

Product Category Rules



Structural Steel Products

Sub PCR SS:2019v1



GLOBAL GREENTAG INTERNATIONAL PTY LTD

ENVIRONMENTAL PRODUCT DECLARATION (EPD) PROGRAM

Type III EPDs

Compliant to

EN 15804 +A1, ISO 14025 and ISO 21930

For construction products

Sub Product Category Rules (PCR) based on Life Cycle Analysis

Structural Steel Products sub PCR SS 2019 V1

I. Application

While CEN standard EN 15804 serves as the core Product Category Rules (PCR)s pertaining to all product categories, this document contains sub PCRs that apply to a particular product category .The former is called the PCR master document and the latter is called the sub PCR. When new product assessments are needed, a sub PCR is developed and new rules defined for that category. As environmental health legislation is enacted, rules in the master document shall be revised with file name and revisions clearly marked so all such PCRs are identifiable for those points in time.

II. Authors

These product category rules, compiled by Delwyn Jones, Director Sustainability, The Evah Institute a Division of Ecuate Pty Ltd have been customised for this product class by Nana Bortsie-Aryee, Product Certifier, Global GreenTag. Rules were approved for Global GreenTag adoption by David Baggs, Program Director, Global GreenTag International Pty Ltd.

III. Terms of Validity

- Product Category Rules Structural Steel PCR SS: 2019 V1
- PCR issue date 21/09/2018 and
- Period of validity to 21/09/2021

IV. Goal

The intended goal of this sub PCR is a guide for developing EPDs for sets of defined product with specified functionality. Users include specifiers, manufacturers and stakeholders. It is valid for all such defined products and related components according to standards and technical approvals herein.

V. Product Set Definition

- The declared product set includes structural steel used for building and infrastructure applications of all kinds including fabrications of:
- Beams, columns, piles, lintels, bar and framing plus angle, tee , channel, pipe and hollow sections:
- Ferrous material types including iron, low carbon and high strength and stainless steels offering:
- High tensile as well as compressive strength, stiffness, toughness, durability and ductility properties in:
- Interiors as well as nominated exterior low corrosion zone C2 to high corrosion zone C5 exposures.

Where relevant coating specifications must conform to International and Australian Standards including:

- Australian Standard AS/NZS 2312:2002 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings,
- Australian Standards AS/NZS 2312.2:2014 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings Hot dip galvanizing,
- International Standard ISO 1461:2009 – Hot dip galvanized coatings on fabricated ferrous products,
- ASTM A123 / A123M -17 Standard Specification for Zinc Coatings on Iron and Steel Products and
- Australian Standard AS/NZS 4680:2006 Hot-dip galvanized coatings on fabricated ferrous articles.

System outcomes and results are declared per unit mass and reflect product performance at reference conditions of strength, wear, temperature and humidity defined by 14025:2006, 6.7..

The functional unit for cradle to grave EPDs e.g. reflects reference conditions for 60 years service of structural steel lintels, beams, columns, framing & or bar or other shapes in a given sector/kilogram.

VI. Declared Unit

The declared unit is structural steel sections/kilogram (kg) or tonne (t) cradle to gate.

VII. Functional Unit

Here the functional unit is 60 year structural steel sections use in construction/kg or t cradle to grave.

Normative References

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ISO 14020:2000 Environmental labels & declarations — General principles

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ISO 14025:2006 Environmental labelling & declarations Type III EPDs Principles & procedures

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ISO 15392:2008 Sustainability in building construction General principles

ISO 15686-1:2011 Buildings & constructed assets Service life planning Part 1: General principles

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