



## DRYWALL BEAD HRV/ERV CEILING MOUNTED ACCESS PANEL with REMOVABLE DOOR and CAM LATCH

The CAP-DBF Drywall Bead HRV/ERV Ceiling Mounted Access Panel is designed for drywall installation. The door is flush to the frame with drywall corner beads on all sides. Once installed, the outer flange is concealed and only the door is visible. This product features a REMOVABLE door panel that allows complete, unobstructed access to HRV/ERV units during service.

It comes with a zinc plated screwdriver operated cam latch and it is manufactured from corrosion resistant satin coat steel. In addition, our select formula powder coated finish on the door panel safeguards against condensation.

### A positive impact with LEED® Canada-NC 2009

The growing interest in sustainability in the design and operation of buildings is embodied in the great systems of Green Building Rating Leadership in Environmental Design (LEED®) in North America. This document explores the potential contribution of the use of MARFAB HRV/ERV CEILING MOUNTED



ACCESS PANELS for LEED® Canada-NC & CS 2009 (New Construction and Major Renovations & Core and Shell) systems.

The CaGBC's rating systems LEED® Canada-NC & CS 2009 are based on 110 points divided into seven categories and can be used in different types of construction projects, for commercial or institutional buildings. MARFAB's HRV/ERV CEILING MOUNTED ACCESS PANELS can contribute to LEED® credits. However, the LEED® requirements take into account the project's conception as well as the materials used in the project.



LEED® Canada-NC & CS 2009 System Summary Table					Potential contribution of HRV/ERV CEILING ACCESS PANEL CAP-DBF*	
		Prerequisite	Credits	Points	LEED® Canada NC 2009	LEED® Canada CS 2009
<b>SS</b>	Sustainable Sites	1	8	26	0 points	0 points
<b>WE</b>	Water Efficiency	1	3	10	0 points	0 points
<b>EA</b>	Energy and Atmosphere	3	6	35	0 points	0 points
<b>MR</b>	Materials and Resources	1	7	14	4 points	4 points
<b>IEQ</b>	Indoor Environmental Quality	2	8	15	1 point	1 point
<b>IDP</b>	Innovation in Design	0	2	6	3 points	3 points
<b>RP</b>	Regional Priority	0	2	4	3 points	3 points
<b>Total</b>		8	36	110	Up to 11 points (NC)	Up to 11 points (CS)

\* It is important to consider that the total amount of possible points reflects the number of achievable points in each credit category. The product by itself cannot achieve this score, as defined above, but is considered as a beneficial element in order to achieve LEED® credits.





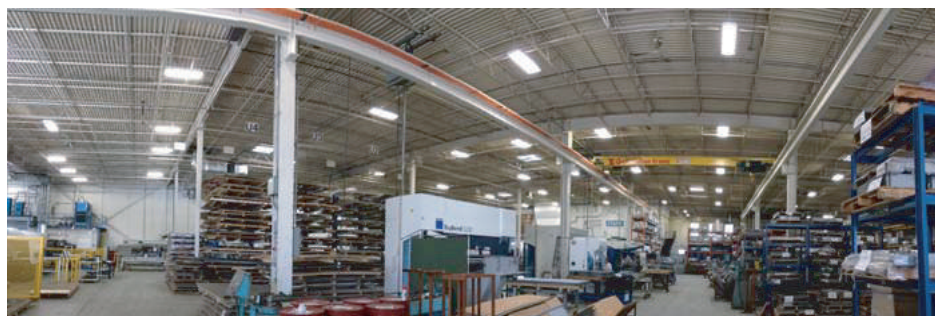
## About the Company

MARFAB is a leading manufacturer of metal products for the commercial and industrial building industry. They offer a wide range of standard and made-to-order products for the plumbing, mechanical and electrical trades and their products can be seen in hi-rise and multi unit residential buildings throughout North America. For over 20 years, they have been supplying custom metal components to leading manufacturers of HVAC equipment and Fire & Safety Products. MARFAB demonstrates its commitment to its customers through continued innovation and the development of products that offer functional advantages, durability and great value.

## Environmental Commitment

### REDUCING LIGHTING ELECTRICAL CONSUMPTION

MARFAB has shown a marked interest in developing and selecting products that have less adverse effects on the environment. The company recently undertook lighting retrofits in order to use more efficient lighting technology in its facilities. As a result,



MARFAB has reduced its carbon footprint and significantly decreased its lighting electrical consumption. All the old lamps, light fixtures and ballasts were recycled in accordance with the environmental laws. The new light fixtures have an extended life expectancy that reduces the environmental impact by having to replace the lamps less often.

### LOW VOC FINISHES

MARFAB finished products are powder coated. Electrostatic powder coating is a clean process that is HAPs (hazardous air pollutants) Free. Powder coatings contain no solvents and therefore emit negligible, if any, polluting VOCs into the surrounding air.

### MANUFACTURING EFFICIENCIES and PRODUCT INNOVATION

Equipped with the most advanced manufacturing technology, MARFAB produces maximum product yields with less energy use and material waste. Some products are processed overnight, by fully automated, CNC machinery. These "Lights Out" operations eliminate the need for lighting and facility climate control, while drawing electricity during "off peak" hours. MARFAB couples technology with fabrication ingenuity and innovative design changes that streamline the operations and sequences required to make their parts. The result is superior products made in the most efficient way possible.

### REUSE and RECYCLE

MARFAB utilizes recycled metal and recycles any waste material generated by fabrication of products. All corrugated packaging is made of recycled material and any packaging from incoming supplies is reused. MARFAB has also implemented a facility wide recycling program for paper as well as plastic and glass bottles.

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Vertima's interpretation regarding potential contribution and compliance of product and/or system to the LEED® credits are based on information given by the clients and their suppliers, who are responsible for its veracity and integrity. Vertima documents, analyses and validates the supporting documentation in compliance with the CAN/CSA ISO 14021 standard. Therefore, Vertima cannot be held responsible for false or misleading information. VERTIMA INC. ensures an annual review of the technical data enclosed in this document in collaboration with its clients in order to maintain a high quality standard.

Vertima record number: **FVERT-14-1039-10**

In effect since: December 2014

Last update: December 2014

Technical Data documented and validated by: [www.vertima.ca](http://www.vertima.ca)



# POTENTIAL CONTRIBUTION FOR LEED® CANADA-NC & CS 2009 REQUIREMENTS



CREDITS SUSTAINABLE STRATEGIES POTENTIAL POINTS CREDIT RELEVANCE

## CONTRIBUTION AND COMPLIANCE\* HRV/ERV CEILING MOUNTED ACCESS PANEL CAP-DBF

MR 4

Recycled Content

1-2 points

Direct

COMMENTS

### Requirements

Use materials with **recycled content** such that the sum of **post-consumer recycled content** plus 1/2 of the **pre-consumer recycled content** constitutes at least **10%** (1 point) or **20%** (2 points), based on cost, of the total value of the materials in the project. The recycled content value of a material assembly is determined by weight. The recycled content fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

The HRV/ERV Ceiling Mounted Access Panel **CAP-DBF** from **MARFAB METAL** can contribute to this credit because it has **pre-consumer** and **post-consumer** recycled content, as displayed in the tables below:

Product dimension	CAP-DBF with Camlock	
	% Pre-consumer	% Post-consumer
24x32	18.63%	65.93%

Product dimension	CAP-DBF with Cylinder Keylock	
	% Pre-consumer	% Post-consumer
24x32	18.54%	65.42%

In a LEED project, **MARFAB METAL** can provide all the required recycled content information for its products.

MR 5

Regional Materials

1-2 points

Direct

COMMENTS

### Requirements

Use building materials or products that have been **extracted, harvested, recovered** and **processed** within **800 km** (500 miles) (**2,400 km** if shipped by rail or water) of the **final manufacturing site**.

Demonstrate that the **final manufacturing site** is within **800 km** (500 miles) (**2,400 km** if shipped by rail or water) of the **project site** for these products.

If only a **fraction of a product** or material is **extracted, harvested, recovered, processed** and **manufactured locally**, then only that percentage (by weight) must contribute to the regional value. The minimum percentage of regional materials for each point threshold is **20%** (1 point) or **30%** (2 points).

The HRV/ERV Ceiling Mounted Access Panel **CAP-DBF** from **MARFAB METAL** can contribute to this credit as a percentage of its components are **extracted, collected, recovered** and **processed** within **800 km** (by road) or **2,400 km** (by rail or water) of the final manufacturing site, as displayed in the tables below:

Product dimension	CAP-DBF with Camlock
	% by weight
24x32	84.56%

Product dimension	CAP-DBF with Cylinder Keylock
	% by weight
24x32	83.83%

The percentage calculation was performed by considering the requirements for Credit **MR 5** and the maximum distance radius (which depends on the means of transportation used).

The final manufacturing site for **CAP-DBF** is located in **Concord, Ontario** (L4K 4Y2).

**MARFAB METAL** has all required documents regarding **LEED®** and can rapidly provide information for your **LEED** project.

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# POTENTIAL CONTRIBUTION FOR LEED® CANADA-NC & CS 2009 REQUIREMENTS

## CREDITS SUSTAINABLE STRATEGIES POTENTIAL POINTS CREDIT RELEVANCE CONTRIBUTION AND COMPLIANCE\* HRV/ERV CEILING MOUNTED ACCESS PANEL CAP-DBF

IEQ 3.2  
Option 2

Construction IAQ  
management plan:  
Before occupancy

1 point

Indirect

COMMENTS

### Requirements

Develop an Indoor Air Quality (IAQ) management plan and implement it after all finishes have been installed and the building has been completely cleaned before occupancy.

#### Option 2 - Air Testing

Conduct baseline IAQ testing, after construction ends and **prior to occupancy**, using testing protocols consistent with the United States Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air and as additionally detailed in the LEED® Canada Reference Guide for Green Building Design and Construction.

The HRV/ERV Ceiling Mounted Access Panel **CAP-DBF** from **MARFAB METAL** is manufactured offsite. **MARFAB METAL** selects the most environmentally friendly products and components, which indirectly promotes a better **IAQ**.

The use of low-emission paints and coatings in the manufacturing process of this product helps comply with the requirements of **IEQ Credit 3.2 Option 2: Air Testing**.

IEQ 4.2

Low-Emitting Materials:  
Paints & Coatings

Non applicable

Direct

COMMENTS

### Requirements

Paints and coatings used on the interior of the building (i.e., inboard side of the weatherproofing system and applied on-site) must comply with the following criteria as applicable to the project scope:

- Architectural paints and coatings applied to interior walls and ceilings must not exceed the volatile organic compound (VOC) content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.
- Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.
- Clear wood finishes, floor coatings, stains, primers, and shellacs applied to interior elements must not exceed the VOC content limits established in **South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings**, rules in effect on January 1, 2004.

The credit **IEQ 4.2** only applies to paints and coatings used on the construction site and on the interior of the building.

The paints and coatings used in the manufacturing of **CAP-DBF** are applied in-factory, therefore are not subject to the requirements of this credit. However, **MARFAB METAL** considers that minimizing the **VOC** content of their access panels is very important and the paints and coatings applied in factory are low in **VOCs**.

In a LEED® project, **MARFAB METAL** can provide all the documentation required for this credit.


**MARFAB METAL** has all required documents regarding LEED® and can rapidly provide information for your LEED project.







# POTENTIAL CONTRIBUTION FOR LEED® CANADA-NC & CS 2009 REQUIREMENTS

	CREDITS	SUSTAINABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE	CONTRIBUTION AND COMPLIANCE* HRV/ERV CEILING MOUNTED ACCESS PANEL CAP-DBF
INNOVATION IN DESIGN (ID)	ID path 2	Innovation in design	1-3 points	Direct	COMMENTS
	<b>Requirements</b> Path 2: Exemplary Performance  Achieve exemplary performance in an existing LEED 2009 for New Construction and Major Renovations credit that allows exemplary performance as specified in the <b>LEED Reference Guide for Green Building Design &amp; Construction, 2009 Edition</b> . An exemplary performance point may be earned for achieving double the credit requirements and/or achieving the next incremental percentage threshold of an existing credit in LEED.  One point is awarded for each exemplary performance achieved. No more than 3 points under ID credit 1 may be earned through PATH 2— Exemplary Performance.				The HRV/ERV Ceiling Mounted Access Panel <b>CAP-DBF</b> from <b>MARFAB METAL</b> contain, in their assembly, high percentages of recycled content and regional materials, which could contribute to exemplary performance strategies for the following credits:  <b>MR 4</b> - Exemplary performance if the project achieves 30% or more recycled content.  <b>MR 5</b> - Exemplary performance if the project achieves 40% or more regional material.  The Ceiling Mounted Access Panel <b>CAP-DBF</b> from <b>MARFAB METAL</b> achieve excellent performances for the MR 4 and MR 5 Credits and can thus contribute to the exemplary performance of these credits.
REGIONAL PRIORITY (RP)	RP 2	Regional Priority	1-3 points	Direct/ Indirect	COMMENTS
	<b>Requirements</b> Up to 3 points for Regional Priority Credit 2 may be proposed for this credit that is intended to allow adding point emphasis to recognize one <b>OR</b> more issues that have additional regional environmental importance.  To achieve a Regional Priority credit, the applicant must identify LEED® credits which have additional regional environmental importance.  <b>A project must achieve the base credit and then propose that credit as a Regional Priority credit.</b>				Please refer to the Advantages and Aspects to Consider section of the Regional Priority credit in the LEED Reference Guide.  For a list of applicable credits, please refer to the CaGBC website <a href="http://www.cagbc.org">www.cagbc.org</a> , under the LEED® tools section for the LEED® Canada-NC & CS 2009 Rating Systems.
	<b>MARFAB METAL has all required documents regarding LEED® and can rapidly provide information for your LEED project.</b>				
POINTS	TOTAL	UP TO 11 POSSIBLE POINTS	The CAP-DBF Ceiling Mounted Access Panel from MARFAB METAL can contribute up to a total of eleven (11) points for a LEED® Canada-NC & CS 2009 project.		

\* It is important to consider that the total amount of possible points reflects the number of achievable points in each credit categories. The product by itself cannot achieve this score, as defined above, but is considered as a beneficial element in achieving the LEED® credits.

