City of Scottsdale 2021 International Green Construction Code (IgCC)

Reduced Impact Materials Checklist



rev. 7-3-23

The intent of this checklist is to list the reduced impact materials in Section 901.4.1 of the amended International Green Construction Code (IgCC). The section reads as follows:

901.4.1 Reduced impact materials. The *building project* shall comply with <u>any two of the following</u> <u>options</u>. Calculations shall only include materials *permanently installed* in the project. A value of 45% of the total construction cost shall be permitted to be used in lieu of the actual total cost of materials.

□ 901.4.1.1 Recycled content and salvaged material content. The sum of the *recycled content* and *salvaged material* content shall constitute a <u>minimum of 10% (based on cost)</u>, of the total <u>materials</u> in the *building project*.

901.4.1.1.1 Recycled content. The *recycled content* of a material shall be the *postconsumer recycled content* plus one-half of the *pre-consumer recycled content*, determined by weight (mass). The recycled fraction of the material in a product or an assembly shall then be multiplied by the cost of the product or assembly to determine its contribution to the 10% requirement.

The annual average industry values, by country of production, for the *recycled content* of steel products manufactured in basic oxygen furnaces and electric arc furnaces shall be permitted to be used as the *recycled content* of the steel. For the purpose of calculating the *recycled content* contribution of concrete, the constituent materials in concrete e.g., the cementitious materials, aggregates, and water) shall be permitted to be treated as separate components and calculated separately.

901.4.1.1.2 Salvaged material content. The *salvaged material* content shall be determined based on the actual cost of the *salvaged material* or the cost of a comparable alternative component material.

901.4.1.2 Regional materials. A minimum of 15% (based on cost) of the total materials or products used shall be regionally extracted/harvested/recovered or manufactured within a radius of 500 miles of the project *site*. If only a fraction of a product or material is extracted/harvested/recovered or manufactured locally, then only that percentage (by weight) shall contribute to the regional value.

Exception: For building materials or products shipped in part by rail or water, the total distance to the project shall be determined by weighted average, whereby that portion of the distance shipped by rail or water shall be multiplied by 0.25 and added to that portion not shipped by rail or water, provided that the total does not exceed 500 miles.

□ **901.4.1.3 Biobased products.** A minimum of 5% (based on cost) of building materials used, shall be *biobased products*. *Biobased products* shall:

- a. Comply with the minimum biobased contents of the USDA's Bio-Preferred Program;
- b. Contain the "USDA Certified Biobased Product" label; or
- c. Be composed of solid wood, engineered wood, bamboo, wool, cotton, cork, agricultural fibers, or other biobased materials with at least 50% biobased content.

901.4.1.3.1 Wood building components. Wood building components, including but not limited to structural framing, sheathing, flooring, subflooring, wood window sash and frames, doors, and architectural millwork, used to comply with this requirement shall contain not less than 60% certified wood content tracked through a chain of custody process, either by

physical separation or percentage-based approaches, or wood that qualifies as a *salvaged material*. Certified wood content documentation shall be provided by sources certified through a forest certification system with principles, criteria, and standards developed using ISO/IEC Guide 59 or the WTO Technical Barriers to Trade. Wood building components from a *vendor* shall be permitted to comply when the annual average amount of certified wood products purchased by the *vendor*, for which they have chain of custody *verification* not older than two years, is 60% or greater of their total annual wood products purchased.

901.4.1.4 Multiple-attribute product declaration or certification. A minimum of ten different products installed in the *building project* at the time of issuance of certificate of occupancy shall comply with one of the following subsections.

901.4.1.4.1 Industry-wide declaration. A Type III industry-wide environmental product declaration (EPD) shall be submitted for each product. Where the program operator explicitly recognizes the EPD as fully representative of the product group on a national level, it is considered industry-wide.

901.4.1.4.2 Product-specific declaration. A product-specific Type III EPD shall be submitted for each product. The product-specific declaration shall be manufacturer-specific for a product family. <u>Each product complying with this section shall be counted as two products for compliance with Section 901.4.1.4.</u>

901.4.1.4.3 (9.4.1.4.3) Third-party multi-attribute certification. A material-specific assessment shall be submitted for each product in accordance with one of the listed standards (see IgCC for listing). <u>Each product complying with this section shall be counted as two products for compliance with Section 901.4.1.4.</u>

901.4.1.4.4 (9.4.1.4.4) Product life cycle. A report by a third-party that has critically reviewed the *lifecycle assessment (LCA)* of a product, based on ISO Standards 14040 and 14044, shall be submitted. Each product complying with this section shall be counted as two products for compliance with Section 901.4.1.4.

Scottsdale green code link - https://www.scottsdaleaz.gov/green-building-program/green-codes