What particular pitfalls are there in application?

E8480 has optimal film properties at a reasonably low film thickness, so resist the urge to overcome 'orange peel' by applying a heavy coat. It will tend to show 'post-flow' more than a solvent based product. Overspray may float and stick significantly given that it is a water based product.

12. What is 'Theoretical Coverage' and how important is it?

This provides a guide to how much paint you are likely to use. It will vary depending on:

- a. The size, or area being coated – larger areas normally give a better 'coverage rate'.
- b. The condition of the substrate – for example, a textured wall will need a heavier coating than a very smooth wall
- c. The colour – some strong colours will require extra coats for full colour coverage

13. Practically, what usage rates can be expected?

The following is a guide from field experience, although this will obviously vary from project to project.

Spray Application:

1. E8480 or E8075 thinned 5% with water – 7m²/litre

Roller Application

1. E8480 or E8075 unthinned – 7m²/litre

14. If I spray, will the smell be a problem?

E8480 is virtually odorless, but does release some Isocyanate when sprayed. Proper PPE must be used, and other trades working in the area should be avoided.

E8075 is odorless and very safe.

15. Roller marks – how can they be avoided?

Both coatings have good flow properties. Always roll in both directions – i.e. north/south, and then east/west. Unfortunately, it is often impossible to completely eliminate roller marks.

16. How soon after I am finished will the coating be graffiti restraint?

Initial graffiti resistance is attained within hours, but is at best sacrificial. Maximum graffiti resistance is reached after about 1 week of curing.

17. How should graffiti be removed? Graffiti should be removed with V745 Graffiti Remover or mild solvents such as Methylated Spirits. In extreme cases, strong solvents such as Acetone may be used on E8480.