SITE REPAIRS

High applicator skill is important to achieve a satisfactory outcome when painting large sections either in shop or on site, and particularly when performing site repairs or “touch ups”.

Protective coatings are either “shop applied” or “site applied” systems.

SHOP APPLIED COATING SYSTEMS

Shop preparation generally employs abrasive blast cleaning, a highly effective and very fast method to achieve a uniform and clean surface with a perfect key for the new coating system to bond to.

Shop spray application results in a superior standard of finish, as higher gloss levels can be achieved than with brush or roller, and there are far fewer airborne contaminants, such as dust, moisture or salts, to settle on the surface. Temperature control ensures that the coating does not dry too quickly, or too slowly. Too quick, and the coating may not develop a sufficient bond with the substrate. Too slow, and dust and bugs may fall onto the wet coating.

Shop application is also very fast. The recommended minimum film thickness can easily be achieved, and far more uniformly in the recommended number of coats.

SITE REPAIR OF SHOP APPLIED COATING SYSTEMS

Once erected on site, any damage to the shop applied coating system must obviously be rectified. If welding is required, the welds will have to be ground, primed and painted in situ.

Both welds and damaged areas should be treated similarly – apply the primer to the repair areas so as to overlap the sound adjacent coating by not less than 25mm or greater than 50mm.

Apply intermediate and topcoats over the primed welds to match the surrounding coating system, overlapping the sound adjacent coating by not less than 25mm or greater than 50mm. To match the adjacent coating, the same application method should be used – that is, spray application using a touch-up spray gun.

TOUCH UPS OF SHOP APPLIED COATING SYSTEMS

The closer the touch up method is to the original method used for applying the coating, the better the result; therefore, if spray was originally used in shop to paint the steelwork, spray should be used for touch ups. Touch-up spray guns allow small volumes of material to be mixed in the vessel and sprayed onto the repair area.

Do not use a brush, as brush application will look dramatically different from the sprayed finish and will be very noticeable. The sprayed touch ups won’t always be perfect matches either, but certainly superior to brush applied touch ups.
SITE APPLIED COATING SYSTEMS

In situ applied protective coatings are formulated for greater application versatility, as brush and roller application are often more practical methods for use on site.

In order to balance good brush loading, good flow-out, and adequate coverage when applied in situ, these coatings generally exhibit roller stipple and orange peel when sprayed.

TOUCH UPS OF SITE APPLIED COATING SYSTEMS

As mentioned earlier, the closer the touch up method is to the original method used for applying the coating, the better the result; therefore, if spray was originally used on site to paint the steelwork, spray should be used for touch ups.

On the other hand, if roller application was used originally, a small roller of a similar nap to the original should be used for touch ups. Sometimes it pays to experiment with sponge rollers and nook-and-cranny rollers as these can also produce satisfactory results. A little artistry is sometimes required to ensure that the repair area is matched to the surrounding coating finish.

TOUCH UPS OF AGED COATINGS GENERALLY

Occasionally only parts of a building or structure require coating and there is a temptation to obtain some retained paint or purchase new paint in the same colour as the original job an simply dab a bit of paint over the patches.

Unfortunately, touching-up a section of a painted area rarely produces the satisfactory result you had imagined!

Even if you had retained a kit of the original topcoat used on the job, it would be extremely unlikely that any touch-ups on a job originally completed a few years before will be completely successful for the following reasons.

- The old coating is likely to have faded or picked up airborne pollution so the touch-up patch will appear a different colour
- The old coating may have chalked so the touch-up patch will appear slightly glossier
- The old coating may have been applied differently from the touch-up patch, so the two areas will differ in texture

If you had’t retained a kit of the original topcoat used on the job and thought you might get a colour match, it is amazing how very, very difficult it is to get an exact match – and you can’t tell how close (or how bad) it is until the touch-up patch dries.

And touch-ups can look even worse if a different product was used to the original.

The only reliable way to touch up an area is to paint a whole section, at least up to the nearest construction joint.

For more information, please contact the Dulux Protective Coatings Technical Consultant in your state.