



Subcontractor/Supplier LEED Documentation Requirements

Date: 3/01/16

RE: Webster Interdisciplinary Science Building LEED requirements

LEED Certification Process

Dear Subcontractor/Supplier:

As you know, Webster ISB in Webster Groves is pursuing LEED-New Construction v2009 Silver Certification.

As a subcontractor/supplier on this project, your company is responsible for supporting compliance under the LEED rating system and for taking specific measures to meet the specific standards required to earn certain credits.

As a supplier/subcontractor on this project, you are obligated to provide cost and construction material backup documents and information to be included with the project LEED-NC application.

Please review the following list of requested items from your subcontract scope of work for this project. You may need to consult with material suppliers and manufacturers for additional information.

Backup cut sheets similar to those providing with shop drawings will be necessary.

MSDS sheets may be necessary.

Please call or email with questions or comments.

Thank you.

Devin Gates
Paric Corporation
Senior Project Engineer

Material & Product Data Form

NOTE--Please complete a copy of this form for EACH product used or installed at the Loop Student Living Initiative Project.

This is mandatory for LEED Compliance.

Subcontractor/Installer: Ambassador Steel Fabrication LLC

Address: 150 Tyler Street St Louis, MO 63102

Contact: David Jones 314-382-9855 djones@harrisrebar.com

Manufacturer: Nucor Steel Kankakee

Manufacturing Location: Kankakee, IL

Material or Product: Concrete Reinforcing Bars

Form Completed By: David Jones Date: 4/18/2016

Instructions to Subcontractor/Installer: Please complete the following information in all appropriate categories for all materials/products from CSI Master Format 2004 Divisions 3-10, 31, and 32. Use one documentation sheet for **EACH** product or material (ie: tile and grout each require their own form). Note as N/A if not applicable. Attach letter of certification/backup from the manufacturer verifying all applicable credits.

Scope of Work: Drilled Piers & Pier Caps

Specification Section: 31 6329

Exact Model # and Name: N/A

Material Costs (Including raw materials, shop fabrication or shop assembly labor, and delivery to the jobsite):

\$12,290.15

LEED SS Credit 7.1 – Heat Island Effect, Non-Roof

Do paving materials have a Solar Reflectance Index of at least 29? N/A

Product Name:	Solar Reflectance Index (SRI):

LEED SS Credit 7.2 – Heat Island Effect, Roof

Do roof materials/products have a high Solar Reflectance Index? N/A

Product Name:	Roof Slope:	Solar Reflectance Index (SRI):

LEED MR Credit 4 – Recycled Content

Does the material/product contain post-consumer and/or pre-consumer content? Yes

% of Post-Consumer Content?	82.8%
% of Pre-Consumer Content/Post Industrial Content?	17.0%

If only part of the assembly contains recycled content, fill in the detail chart below:

Assembly Components:	Weight (lbs):	% Post-Con*:	% Pre-Con*:
Totals by Weight (100% of assembly):*			

*Assembly Recycled Content = [Component Weight (lbs) x Recycled Content (%) / Total Weight (lbs)] x 100%

LEED MR Credit 5 – Regional Materials

Was the material/product manufactured regionally? Yes

Location of Manufacturer (City/State): Kankakee, IL
Distance from Manufacturer to Project Site (Miles): 269

Does the material/product contain regionally extracted, harvested, or recovered materials? Yes

Raw Materials:	City/State:	Miles to Project Site:
Scrap Steel	Kankakee, IL	269

If only part of the assembly contains regional material, fill in the chart below:

Assembly Components:	Weight (lbs):	% Regional*:
Totals by Weight (100% of assembly):*		

*Assembly Recycled Material= [Component Weight (lbs) x Regional Material (%) / Total Weight (lbs)] x 100%

LEED MR Credit 6– Rapidly Renewable Materials

Does the product/material contain rapidly renewable materials? No

If yes, what percentage of the product/material contains rapidly renewable content?

Provide manufacturer information/documentation supporting rapidly renewable materials.

Raw Materials:	% of Material Costs

LEED MR Credit 7 – FSC Certified Wood Materials

Does the product/material contain FSC certified wood?* No

If yes, what percentage of the material/product contains FSC certified wood?

Provide manufacturer information/documentation supporting FSC certification.

Component:	FSC Pure, Mixed Credit, or Mixed %	Chain of Custody Certificate #	% of Material Costs

*Attach vendor invoices for each new wood-based component.

LEED IEQ Credit 4.1 – Low-Emitting Materials; Adhesives and Sealants

Does the product/material comply with VOC limits of SCAQMD rules or Green Seal standards? _____

Is product applied onsite and inside the building? _____

Product Name:	CRI-ID# if applicable	VOC Content (g/L)

LEED IEQ Credit 4.2 – Low-Emitting Materials; Paints and Coatings

Does the product/material comply with VOC limits of SCAQMD rules or Green Seal standards? _____

Is product applied onsite and inside the building? _____

Product Name:	VOC Content (g/L)

LEED IEQ Credit 4.3 – Low-Emitting Materials; Flooring Systems

Does the carpet material/product meet the Carpet and Rug Institute's Green Label Plus Program? _____

Carpet Product Name (and backing type):	CRI ID No.

Does the carpet pad material/product meet the Carpet and Rug Institute's Green Label Plus Program? _____

Pad Product Name:	CRI ID No.

Does the carpet adhesive comply with VOC limits of SCAQMD rules or Green Seal standards? _____

Product Name:	CRI-ID# if applicable	VOC Content (g/L)

Is the hard surface flooring compliant with the SCS FloorScore standard? _____

Hard Surface Flooring Product Name:	FS Reg. No.

Does the tile setting and grout product/material comply with VOC limits of SCAQMD rules? _____

Tile Setting and Grout Product Name:	VOC Content (g/L)

Does the floor coating comply with VOC limits of SCAQMD rules or Green Seal Standards? _____

Product Name:	VOC Content (g/L)

LEED IEQ Credit 4.4 – Low-Emitting Materials; Composite Wood and Agrifiber Products

Does the product/material contain added urea-formaldehyde resins? _____

Product Name:	Yes/No	Binder Type:

Subcontractor Important Note--Specific manufacturer or fabricator documentation in support of the above information **must** be submitted with **EACH** product or material submission for review by the US Green Building Council for LEED Platinum certification of the project.

Have you provided the necessary support documents to PARIC? YES or NO



April 7, 2015

To: All Nucor Customers

Re: 2014 Recycled Content of Nucor Steel Products

Nucor Corporation is North America's largest recycler, using nearly 20 million tons of scrap steel in 2014 to create new products. Nucor uses Electric Arc Furnace (EAF) technology at all of its steel recycling facilities. EAFs use post-consumer scrap steel material as the major feedstock, unlike blast furnace operations that use mined iron ore as the major feedstock. Nucor has prepared the following information to help calculate the recycled content for products being used in "Green Building" applications or for projects in the LEED® program. These percentages are approximate and are based on the total weight of the products. The calculations are based on 2014 scrap steel delivered and hot metal tons produced and are defined in accordance with ISO 14021:2001. More specific product information may be available from facility representatives.

Recycled Content – LEED V 3 Credit 4

2014 Recycled Steel Content of Nucor Products (% by Total Weight)	
Product Group	Average Recycled Content
Nucor Bar Products	99.8%
Nucor Beam Products	90.7%
Nucor Plate Products	80.0%
Nucor Sheet Products	70.2%
Nucor Castrip®	96.7%
Total Nucor Steel Combined	83.1%
Vulcraft Structural Products	99.8%
Vulcraft Decking	70.2%
Nucor Building Group	83.1%
Nucor Fastener Products	99.8%
Nucor Wire Products	99.8%
Nucor Cold Finish	99.8%

Regional Materials – LEED Version 3 Credit 5

Nucor tracks the origin of scrap shipments to our mills. Nucor can approximate the amount of scrap recovered from any project site region. Nucor owns steel and steel products manufacturing facilities throughout the US that are often within 500 miles of the project site. Please refer to the LEED Contact List (<http://nucor.com/responsibility/sustainability/compliance/leed/>), then click on "LEED Contact"), and contact the specific Nucor representative at the facility directly.

Bar Mill Group – Darlington, SC; Norfolk, NE; Jewett, TX; Plymouth, UT; Auburn, NY; Birmingham, AL; Kankakee, IL; Jackson, MS; Seattle, WA; Marion, OH; Memphis, TN; Kingman, AZ

2014 Approximate Recycled Steel Content Of All Nucor Bar Mill Group Products ^(*)				
Facility	Total Scrap Steel Used	Total Alloys and Other Iron Units	Total Post-consumer Recycled Content	Total Pre-consumer/ Post-industrial Recycled Content
All	99.8%	0.2%	82.8%	17.0%

The Nucor Bar Mill Group produces rebar, angles, flats, rounds and other miscellaneous shapes. The bar mill group uses recycled scrap steel for 99.8% of the feedstock.

Sheet Mill Group – Crawfordsville, IN; Hickman, AR; Huger, SC; Decatur, AL, Gallatin, KY; Castrip, IN; Castrip, AR

2014 Approximate Recycled Steel Content Of Nucor Sheet Mill Group Products ^(*)				
Facility	Total Scrap Steel Used	Total Alloys and Other Iron Units	Total Post Consumer Recycled Content	Total Pre-consumer/ Post-industrial Recycled Content
Crawfordsville, IN	92.3%	7.7%	77.5%	15.9%
Hickman, AR	61.4%	38.6%	50.9%	10.4%
Berkeley, SC	53.4%	46.6%	44.3%	9.1%
Decatur, AL	68.6%	31.4%	57.0%	11.7%
Gallatin, KY	81.3%	18.7%	67.4%	13.8%
Nucor Castrip® Blytheville, AR	99.8%	0.2%	82.9%	16.9%
Nucor Castrip® Crawfordsville, IN	92.3%	7.7%	77.5%	15.9%

The Nucor Sheet Mill Group produces hot band, cold rolled, pickled and galvanized products. Nucor Sheet mills use varying amounts of recycled materials depending on metallurgical product demands and market conditions. The combined sheet mill total recycled content is approximately 70.2%.

Beam Group – Blytheville, AR; Huger, SC

2014 Approximate Recycled Steel Content of Beam Mill Products ^(*)				
Facility	Total Scrap Steel Used	Total Alloys and Other Iron Units	Total Post Consumer Recycled Content	Total Pre-consumer/ Post-industrial Recycled Content
Nucor Yamato Steel, Blytheville, AR	99.8%	0.2%	82.9%	16.9%
Nucor Berkeley, Huger, SC	48.6%	51.4%	40.4%	8.3%

Nucor Beam mills produce narrow and wide flange structural beams. Nucor Yamato uses approximately 99.8% scrap steel for their feedstock. Nucor Steel Berkeley uses a higher percentage of non-scrap iron due to metallurgical product demands for sheet steel produced using the same EAF's. The combined beam mill recycled content is approximately 90.7%.

Plate Group - Hertford County, NC; Tuscaloosa, AL

2014 Approximate Recycled Steel Content of Plate Mill Products ^(*)				
Facility	Total Scrap Steel Used	Total Alloys and Other Iron Units	Total Post Consumer Recycled Content	Total Pre-consumer/ Post-industrial Recycled Content
Hertford County, NC	89.3%	10.7%	74.1%	15.2%
Tuscaloosa, AL	69.5%	30.5%	57.7%	11.8%

The Nucor Plate combined recycled content by weight is approximately 80.0%.

^(*) Studies show that the recycled steel used for Nucor products consists of approximately 83% post-consumer scrap. The remaining 17% typically consists of pre-consumer scrap generated by manufacturing processes.

Vulcraft Group – Florence, SC; Norfolk, NE; Brigham City, UT; Grapeland, TX; St. Joe, IN; Fort Payne, AL; Chemung, NY; Verco Decking, Inc. – Phoenix, AZ; Fontana, CA; Antioch, CA

Joists - The bar steel for Vulcraft joists is typically obtained from one of the eleven Nucor bar mills. That would mean that the average recycled content percentage for the Vulcraft group is 99.8%. The post consumer and pre consumer recycled content have been calculated to be approximately 82.8% and 17.0% respectively.

Deck – Steel for decking produced by Vulcraft facilities is typically obtained from one of the seven Nucor sheet mills. That would mean that the Vulcraft deck products contain approximately 70.2% recycled steel. The post and pre consumer recycled content were calculated to be approximately 58.3% and 11.9% respectively. Verco Decking, Inc. may obtain steel from sources outside of Nucor that may contain lower amounts of recycled content; specific product information regarding Verco Decking, Inc. is available from facility representatives.

Products Group -

- **Nucor Building Group** –
 - o Swansea, SC; Waterloo, IN; Terrell, TX; Brigham City, UT;
 - o **American Buildings Company** – Eufaula, AL; La Crosse, VA; Carson City, NV; El Paso, IL;
 - o **Kirby Building Systems** – Portland, TN;
 - o **Gulf States Manufacturer** – Starkville, MS;
 - o **CBC Steel** – Lathrop, CA;
- **Nucor Fastener** – St. Joe IN
- **Nucor Wire Products Pennsylvania** – New Salem, PA; **Nucor Steel Connecticut** – Wallingford, CT; **LMP Steel** – Maryville, MO;
- **Nucor Cold Finish** – Milwaukee, WI; Darlington, SC; Brigham City, UT; Norfolk, NE
- **Nucor Steel Kingman, LLC**

Nucor Building Group (Including American Buildings Company, Kirby Building Systems, Gulf States Manufacturer, and CBC Steel) – Nucor Building Group products may contain steel from all of the Nucor steel mills or obtain steel from outside of Nucor Corporation for their sheet, plate, bar and beam steel needs. The Nucor Building Systems, when using Nucor steel, contains an average of 83.1% total recycled content. The post and pre consumer recycled content was 69.0% and 14.1% respectively.

Nucor Fastener – Steel for Nucor fasteners is typically obtained from Nucor bar mills that use scrap steel as their feedstock. Some fasteners may contain high percentages of alloys that may reduce the total recycled content of the products, but Nucor Fastener products typically contain 99.8% recycled materials. The post and pre consumer recycled content would be approximately 82.8% and 17.0% respectively.

Nucor Wire Products Pennsylvania, Nucor Connecticut, LMP Steel – Steel for wire is typically obtained from a Nucor bar mill that uses scrap as the feedstock. Nucor wire products, when using Nucor bar steel, would contain an average 99.8% recycled steel. The post and pre consumer recycled content would be approximately 82.8% and 17.0% respectively.

Nucor Cold Finish – Steel processed at Nucor Cold Finish is typically obtained from Nucor bar mills. The Nucor Cold Finish, when using Nucor steel, would contain an average amount of 99.8% recycled steel. The post and pre consumer recycled content would be approximately 82.8% and 17.0% respectively.

Nucor Steel Kingman, LLC – Steel for Nucor Steel Kingman, LLC products is typically obtained from Nucor bar mills that use scrap steel as their feedstock. Nucor Steel Kingman, LLC products would then typically contain 99.8% recycled materials. The post and pre consumer recycled content would be approximately 82.8% and 17.0% respectively.

Additional information regarding specific recycled content of Nucor Corporation products group for a customer's specific order is available from facility representatives.

Additional information is available online through the Steel Recycling Institute at <http://www.recycle-steel.org>.

NUCOR STEEL BAR MILL
One Nucor Way
Bourbonnais, IL 60914



April 18, 2016

To: Webster University ISB – Phase 1

Re: Nucor Scrap Steel Harvest Locations

Dear Customer,

Thank you for using Nucor Steel products. Nucor tracks the harvest location of the scrap steel recycled at each of our steel mills. We have compiled the following data in regards to scrap harvested within 500 miles of your site location at in Webster Groves, MO 63119.

Product Final Manufacturing Location	Steel Recycling Mill Location	Percent of Scrap Steel Harvested within 500 miles of 63119	Percent of Virgin Material Harvested within 500 miles of 63119
Bar Mill Nucor Steel Kankakee (NSKNK) Bourbonnais, IL 60914	Nucor Steel Kankakee (NSKNK) Bourbonnais, IL 60914	91.1%	<0%

All data is approximate totals based on 2014 tons of scrap steel received at our steel recycling facility. If you have any questions please feel free to contact me at:

Nucor Steel
One Nucor Way
Bourbonnais, IL 60914

Sincerely,

A handwritten signature in black ink that reads "Carmen Costales".

Carmen Costales
Environmental Engineer