# TATA STEEL



# **Colorcoat® High Reflect**

The optimum reflectivity for an internal liner, maximising daylight and reducing requirements for artificial lighting

Colorcoat $^{\circ}$  High Reflect is a bespoke liner designed with maximum reflectivity to reduce energy requirements, associated operational costs and  $CO_2$  emissions.

- ≥ 85% reflectance, reducing the amount of energy required to achieve the same level of lighting.
- Significantly reduces CO<sub>2</sub> emissions by 2-3% per year, helping to achieve compliance with tightening regulations.
- Can improve daylight factor by 10%.
- Possible energy savings of up to 12% per annum.
- Smooth 30µm polyester coating.
- Galvanised substrate with Zinc metallic coating or equivalent for very good corrosion resistance.

 High-performance reverse side backing coat specially formulated for use in construction applications providing good adhesion to standard systems.

# Typical payback and savings

Lux	Energy savings (%)	CO <sub>2</sub> reduction (%)	Payback (years)
300	11	3*	9.8
500	12	3*	3.8
1000	12	3*	1.1

Based on  $4000m^2$  building, daytime operation (Payback for 24 hour operation is  $\leq 1.5$  years). \*Based on SBEM Calculation under NCM conditions for Part L compliance.



Test building with Colorcoat® PE 15 internal liner and Colorcoat® High Reflect.



Close up showing transition from Colorcoat® PE 15 to Colorcoat® High Reflect.

# Colorcoat® High Reflect

### Colorcoat® reassurance

The Colorcoat® brand provides the recognised mark of quality and expertise from Tata Steel. Encompassing fifty years of innovation, strict testing procedures and manufacturing excellence, Colorcoat® provides a range of pre-finished steel products which have been used on countless projects worldwide.

## **Product performance**

Colorcoat® High Reflect is carefully manufactured in a controlled process to ensure consistent quality and is suitable for interior roof and wall liner trays, cassette systems and composite panels in dry and unpolluted environments. Foam composite panels should not be stacked plastisol to Colorcoat® High Reflect until cool.

Colorcoat® High Reflect is not suitable for external applications and to ensure it is fitted in the optimum condition, outdoor storage should be minimised during the construction process.

Colorcoat® High Reflect can be expected to last the life of the building in normal, controlled, dry and unpolluted environments.

Tata Steel has a range of Colorcoat® products suitable for different environments and applications.

### **Product statement**

A fit for purpose guarantee is available. The actual duration of the guarantee will depend on the environment, geographic location and application.

### **Product testing**

To ensure the integrity of Colorcoat® products, Tata Steel uses laboratory tests to measure their performance against corrosion, effect of sunlight, chemicals and abrasion. All testing of products is carried out in accredited laboratories to international standards.

# **Typical properties**

Colorcoat® High Reflect	Test standard		
Nominal organic coating thickness	μm	30	EN 13523 - 1
Specular Gloss (60°)	%	25-35	EN 13523 - 2
Resistance to rapid deformation (Reverse impact)	J	< 9	EN 13523 - 5
Paint adhesion (cross hatch)		No pick off	EN 13523 - 6
Flexibility: Minimum bend radius	Т	5T (16°C)	EN 13523 - 7
Adhesion	T	3T	EN 13523 - 7
Reflectance (Y value)	%	≥ 85%	
Pencil hardness (Surface marking)		HB - 5H	EN 13523 - 4
Solvent resistance (MEK rubs)		> 100	EN 13523 - 11
Corrosion resistance: Salt spray Humidity Reaction to fire	hours hours	500 500 Class A1	EN 13523 - 8 EN 13523 - 26 EN 13501 - 1
Internal environment classification		CPI2	EN 10169

#### General notes

 The figures contained in this table are typical properties and do not constitute a specification. These figures relate to the topcoat. For details on test methods see www.colorcoat-online.com

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