

2009

BOEHMERS
operating under Hargest Block Ltd.

LEED Submission for Block

- **Recycle Contents**
- **Mix Designs**
- **Material Verification**
- **CaGBC Tag Approval**



February, 2007

Boehmers
P.O. Box 25059
Kitchener, ON
N2A 4A5

Attention: Paul Hargest

Dear Paul:

Re: Boehmers Block LEED Credits

Based on the mix designs that you provided, the attached calculation sheet shows that your Concrete Block and Lightweight Block have post-industrial recycled contents of 76%, and 174.2% respectively. These values can be submitted under LEED Canada credit MR 4 for Recycled Content.

In addition, for projects within 800 km of your manufacturing facility and raw materials sources, these products qualify under LEED Canada credit MR 5 for Regional Materials.

Yours truly,

Bill McEwen, P.Eng.
Executive Director

Boehmers Block Recycled Content:

Concrete - heavyweight:

	<u>SCM Mix (Kg)</u>	<u>%</u>	<u>Non-SCM Mix</u>	<u>%</u>
Sand	1590		1590	
Stone	545		545	
Portland	143	6.03	230	9.73
Silica-SCM	93		-	
TOTAL	<u>2371</u>		<u>2365</u>	

$$\text{Cement Reduction: } \frac{9.73 - 6.03}{9.73} = 38.0\%$$

$$\text{Cement Reduction Factor} = 38.0 \times 2 = 76.0\%$$

TOTAL Post-industrial Recycled Content = 76.0%

Lightweight:

	<u>SCM Mix (Kg)</u>	<u>%</u>	<u>Non-SCM Mix</u>	<u>%</u>
Sand	200		200	
Slag	1667	77.82	1667	
Portland	140	6.54	270	12.63
Silica-SCM	135		-	
TOTAL	<u>2142</u>		<u>2137</u>	

$$\text{Cement Reduction: } \frac{12.63 - 6.54}{12.63} = 48.2\%$$

$$\text{Cement Reduction Factor} = 48.2 \times 2 = 96.4\%$$

Recycled content from SCM cement reduction: 96.4%

Slag recycled aggregate = 77.8%

Recycled content from aggregate replacement: 77.8%

TOTAL Post-industrial Recycled content: 174.2%



Paul Hargest
Boehmers
1060 Guelph Street
Kitchener, Ontario
N2G 4H9

March 9, 2004

Dear Paul;

The following information is for Expanded Blast Furnace Slag. Slag is a material produced during the iron making process. Slag "floats" on the surface of molten iron and is skimmed off prior to casting the iron. In past years slag was discarded into pits at the mills, and then land filled for disposal.

Lafarge processes the slag in its molten state at Dofasco and Stelco in Hamilton and ISPAT/Inland Steel in East Chicago. Lafarge recycles the slag (using controlled amounts of water that is also recycled from the mills) into a useful lightweight aggregate that is suitable for concrete masonry, ready mix concrete, precast and other concrete products.

Please do not hesitate to call if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Carrozza', with a long horizontal flourish extending to the right.

Tom Carrozza
Technical Sales Representative
Lafarge Slag, Hamilton
139 Windermere Road
Hamilton, Ontario
L8H 3Y2
Office -- (905) 547-2133, Ext 235
Mobile -- (905) 979-5446



Unimin Canada Ltd.
10 Four Seasons Place, Suite 600
Toronto, Ontario M9B 6H7

Sales Phone: (416) 626-1500
Sales Fax: (416) 626-1855
Finance & Administration Phone: (416) 622-1900
Finance & Administration Fax: (416) 626-5383

March 12, 2004

Mr. Paul Hargest
Hargest Block Ltd.
P.O. Box 1360 -1060
Guelph
Kitchener, ON N2G 4H9

Dear Mr. Hargest:

As you are aware you purchase Granusil 8000 from Unimin Canada Ltd. to use in the production of your autoclave concrete block.

Granusil 8000 is produced as a by-product during the manufacture of glass sand.

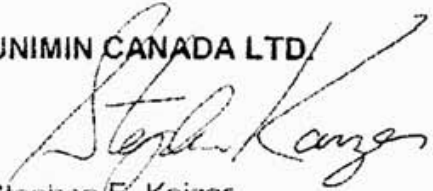
If it were not for applications such as yours, this product would end up being land filled.

Your usage of Granusil 8000 effectively recycles a finite resource and reduces the burden on the countries waste disposal system.

Please contact me should you have any questions regarding this.

Sincerely,

UNIMIN CANADA LTD.



Stephen E. Kaizer
Sr. District Sales Manager

Paul Hargest

From: Bill McEwen [info@masonrybc.org]
Sent: Monday, September 25, 2006 7:18 PM
To: MarshallRbrt@aol.com; info@ccmpa.ca; Paul Hargest; gsturgeon@canadamasonrycentre.com; bclark@cci-industries.com; mmgiroux@cement.ca
Subject: Re: Concrete Block CaGBC CIR Approved

Greetings All,

Just received confirmation from the CaGBC that our Credit Interpretation Request for a revised procedure for SCM's in block has been approved. This means that block can now qualify for this high profile credit under LEED Canada. The existing credit was designed for readymix concrete and effectively shut us out. The CIR should be posted by the CaGBC by the end of the month. We'll need to get this out to block producers across the country.

We had help from: the architect for the project we ran this through, Busby Perkins+Will; Diana Klein who we retained to help with the submission; and Rob Marshall and CAC at the eastern end. Shows what a small budget and a bit of work can do. Thanks to all!

Cheers,

Bill McEwen, P.Eng., LEED[®] AP

Executive Director
Masonry Institute of BC
info@masonrybc.org
ph 604-291-1458
fax 604-291-9482
3636 E.4th Ave,
Vancouver, BC V5M 1M3

----- Original Message -----

From: MarshallRbrt@aol.com
To: info@masonrybc.org
Cc: info@ccmpa.ca ; phargest@boehmerblock.com ; gsturgeon@canadamasonrycentre.com ; bclark@cci-industries.com ; mmgiroux@cement.ca
Sent: Friday, September 22, 2006 3:28 PM
Subject: Re: Concrete Block CaGBC CIR - Needed information from the industry

Bill, Today CaGBC TAG approved your LEED Canada CIR with the 15% cement base limit. Since this limit is above all the member producers typical cement content for concrete block, it is not a hardship. I am happy to have helped the Canadian concrete products industry to achieve (another) sustainability advantage. I thank CAC for their help, especially Rick McGrath.

Rob Marshall, P. Eng., LEED[®] A.P., BDS

Paul Hargest

To: All Boehmer Block Customers

Subject: RE Shipping Skids

TO WHOM IT MAY CONCERN.

Please be advised all hardwood skids used for the shipping of concrete block are in fact refundable and re-used on average seven times before being cut-up for fire-wood, creating NO waste.

IF you have any questions, please call.

Kind Regards,

Paul Hargest

President

Boehmers

operating under Hargest Block Ltd.

email: phargest@boehmerblock.com

Phone: 519-624-8396

Cell: 519-651-9465

Home: 519-650-6048

SCHEDULE A GENERAL MATERIAL CERTIFICATION LETTER

Material Supplier Company: Boehmers

Date:

To:

Fax:

Project:

For the purpose of LEED documentation only, we certify that the following products contain:

Product Name	Description
Standard Concrete Block	Concrete Block

Contain :

_____ % Post-Consumer Recycled Content by (weight/volume)
76 % Post-Industrial Recycled Content by (weight/volume) from external sources
_____ % Post-Industrial Recycled Content by (weight/volume) from our in house process

These products were manufactured (processed or assembled) and extracted (or harvested) at the following Locations :

Manufacturing Location	Extraction Location
City : Cambridge	City : Hamilton
Province: Ontario	Province: Ontario
Postal Code : N1R 5S3	Postal Code: L8H 3Y2
Mode of Transport : Truck	Mode of Transport: Truck

Sincerely,



Name:

Paul Hargest

Please Print:

President

Job Title:

8-4-09

Date:

SCHEDULE A GENERAL MATERIAL CERTIFICATION LETTER

Material Supplier Company: Boehmers

Date:

To:

Fax:

Project:

For the purpose of LEED documentation only, we certify that the following products contain:

Product Name	Description
Standard Lightweight Block	Lightweight Block

Contain :

_____ % Post-Consumer Recycled Content by (weight/volume)
174.2 % Post-Industrial Recycled Content by (weight/volume) from external sources
_____ % Post-Industrial Recycled Content by (weight/volume) from our in house process

These products were manufactured (processed or assembled) and extracted (or harvested) at the following Locations :

Manufacturing Location	Extraction Location
City : Cambridge	City : Hamilton
Province: Ontario	Province: Ontario
Postal Code : N1R 5S3	Postal Code: L8H 3Y2
Mode of Transport : Truck	Mode of Transport: Truck

Sincerely,



Name:

Paul Hargest

Please Print:

President

Job Title:

8-4-09

Date: