

**PRODUCT SPECIFICATION SHEET:**

Product Brand Name:

**C-FLEX NATURAL 3 $\mu$**

Product Description:

**3  $\mu$ m single-sided clear continuously anodized corrugated aluminum<sup>i</sup>**

**Anodized surface properties : front side**

- Anodic layer thickness:
  - Measured following Eddy Current method (ISO 2360)
  - guaranteed value of minimum 3  $\mu$ m, at any point on the surface
- Sealing of the anodic layer
  - Weight loss test following EN ISO 3210:2010 (method 1)
  - Results < 25 mg/dm<sup>2</sup>
- Continuity of the anodic layer,
  - Continuity test following EN ISO 2085:2010
  - Results : no points per cm<sup>2</sup>
- Visual surface appearance:
  - Uniform and matt appearance
  - No defects visible at an inspection distance of 3 m
  - For available corrugation patterns, please contact COIL NV/SA for more information.
  - Perforation as post-treatment is possible
- Gloss :
  - Measured at 60°// following EN ISO 7668:2010 expressed in Gloss Units (GU)
  - Gloss difference: tolerances can be agreed based on the chosen aluminum substrate.  
With non-etched products, the gloss is 100% determined by the metal substrate
- Color: Natural
- Temperature resistance:
  - This product can be safely exposed to temperatures up to 80°C.
  - If this product is intended to come into contact with process temperatures above 80°C, please contact COIL NV/SA for advice.

- Corrosion<sup>ii</sup> & weathering<sup>iii</sup> resistance: excellent, no peeling/blistering/filiform corrosion
- Light stability: perfect<sup>iv</sup>
- Foldability: excellent<sup>v</sup>

**Anodized back side for protection:**

- Anodic layer thickness: indicative value of 1 to 3 µm (not guaranteed)

**Important remark:** the back side is **not** intended to be the exposed, visible side.

**Aluminum substrate :**

- Mechanical properties following DIN EN 485-2
- Dimensional tolerances following DIN EN 485-4
- Alloy: typically EN-AW 5005, 3003, 3004, 3005 but other alloys possible on request
- Temper: typically H14, H16, H24 or H26 but other tempers possible on request
- Anodizing Quality

**Warranties:**

- Standard Warranty:
  - Warranty period: 25 years
  - Warranted properties:
    - Anodic layer thickness
    - Sealing quality of the anodic layer
- Extended Warranty:
 

On request it is possible to extend the standard warranty period and/or other properties can be included in the warranty. If such an extended warranty is requested, the project specifications have to be submitted to COIL NV/SA for evaluation. For more information, please contact COIL NV/SA.

**Application(s):**

This product is intended for use in roofing and wall for industrial buildings, for all applications where flexibility is combined with a pre-weathered look.

**Availability:**

- Coil

Width (mm)	Gauge (mm)
1000-1600	0,5-1,2

Dimensional tolerances following DIN EN 485-4

Protective film possible. Recommended type: rubber based, 70-80  $\mu\text{m}$  , UV resistant

Availability may vary with the chosen corrugation pattern.

- Sheet

Width (mm)	Length (mm)	Gauge (mm)
1000-1600	350-10500	0,5-1,2

Dimensional and flatness tolerances following DIN EN 485-4

Sheets cut by homologated subcontractors under supervision of COIL NV/SA' Quality Dept.

Protective film possible. Recommended type: rubber based, 70-80  $\mu\text{m}$  , UV resistant

Availability may vary with the chosen corrugation pattern.

<sup>i</sup> Definitions:

- Single-sided anodizing: only the front side is intended to be the exposed, visible side. Only this side is guaranteed.
- Clear anodizing: the anodic layer is transparent, not colored. The observed surface color is that of the matt aluminum substrate. Also known as "natural" anodizing.
- Continuous anodizing: anodizing of aluminum coils in a continuous treatment process
- Corrugated: after anodizing the flat surface has been transformed into a sinusoidal "corrugated" surface. The anodizing process has been specifically modified to enable the corrugation.

<sup>ii</sup> Based on accelerated corrosion tests :

- Neutral Salt Spray (ISO 9227), 1000 hrs exposure.
- Kesternich (ISO 6988), 1000 hrs exposure.

<sup>iii</sup> Based on Tropical Test (ISO 6270-2) , 40°C – 100% humidity , up to 1000 hrs exposure

<sup>iv</sup> Based on Sun Test CPS+Atlas (ISO 11341), 1000 hrs exposure

<sup>v</sup> Based on bending tests with an adaptive bending press. Folding radius 1 mm, angle 45° and 90°.