

LEEDv4 Credit Information

Developed by USGBC, LEED addresses all building types and emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality. LEED is a practical rating tool for green building design and construction that provides immediate and measurable results for building owners and occupants.

Frost Products supports both the USGBC and CAGBC by offering products that are manufactured in a sustainable manner to minimize any impacts on the environment. Commercial washroom accessories are a very minor component to any new commercial building's total cost, and relative to other building components, will not contribute significantly to LEED¹. Frost is committed to lessoning their environmental footprint and will continue to explore new manufacturing materials and processes that make a positive impact on both environmental and human health for the full complete product lifecycle.

LEEDv4 Requirements:

Construction projects are eligible to earn LEEDv4 points if they use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least: 10% (1 point) or 20% (2 points) based on cost of the total value of all materials in the project.

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION - SOURCING OF RAW MATERIALS (1-2 POINTS)²

Intent

To encourage the use of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.

Option 2: Leadership Extraction Practices (1 point)

Use products that meet at least one of the responsible extraction criteria below for at least 25 percent, by cost, of the total value of permanently installed building products in the project.

- Extended producer responsibility.
- Bio-based materials.
- Wood products.
- Materials reuse.
- Recycled content. Recycled content is the sum of post-consumer recycled content plus one-half the pre-consumer recycled content, based on cost. Products meeting recycled content criteria are valued at 100% of their cost for the purposes of credit achievement calculation.
- USGBC-approved program. Other USGBC-approved programs meeting leadership extraction criteria.

Structure and enclosure materials may not constitute more than 30 percent of the value of compliant building products. All steel structures and steel construction products contain significant levels of recycled content. Additionally, many steel products recovered from demolition or refurbishment projects are suitable for reuse. The LEEDv4 Reference Guide (page 535) allows a default value of 25% post-consumer recycled content for any steel product. However, some steel products (e.g. structural sections and reinforcing bar) may have recycled content levels as high as 100%. These higher values may be used in the LEED credit calculations if company-specific recycled content information is available from the steel product supplier. As described in the LEEDv4 Reference Guide (page 536), industry-wide or national average recycled content values may not be used in calculations to support achievement of this credit.

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¹ Buildings Magazine, "Comparative Building Costs" (November 17, 2017), p. 50

² Steel Recycling Institute Website: <u>https://www.steelsustainability.org/construction/leedv4/leedv4?siteLocation=48774ce4-0c35-4364-9d63-407adb786392</u>. Accessed November 20, 2018.



Frost's Recycled Content Documentation – Option 2

Manufacturing

Material Extraction

Location

For credit achievement calculation, products sourced (extracted, manufactured, and purchased) within 100 miles (160km) of the project site are valued at 200% of their base contributing cost. For credit achievement calculation, the base contributing cost of individual products compliant with multiple responsible extraction criteria is not permitted to exceed 100% its total actual cost (before regional multipliers) and double counting of single product components compliant with multiple responsible extraction criteria to exceed 100% its total actual cost (before regional multipliers) and double counting of single product components compliant with multiple responsible extraction criteria is not permitted and in no case is a product permitted to contribute more than 200% of its total cost.

<u>Post-consumer</u> material is waste material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.

<u>Pre-consumer</u> material is material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

LEED Category Description **Powder Coated Powder Coated Site** Stainless Steel Furnishings** Washroom/Lobby Washroom/Lobby Accessories* Accessories* **Recycled Content** Post-consumer 69% 69% 72.1% 19.5% 19.5% 15% Pre-consumer

Burlington, ON, CA

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Minerals used in manufacturing steel and stainless steel are sourced globally. Frost emphasizes the purchase of North American sourced

steel and stainless steel from the great lakes region

Frost Products uses over 70% post-consumer recycled content in its stainless steel washroom/lobby accessories.

*Washroom/Lobby Accessories include: Grab Bars, Paper Towel Dispensers, Toilet Paper Dispensers, Soap Dispensers, Mirrors, Waste Receptacles, Coat Hooks, Feminine Vendors and Disposals, Hand Dryers, Recycling Stations, Shelves, Shower Seats, Wet Floor Signs, Baby Change Tables, Wall Protection, Janitorial Accessories and Shower and Towel Rods **Site Furnishings include: Bike Racks, Outdoor Waste Receptacles, Benches, Pet Waste Stations, Ashtrays, and Salt Bins

Additional Material Information:

Regional Materials

Frost's plastic liners used in disposal units and the carboard packaging used on all products are made from 100% recycled material and are also 100% recyclable after use. Frost's stainless steel is a sustainable material and is 100% recyclable at the end of the product's life. It is considered a valuable material providing consumer motivation to ensure the material is directed back into the scrap stream to be recycled. This conserves natural resources, further reducing energy consumption.

Volatile Organic Compounds (VOCs) and Formaldehyde Frost products do not emit or contain any Volatile Organic Compounds or Formaldehyde.

Frost Items that contain less than 70% post-consumer recycled stainless steel content and sourced globally:

165, 169, 713, 719	Less than 20% post-consumer
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and Others