

# SUSTAINABILITY

OF NUCOR BUILDING SYSTEMS



# IT'S MORE THAN A COMMITMENT.

**19 MILLION TONS**

**OF DISCARDED JUNK LEFT TO RUST AND DECAY.  
IS NOW 24 MILLION TONS OF RECYCLED STEEL DESTINED  
TO ERECT NEW BRIDGES AND BUILDINGS.**

As North America's largest recycler, Nucor is in the practice of reusing every bit of metal that's worthy of a second life. It's not just good business; it's good for the environment.

- We -

ARE CONSCIOUS OF THE COMMUNITIES IN WHICH WE OPERATE AND RECOGNIZE THIS IS WHERE OUR TEAMMATES AND THEIR FAMILIES LIVE. IT'S IMPORTANT THAT WE ACT AS A GREAT NEIGHBOR AND PROTECT THE ENVIRONMENT.

***This is critical to the long-term sustainability of our company.***

# IT'S OUR NATURE.



- Nucor is North America's **largest recycler**
- Over **19 million tons** of scrap recycled this year
- All NBS plants **ISO 14001** certified
- NBS buildings have nearly **90% recycled steel content**
- NBS buildings can qualify for **LEED** points
- The best **sustainability** story around

# SUSTAINABILITY OF STEEL

- World's most recycled material
  - 64% of all steel is now recycled and kept out of landfills
  - Nucor recycles **1,200 pounds of steel every second 24/7/365**
- Recycling steel reduces:
  - mining waste by **97%**, air pollution by **86%**, & water pollution by **76%**
- 2.6 million tons of appliances & 1.6 million tons of steel cans are recycled in one year
- 5400 BTU's of energy are conserved for every pound of steel recycled!



# RECYCLED STEEL CONTENT

## 2012 Recycled Steel Content of Nucor Products

(Percent by Total Weight)

Product Group	Average Recycled Content
Nucor Bar Products	99.9%
Nucor Beam Products	82.1%
Nucor Plate Products	84.8%
Nucor Sheet Products	75.7%
Nucor Castrip, Crawfordsville, IN	97.4%
<b>Total Nucor Steel Combined</b>	<b>91.4%</b>
Vulcraft Structural Products	99.9%
Vulcraft Decking	75.7%
Nucor Buildings Group Products	91.4%
Nucor Fastener Products	99.9%
Nucor Wire Products	99.9%
Nucor Cold Finish	99.9%

These percentages are approximate and are based on the total weight of the products. The calculations are based on 2012 scrap steel delivered and finished materials produced and are defined in accordance with ISO 14021:1999.



# G.R.E.E.N. POLICY

## Nucor Building Systems' Environmental G.R.E.E.N. Policy

**G** **Great Expectations:** To be world class, Nucor Building Systems is committed to having world class expectations in all aspects of our business.

**R** **Responsibility:** Nucor Building Systems will operate responsibly to preserve and contribute to our local environments.

**E** **Environmental Excellence:** As a world class organization, NBS will uphold our commitment to environmental excellence.

**E** **Effective Practices:** Environmental excellence will be achieved by all NBS employees by participating in effective environmental practices.

**N** **Neighborhood Outreach:** NBS will reach out to our communities as proactive environmental stewards.

# GREEN BENEFITS OF NUCOR BUILDINGS

- Made of nearly 90% recycled steel
- Easy to maintain
- Energy efficient – reduced operating costs
- Increased overall longevity
- 100 % recyclable if ever taken out of operation
- Qualify for LEED points necessary for certification



# LEED RATING SYSTEM



The U.S. Green Building Council's (USGBC) Leadership in Energy & Environmental Design (LEED®) Green Building Rating System™ is:

- Building program for the design, construction, and operation of high performance green buildings
- Framework for identifying and implementing practical and measurable green building design solutions
- Benefits of sustainable buildings:
  - Improve occupant well being
  - Improve environmental performance
  - Improve economic returns of buildings





# LEED CATEGORIES

Using a Nucor metal buildings offers an opportunity to capitalize on earning LEED points right from the start.

LEED Section *	Subject	Potential Points	Nucor Building Systems Contribution
MR Credit 4.1 and 4.2	Recycled Content	2	NBS Recycled Content over 89%
SS Credit 7.2	Head Island Effect: Roof	1	NBS Offers 2 roof paints with Solar Reflectance Index (SRI) over 78
MR Credit 5.1 and 5.2	Use of Regional Materials	2	NBS multiple plant locations and Nucor domestic steel mills can often contribute to the use of regional materials. This varies based on the job site. The local plant will assist in determining regional content.
MR Credit 3.1 and 3.2	Materials Reuse	2	All NBS steel materials are 100% recyclable in the future.

\* Based on LEED for New Construction - Version 2.2



# ENERGY RATING VALUES

Energy rating values for Nucor Building Systems standard color offerings:

## Nucor SP (Silicone Polyester) Color Systems

Color	Solar Reflectance (R)	Thermal Emissivity (E)	Solar Reflectance Index (SRI)
Burnished Slate	0.31	0.86	32
Evergreen	0.26	0.86	25
Aztec Blue	0.25	0.86	24
Brick Red	0.32	0.83	32
Sagebrush Tan	0.47	0.85	53
Fox Gray	0.43	0.85	47
Lightstone	0.59	0.87	70
Polar White	0.66	0.86	79
Unpainted Galvalume®	0.68	0.10	56

## Nucor PVDF Panel Paint Systems

Color	Solar Reflectance (R)	Thermal Emissivity (E)	Solar Reflectance Index (SRI)
Dark Bronze	0.29	0.85	29
Cypress Green	0.30	0.87	31
Royal Blue	0.30	0.86	30
Terra Cotta	0.35	0.85	36
Surrey Beige	0.51	0.86	58
Medium Gray	0.37	0.87	40
Warm White	0.59	0.88	70
Regal White	0.72	0.86	87
Pearl Gray (IMP only)	0.50	0.87	57



A COMMITMENT TO SUSTAINABILITY

