

TO:

Jerry Barr

Center Steel Sales 6645 Roosevelt

Allen Park MI 48101

FROM:

Steel Dynamics, Inc.

4500 County Road 59 Butler, IN 46721

SUBJECT:

**Recycled Material Content** 

DATE:

2-16-09

Dear Jerry,

The recycled material content of our product varies by heat to heat but it is roughly 65 - 90 % recycled scrap. Of this 65 - 90 % approximately 5 - 10 % would be reclaim material from the mill itself. This would be coil ends we have cut off and or partial slabs that were not rolled into coils. This would leave 55 - 80 % that would be post consumer/industrial scrap. The remaining 5 - 30 % is some form of pig iron either in solid or liquid form.

Please feel free to contact me with any questions.

Best Regards,

Pete Schneider

## NORTH STAR BLUESCOPE STEEL LLC

Tim Mitchell
Manager – Quality Assurance and Technology
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May 28, 2008

North Star BlueScope Steel - Sheet Products

Recycled Content of North Star BlueScope Steel Sheet Products

North Star BlueScope Steel LLC operates a steel mill located near Delta, OH USA for the manufacture of steel sheet product hot rolled bands.

The mill recycles iron based scrap metal in AC electric arc furnaces. The scrap metal is procured from domestic sources. Scrap metal and virgin iron units (pig iron, HBI or DRI) make up the melt charge for the furnaces. The scrap metal used to manufacture hot rolled steel bands is purchased domestically, but the original source is not always ascertainable and certification of the melt with respect to origin is not possible.

The typical post-consumer content of the recycled scrap metal used to manufacture hot rolled steel bands is between 30-40% and the pre-consumer content is between 20-35%. North Star BlueScope Steel LLC home scrap, scrap that is generated during the manufacturing process and consumed onsite, constitutes 2-5% and virgin iron units at 20-30% constitute the remaining iron requirements.

For the purpose of U.S. Green Building Council (USGBC) LEED, NC 2.2, MR credits 4.1, 4.2, 5.1 and 5.2; North Star BlueScope Steel LLC hot rolled steel bands contain between 50-75% recycled content of which >95% of this figure is purchased from dealers within 500 miles of this facility or originates at this facility. The recycled content percentage was calculated using the LEED formula:

Recycled Content = (% post-consumer +  $\frac{1}{2}\%$  pre-consumer)

Hot Rolled Steel Bands supplied by North Star BlueScope Steel LLC are 100% melted and manufactured in the USA.

If you have any questions please contact us.

Sincerely, Tim Mitchell







November 9, 2007

Dear Valued Customer:

The steelmaking process employed by ArcelorMittal USA for production of flat products utilizes as much as 20-25% recycled steel scrap. This basic oxygen (BOF) process incorporates both this steel scrap component and liquid iron to produce high quality steel.

Sincerely,

George D. Healey Vice President, Marketing

Dun D. Huy

Fred Post Manager, Environment Control Services



January 13, 2014

Essar Steel Algoma Inc. 105 West Street Sault Ste. Marie, Ontario Canada P6A 7B4

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## ESSAR Steel Algoma Inc. Recycle Content and LEED

Sustainability, with respect to the Canadian Green Building Council's Leadership in Energy and Environmental Design (LEED ®) principle for construction products, is supported by the ESSAR Steel Algoma Inc. manufacturing process and is consistent with our corporate environmental policy.

ESSAR Steel Algoma Inc. is an integrated steel producer based in Sault Ste. Marie, Ontario, Canada. Revenues are derived primarily from the manufacture and sale of hot and cold rolled steel products, including hot and cold rolled sheet and plate.

Consistent with the requirements which support achieving the LEED MR5 category, Essar Steel Algoma can offer the following information:

Our products are currently made using the Basic Oxygen Furnace (BOF) process. The average recycle content of our steel ranges from 21 to 25%, typically made up of 5 to 10% post consumer and 90 to 95% post industrial scrap.

Essar Steel Algoma recycles over 500,000 metric tonnes of steel scrap annually, reducing its overall carbon foot-print by attaining in the range of 75-80% self-efficiency by supplying its own post industrial scrap from internal recovery practices. 100% of our external scrap steel requirement is sourced from Canada and the United States. Of that, 20% is U.S. sourced material; shipped to our manufacturing facility in Sault Ste. Marie Ontario by lake vessel from the ports of Duluth, Minnesota and Chicago, Illinois. 20% is Canadian-sourced from southern Ontario, and shipped to our manufacturing facility in Sault Ste. Marie from Hamilton and Cambridge, Ontario; 60% is Canadian-sourced from northern Ontario. 30% is shipped by rail, 20% by lake vessel and 50% by truck.

Our raw material inputs are sourced similarly. 100% of our iron ore is extracted from Ishpeming, Michigan. Two-thirds is shipped by lake vessel via the port of Marquette, Michigan and one-third is shipped by rail directly from Ishpeming. The extracted iron ore input represents approximately 63.5% of total raw steel produced.

18% of our coal is extracted from western Canada, shipped by rail to the Lake Superior port of Thunder Bay, Ontario and from there by lake vessel to our manufacturing facility in Sault Ste. Marie, Ontario. 82% of our coal is extracted from the coal ranges of West Virginia and Kentucky, United States and is sent by rail to the ports of Sandusky and Toledo, Ohio, on Lake Erie, and from there by lake vessel to our manufacturing facility in Sault Ste. Marie, Ontario. The extracted coal inputs represent approximately 22.4% of total raw steel produced.



100% of our limestone is extracted in Michigan and shipped by rail to ports in Cedarville and Rogers City, Michigan and from there 100% is shipped by lake vessel to our manufacturing facility in Sault Ste. Marie, Ontario. The extracted limestone input represents approximately 3.5% of total raw steel produced.

On a tonne per tonne basis, the total of regionally extracted material inputs contribution compared to raw steel production equates to 95.4%.

We trust this information satisfies any questions you may have regarding the status of the ESSAR Steel Algoma Inc. product mix with respect to the LEED ® protocol and in particular our capability of providing a quality product which meets the requirements of LEED MR5 status

We would be pleased to answer any additional questions that might arise.

Sincerely,

ESSAR Steel Algoma Inc.