Evaluation and Certification of Building Materials

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Too many choices.
High volume of information.
Poor quality of data.
Uncertain credibility.
No common standard.
• The **ROLE** of certification programs in evaluating building materials.

• The **METHODOLOGY** for using certification programs for building material specification.

• The **CRITERIA** for assessing the credibility of certification programs.
The ROLE of Certification Programs

Certification is a **TOOL** for evaluating building materials. But ... not the only tool.

You must **UNDERSTAND** what the certification means.

The certification system, like the product, must be **CREDIBLE**.
2. Collect Available Data
3. Confirm Credibility of Data
4. Make a decision

1. Identify Building Material Evaluation Criteria

TOOL KIT
Building Material Certification
1. Identify Building Material Evaluation Criteria

- What are the criteria by which you are evaluating the product or company?

- What is driving your selection decision?

  Personal values

  Corporate mandate

  LEED™ requirements

  Living Building Challenge
2. Collect Available Data

- What type of information is available about this company, product, equipment or system?

Corporate CSR report, technical performance, environmental, social, human health, toxicity, lifecycle, end-of-life etc.

- What is the source of this information?

  - **Self-Declaration**: manufacturer, supplier, NGO, industry association, government agency etc.

  - **Product Rating Service**

  - **Certification**
3. Confirm the CREDIBILITY of Data

• For all information (regardless of source) you want to know if it is credible. What should you look for?

**TRANSPARENT**

• What data is available (company and product)?
• Is it easy to access?
• How was it measured?

**RELEVANT**

• **Scope:** What aspect of the product or company does data relate to?
• **Sustainability:** Does data relate to company or product’s impact?
• **Participation:** Who participated in determining relevant attributes?

**ACCURATE**

• Has the data been verified to be true?
• By whom?

**INDEPENDENT**

• Who verified the product claims?
• How is the verifier related to the company or product?
• Who funds the verification entity?
### The CRITERIA to assess credible certification

<table>
<thead>
<tr>
<th><strong>Type of Certification</strong></th>
<th>Mainly performance</th>
<th>Performance</th>
<th>Performance and process.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope of Certification</strong></td>
<td>- Company and product (variety) - Scope of LCA limited.</td>
<td>Products, homes (energy)</td>
<td>- Product sourcing and traceability (forest product extraction)</td>
</tr>
<tr>
<td><strong>Origin of Certification</strong></td>
<td>Insufficient data</td>
<td>Government</td>
<td>Industry, Enviro, Social, Aboriginal</td>
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<tr>
<td><strong>Standard Development Process</strong></td>
<td>Public review, Appeals process.</td>
<td>Closed</td>
<td>- Formal, broad participation. - Appeals process.</td>
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<tr>
<td><strong>Independence of Evaluation</strong></td>
<td>3rd party, but allows 1st party ‘verified’, ‘provider’ claim.</td>
<td>3rd party.</td>
<td>3rd party.</td>
</tr>
<tr>
<td><strong>Qualification and Labeling</strong></td>
<td>Pass/Fail. ‘Certified’ and ‘Provider’ label.</td>
<td>Scald rating and label.</td>
<td>Content based labels.</td>
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<tr>
<td><strong>Leadership</strong></td>
<td>Pushing in some areas, complacent in others.</td>
<td>Neither. Communicates performance.</td>
<td>Continual improvement.</td>
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</tbody>
</table>
4. Make a decision

• **Knowledge is power.** You must know your needs, know your suppliers, and know the products.

• **No product is an island.** Building materials do not perform in isolation. Consider product integration.

• **Make your life easier.** Use existing, credible tools, such as certification, to facilitate decision making.

• **It’s complicated.** There is not one tool, one certification or one answer.

• **Take the lead.** Green building, sustainable materials, and certification are about differentiation, not conformity.
Certification of the responsible extraction and use of aggregates.
www.cornerstonestandards.ca

Certification of the environmental and social performance of mining operations.
www.responsiblemining.net

An open standard for reporting product content and associated health information.

Environmental Product Declarations

Description of the environmental impacts of a product. Based on a life-cycle assessment.
Thank you

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