

Install® Plus: New improved Tata Steel red paint

Significantly enhanced corrosion performance and service life improvements

The best just got better, Install® Plus tube is now available externally coated with a new and improved Tata Steel red paint as standard.

This coating has been specifically and exclusively developed for Install® Plus and provides significantly enhanced corrosion resistance.

It provides better mechanical handling performance, and is more environmentally friendly compared to our previous red paint offering.



Dedicated development

As part of our continuous product development activities, a dedicated team of scientists and engineers have researched many aspects of tube surface preparation, coating application and corrosion mechanisms.

Working with leading academic experts, Tata Steel have developed new testing protocols that replicate the typical service conditions of our products.

Data from such testing has allowed us to develop a new and improved water based paint system that significantly out performs our previous transit protection coating.

More solids and additives

Paints are made up of different ingredients, including solid pigments and additives, which define how well the paint will perform in service.

The new Tata Steel red water based acrylic paint has more solids than the previous offering and increased amounts of anti-corrosion additives to deliver 'best in class' performance.

Salt spray and humidity testing

Install® Plus tubes may see service in excess of 25 years. We would always recommend that additional protection is applied, where application conditions require this, to ensure the best performance from any steel product is obtained. However we regularly see pipework applications where our transit protection has been left as the final external protective coating.

With this in mind, Tata Steel have developed a paint formulation that can last the lifetime of the tube in typical applications (please refer to the Tata Steel service life technical datasheet for additional information).

Just like the automotive, aerospace and defence industries, we have undertaken accelerated salt spray and humidity testing that replicates the service life of the product.

Such tests are very aggressive, but allow years of exposure to be condensed into weeks of accelerated product testing, to enable performance validation.

Improved corrosion resistance

Samples of Install® Plus with the new Tata Steel red coating were taken from our product process, and exposed to a controlled salt spray solution at a temperature of 35°C.

Testing was carried out by coating experts at our R&D laboratories, and also independently verified by academic experts at Swansea and Coventry Universities.

During the accelerated testing conditions, the coating integrity, blistering, staining and adhesion were all closely monitored.

The new Tata Steel red paint provides a significant performance improvement over our previous offering.

The new Tata Steel red paint passed our accelerated test requirements, which ensures that for typical building service pipework applications, the coating will last the lifetime of the tube (please refer to the Tata Steel service life technical datasheet for additional information).

Humidity improvements

Pipework systems can be exposed to fluctuating temperatures; this may cause moisture to form on the tube surface.

Accelerated humidity tests were conducted on production samples. The samples were exposed to 100% relative humidity at temperatures that cycled between 42°C and 48°C for 10 days.

Once again, the new Tata Steel red paint provides a major improvement when compared to our previous offering.

Better adhesion

The new Tata Steel red paint provides better adhesion than our previous coating.

Better pull-off strength means that Install® Plus tubes can be readily bent or manipulated without the risk of paint cracking, flaking or disbondment.

Improved impact resistance

The new Tata Steel red paint provides a better coating integrity compared to our previous versions.

This improves its resistance to impacts and handling damage.

Coating process

Install® Plus tubes are de-scaled before coating by blast cleaning to EN ISO8501-1 grade SA 2½ using round cast steel shot in accordance with EN ISO11124-3 Grade S100 (SAE S330) to obtain a mean surface profile of Rz 15 – 20 µm.

Prior to coating tubes are preheated to 60°C ± 5°C and the spray coating applied in two passes. This ensures a robust coating that is fully cured prior to being packed via a dedicated auto-packing process.

The auto-packing system is one of the new investments at the Corby manufacturing hub to improve our service and quality.

Install® Plus tubes are typically supplied with a total Dry Film Thickness (DFT) of 25 – 35 µm.

Colour match

Tata Steel red is a unique colour exclusively available to us. There is no directly equivalent RAL number.

The colour and sheen of Tata Steel red is closely controlled in accordance with Tata Steel requirements, and is based on specified CIE Lab values, with a tolerance of Delta E 2.0 max.



Touch up kits from Tata Steel may be available, please contact one of our Customer Technical Service (CTS) experts for further details.

Technical support

Our Customer Technical Services (CTS) experts are on hand to answer any tube mechanical suitability enquiries.

Please contact us via the Tubes Technical Helpline: +44 (0) 1536 404561

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