



# 中鋼馬來西亞有限公司 CSC STEEL SDN. BHD. (228899-P)

180, Kawasan Industri Ayer Keroh, Ayer Keroh, 75450 Melaka, Malaysia.  
Tel : (06) 2310169 (Hunting) Fax : (06) 2315806, 2310167



## General Warranty

CSC STEEL SDN. BHD. (hereafter called CSC) extends the following limited warranty to XXX concerning quality performance of **Pre-painted Galvanized Coils** from XXX (the date of production) if correctly applied in accordance with the following terms and conditions.

### 1. Product Information

- Order no.: DXPCxxxxx-xx
- Coil no.: XXxxxx
- Substrate:  $\geq 0.35$  mm, Z27 of JIS G3302
- Coating system: **realcolor® Thermoshield**
- Total delivered weight: XXXX kg

### 2. Warranty Terms

- Shall not perforated excessively for up to **30 years**
- Shall not color change/chalk as refer table below for up to **12 years**
- Shall not discolor by dirt staining for up to **5 years**

### 3. Warranty Items

Item	Test method	Year	Value/ Rating
Color change	ASTM D2244 – 89	12	Light (eg: Off White): $\Delta E \leq 16$ Intermediate (eg: Beige): $\Delta E \leq 12$ Dark (eg: Dawn Blue): $\Delta E \leq 8$
Chalking grade	ASTM D4214 – 89	12	6
Maximum dirt staining	ASTM D2244-89	5	Light (eg: Off White): $\Delta E \leq 7$ Intermediate (eg: Beige): $\Delta E \leq 5$ Dark (eg: Dawn Blue): $\Delta E \leq 3$

### 4. Warranty authorization

Project Name: XXXX

This warranty is signed for:  
CSC STEEL SDN. BHD.

Accepted by:  
XXX

.....  
Date: .....

.....  
Date: .....



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## 5. Area for Warranty

The warranty is valid only for normal environmental climate.

Warranty for areas that are heavy polluted industrial areas, close to coast lines, or have special circumstance not specially referred to herein, must be referred to on an individual basis.

## 6. Warranty Conditions

- 1) Perforations partly or wholly due to the following causes are not covered by this warranty:
  - a) For the reverse side of the coils or sheets.
  - b) For surface which have been touched up.
  - c) Defects attributed to faulty design, method of manufacture or installation of the product.
  - d) Mechanical, chemical or other damage sustained during transportation handling, storage erection, subsequent to erection or other external forces.
  - e) Attack from fire, chemical agents, liquids or solids other than direct rain falling onto the product.
  - f) The air contains strong aggressive chemical substances or there are other abnormal conditions.
  - g) Expose to excessive temperature, exceeding 80°C, for any significant length of time.
  - h) Contact with soils, ashes, fertilizers or other moisture retaining substances.
  - i) Areas in metallic contact with lead or copper or subject to the run-off from copper flashing and piping.
  - j) Failures to remove ferrous shavings, swarf, debris or residue and/or failure to provide free drainage of water including internal condensation from all surfaces of the product.
  - k) Fail to erect the materials in accordance with standard industry erection practice, and particularly to avoid bi-metallic corrosion cause by a failure to insulate the materials from foreign metals.
  - l) Deterioration of the panels caused by contact with green or wet timber.
  - m) Storm and tempest or other acts of God.
  - n) Storage areas are not under panels or cover to keep away from the moisture, chemical agents, dust contamination and the stacking coil on each other.
  - o) Installation subject to salt marine, severe industrial or unusually corrosive environments at any time in the future.
  - p) Corrosion resistance on edge cut and forming part.
  - q) If damaged or loss has been incurred due to late or delayed reporting of a claim, the extent of claim under the warranty is restricted or voided due to the extent of damaged caused by delay in reporting.
- 2) Warranty of the product is referring to the beginning environmental condition after installation. Any conditions (weather or environment) change is out of responsibility.
- 3) The changing of the end use from the original order usage location also is out of our responsibility.
- 4) The defect or disintegrates that apply to this warranty shall affect a considerable part of the total coated area (>2%).
- 5) Dirt and other deposits, as well as surface protected from rain, must be washed down regularly, in a professional manner.
- 6) Appropriate fastenings and sealants must be used.
- 7) This limited warranty is issued only after the delivery date of CSC STEEL SDN BHD to customer. Claims under the warranty must be made within 30 days or less of the appearance of said claimed defect.



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## 7. Responsibility

In case of failure is occur during the warranty period, CSC Steel are responsibility to compensate due to pro-rata

**(I) CSC STEEL SHALL ONLY BE LIABLE FOR:**

- a) The cost of replacing the affected area:
- b) The cost of obtaining equivalent product: or
- c) The cost of having the project repaired.

Whichever is the lowest as well as proportional and should not excess original material selling price.

**(II) CSC STEEL SHALL NOT BE LIABLE FOR:**

- a) Labor costs and transportation charge associated with the installation or removal of affected product or the fixing of replacement sheets: or
- b) Injury of persons, or damage to property or consequential losses arising from the use of the product.

**(III) XXX'S RESPONSIBILITY:**

For this warranty to be valid, customer must maintain records with full trace-ability, such as, but not limited to:

- a) The coil number
- b) Flat-unformed painted samples marked with the coil number
- c) Date of forming
- d) Supply date to project and installation date to project

## 8. Attachments

Appendix 1, 2 and 3 are an integral part of this warranty.

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### APPENDIX 1

Topcoat valid for warranty under point 2 in the warranty agreement:

XXX (XXXxxx)

### APPENDIX 2

Method of measuring chalking on pre-painted sheets exposed at buildings.

When measuring grade of chalking it is necessary to have a flat-unformed painted sample from the same coil, (as mentioned under point 7-III (b) in this agreement).

If customer has a claim on grade of chalking the following should be carried out:

- (1) Inspect the surface in question. Bring the line painted sample to make initial judgment of the claim.
- (2) If a visual control gives a negative result for chalking, act as described in ASTM D4214-89.

When inspecting a claim for chalking there is no other way other than to inspect the actual building.

### APPENDIX 3

Method of measuring color change on pre-painted sheets exposed at buildings.

When measuring grade of color change it is necessary to have a flat-unformed painted sample from the same coil (as mentioned under point 7-III (b) in the warranty agreement).

If customer has a claim on grade of color change the following should be carried out:

- (1) Inspect the object in question. Bring along the line painted sample to compare and determine if a basis of justification exists.
- (2) If a visual control gives a negative result for color change, cut out a small piece from the building/area in question.
- (3) In laboratory environment measure the change against the line painted sample. For scale on color change see point 3 in this warranty agreement ( $\Delta E$  units max).
- (4) Measurements for color change must be made on a cleaned surface.

When inspecting a claim for color change there is no other way other than gaining access to the building in question.

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