

GreenFormat

Structured Format for Information to Support Sustainable Design and Product Choices

Copyright © 2015. U.S. copyright held by CSI, Alexandria, VA.

All rights reserved, including World Rights and Electronic Rights. Except as permitted under the United States Copyright Act of 1976 and all subsequent amendments, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher, The Construction Specifications Institute (CSI).

For use of any portion of GreenFormat in commercial applications, educational programs, or publications, please contact CSI at csi@csinet.org to obtain copyright license.

GreenFormat: Structured Format for Information to Support Sustainable Design and Product Choices

ISBN 978-0-9845357-8-1 \$00.00 Retail

Cataloging-in-Publication Data is on file with the Library of Congress

CSI gives acknowledgement and thanks to the members of the GreenFormat Task Team for their work:

George Middleton, CSI, AIA, LEED AP BD+C, GGA, Chair
Paul Sternberg, CSI, CCS, CCCA, LEED AP, NCARB
Chris Hsieh, LEED AP
Chris Dixon, CSI, CCS, LEED AP
Susan Kaplan, CSI, CDT, LEED AP
Renee Doktorczyk, CSI, CCS, FAIA, SCIP
Wade Bevier, FCSI, CCS, LEED AP BD+C, GGP
Andy McIntyre, CSI, CCPR, CIEA, LEED GA
Dawn Spears, CSI, CCPR, LEED AP BD+C, GGP, EDAC
Steven Thorsell, CSI, AIA
Mike MacVittie, Technical Committee Liaison

Introduction

CSI's GreenFormat™ is a standardized structure for organizing sustainable information elements associated with materials, products, systems, and technologies used in the built environment. By using this standardized format, manufacturers are assisted in identifying key product characteristics and providing designers, constructors, and building operators with information needed to help meet sustainable design and operation goals. The identification of the criteria, standards, and applicable certifications using GreenFormat provides designers, constructors, and building operators an effective way to evaluate the sustainable characteristics of materials, products, and processes.

The *GreenFormat* Task Team has organized the structure into specific categories in an effort to make the process of understanding and using sustainability related product information effective. Information classified according to the GreenFormat system is grouped into five categories, each containing sub-categories and classifications.

The first three categories allow suppliers and manufacturers to identify information specific to their products. These categories include the following:

1.0 Product General Information

2.0 Product Properties

3.0 Product Life Cycle

The last two categories focus on information about the manufacturer, which may include environmental policies, environmental or life cycle assessment initiatives, and social responsibility initiatives. These categories are as follows:

4.0 Manufacturer Sustainability Policies

5.0 Manufacturer Support Documentation

GreenFormat's flexible structure is designed to be adaptable to anticipated changes in the industry. As sustainability issues and product selection criteria evolve, new topics may be added in the appropriate category, and existing topics that become obsolete, redefined, or changed can be revised or removed as necessary. The structure is designed to support specification writers and the project construction documents they produce by providing the information needed for the four different methods of specifying: reference standard, performance, descriptive, and proprietary.

One way to understand the structure and purpose of GreenFormat and how it supports the specification development process is to consider the fact that specifications are typically written with a project requirement stated as a salient feature followed by a value for that salient feature. For example, a salient feature such as “VOC content” included in a project specification would be accompanied by a value such as “5 grams/liter.” This would be one element of information provided by a product manufacturer under a category heading defined under GreenFormat.

The organization of GreenFormat into specific categories or classifications of information is not intended to imply a hierarchy or relative level of importance of the information significance within a category. The user of the information classified according to GreenFormat maintains the responsibility to evaluate and determine the suitability of the information provided. The user of *GreenFormat* determines project specific requirements and then prioritizes the sustainability criteria by which products will be evaluated. Many evaluation and rating systems exist to assist owners, designers, and specifiers in determining the relative contributions of different products to sustainability. Product data developers can organize their data reporting according to GreenFormat categories while retaining their own proprietary features.

One of the principal goals of GreenFormat is for product-related information to be transparent and verifiable. GreenFormat also emphasizes the importance of objective, science-based, and widely recognized standards and evaluation criteria arrived at through consensus standard-setting processes. GreenFormat is also designed to work in conjunction with MasterFormat™ and Section/PageFormat™ and can be applied to all construction products and categories. (See the CSI publications by the same titles for further information.)

GreenFormat Outline Structure

1.0 PRODUCT GENERAL INFORMATION

1.1 PRODUCT INFORMATION

- 1.1.1 MasterFormat Number
- 1.1.2 OmniClass Classification
- 1.1.3 UniFormat Classification
- 1.1.4 Product Identification
- 1.1.5 Product Description
- 1.1.6 Product Photo(s) or Drawing(s)

1.2 MANUFACTURER INFORMATION

- 1.2.1 Company Name
- 1.2.2 Subsidiary Name(s)
- 1.2.3 Address
- 1.2.4 Contact Information
- 1.2.5 Manufacturer's Authorized Representative
- 1.2.6 Technical Sales and Product Representatives

2.0 PRODUCT PROPERTIES

2.1 Sustainable Standards and Certifications

- 2.1.1 Third-Party Certification
 - 2.1.1.1 Whole Product Sustainability
 - 2.1.1.2 Single Attribute
 - 2.1.1.3 Other Certification Categories
- 2.1.2 Second Party Certification
 - 2.1.2.1 Whole Product Sustainability
 - 2.1.2.2 Single Attribute
 - 2.1.2.3 Other Certification Categories
- 2.1.3 Self-Declaration of Compliance
 - 2.1.3.1 Whole Product Sustainability
 - 2.1.3.2 Single Attribute
 - 2.1.3.3 Other Certification Categories

2.2 SUSTAINABLE FEATURES

- 2.2.1 Rating System Credits
- 2.2.2 Recycled Content
- 2.2.3 Rapidly Renewable Materials
- 2.3.4 Reused Materials
- 2.2.5 Emissions
- 2.2.6 Chemical Composition

3.0 PRODUCT LIFE CYCLE

3.1 LIFE CYCLE ASSESSMENT (LCA)

- 3.1.1 Goal and Scope of LCA
- 3.1.2 Life Cycle Inventory (LCI) Analysis Phase
- 3.1.3 Life Cycle Impact Assessment (LCIA) Phase
- 3.1.4 Limitations of the LCA

3.2 LIFE CYCLE INPUTS & OUTPUTS

- 3.2.1 Energy Inputs
- 3.2.2 Material Inputs
- 3.2.3 Air Emissions
- 3.2.4 Water Emissions
- 3.2.5 Waste Disposal

3.3 INDUSTRIAL PRODUCTION SYSTEM

- 3.3.1 Raw Material Extraction
- 3.3.2 Manufacturing and Production
- 3.3.3 Transportation and Distribution
- 3.3.4 Construction, Operations, and Maintenance
- 3.3.5 Recycling and Waste Management

4.0 MANUFACTURER SUSTAINABILITY POLICIES

4.1 ENVIRONMENTAL STEWARDSHIP

- 4.1.1 Description of Environmental Policies or Programs
- 4.1.2 Facilities Certified under Green Building Rating Systems
- 4.1.3 Awards or Recognition for Environmental Stewardship
- 4.1.4 Participation in Voluntary Environmental Impact Reduction Programs
- 4.1.5 Design for Environment Strategies
- 4.1.6 Standards and Certifications

4.2 CORPORATE GOVERNANCE

- 4.2.1 Employment Policies
- 4.2.2 Employer Responsibilities
- 4.2.3 Community Engagement at Plant Level
- 4.2.4 Financial Leadership at Corporate Level

4.3 MANUFACTURING

- 4.3.1 Manufacturing and Support Facilities
- 4.3.2 Manufacturing Process
- 4.3.3 Manufacturer Commentary

4.4 AVAILABILITY OF TRANSPARENCY OF INFORMATION

- 4.4.1 Published Resources
- 4.4.2 Regular Corporate Sustainability Reports
- 4.4.3 Policies on Disclosure
- 4.4.4 Manufacturer Commentary

5.0 MANUFACTURER SUPPORT DOCUMENTATION

5.1 PRODUCT DATA SHEETS

- 5.1.1 Website
- 5.1.2 Product Listings