CENTER FOR **ENVIRONMENTAL** 

INNOVATION IN ROOFING

TO COOL ROOF

### **INTRODUCING ROOFPOINT**<sup>TM</sup>

FOR ENVIRONMENTALLY INNOVATIVE **ROOFING SYSTEMS** 



- A Word About the Center
- Introducing RoofPoint
- RoofPoint LS for Low-Slope Roofing
- Where RoofPoint is Going



INTRODUCING ROOFPOINT

### A WORD ABOUT THE CENTER

MISSION. MEMBERS. PROGRAMS





#### **Advancing Environmental Innovation in Roofing**

- Leading public information resource for roofing, energy and the environment
- Unified industry voice for energy and environmental policy
- Roofing industry forum for energy and environmental research





#### Excellence in Design Award

- Annual recognition program for innovation in roofing
- Former NRCA program transferred to the Center in 2008

#### RISE<sup>™</sup>

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- Rooftop Integration of Solar Energy
- Certification program for roofing contractors
- Under joint development with NRCA

#### RoofPoint<sup>™</sup>

- Rating system for environmentally innovative roofs
- Undergoing public review prior to market launch

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### ROOFPOINT

VISION. MISSION. OBJECTIVES.



- A guideline for the selection of roofing systems to maximize energy efficiency and minimize environmental impact
- A checklist to evaluate the many ways roofing systems provide economic and environmental benefits
- An assessment system to compare alternative sustainable roofing strategies
- A recognition program to reward environmental innovation in roofing

### HOW ROOFPOINT STARTED INTRODUCING ROOFPOIN

#### **Initiated by the Center Board of Directors**

 Major roofing contracting, manufacturing and private capital organizations

#### **Developed by the Center Research Committee**

- Representatives from a cross-section of the largest roofing contractors and manufacturers in North America
- Recognized roofing professionals deeply involved in research & standards development

### Supported by Roofing Industry Alliance for Progress

- Three-year \$750,000 grant awarded in April, 2010
- Joint Center / Alliance Board established to oversee development of RoofPoint<sup>™</sup>

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# WHY IS ROOFPOINT NEEDED?

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**Increase** <u>Visibility</u> of Roofing. "Low-slope roofing systems contribute in many ways to achieving building sustainability, including reducing energy consumption, producing renewable energy, managing water and material resources, and extending building service life. Many popular green building rating systems tend to narrowly focus on one or two roof system options, such as cool roofing or vegetated roofing, instead of the broader array of roofing systems available to enhance the sustainability of the built environment."

**Emphasize Importance of <u>Re-Roofing</u>.** "Green building rating systems, with their predominant focus on new construction or major building renovation, tend to neglect the billions of square feet of re-roofing systems installed on existing buildings every year."

**Increase Emphasis on Durability.** "Green building rating systems may place too little emphasis on the durability and long-term performance required for a roofing system to be considered truly sustainable; and this lack of emphasis on roofing durability may significantly reduce the long-term sustainability of the underlying building."



### THE INDUSTRY VALUE PROPOSITION

WHY ROOFPOINT?

#### Roof systems become a value-added product

- Increased unit revenues and margins
- Reduced economic volatility

#### Roofing becomes a value-added profession

- Higher-paying skills, increased career opportunities
- Increased visibility and influence

#### Once established, the program will be self-funding

- Project registration fees
- Professional training and certification fees



### THE END-USER VALUE PROPOSITION

WHY ROOFPOINT?

#### Good roofing decisions will be easier to make

- All key elements covered in a single guideline
- Program will drive new design and purchasing standards

#### Good roofing practice will be recognized and rewarded

 Program will drive positive public recognition, enhanced property values, increased rents

#### Good roofing practice will become public policy

 Program will become a template for public purchasing standards, incentives and building codes



"The mission of RoofPoint is to provide a means of roof system selection across membrane types and system designs so that the roofing industry as a whole is recognized for the diversity of environmentally responsive options it offers to meet the needs of concerned building owners. RoofPoint is intended to serve as a cornerstone for the design and selection of environmentally innovative roofing systems."





ROOFPOINT LS

### **ROOFPOINT LS FOR LOW-SLOPE ROOFING**





- 2. Materials Management
- 3. Water Management
- 4. Durability/Life Cycle Management
- 5. Innovation in Roofing



### SECTION 1: ENERGY MANAGEMENT

CREDIT	TITLE	PRIMARY INTENT	STRATEGY	POINTS
E1	HIGH R ROOF SYTEMS	REDUCE ENERGY & GHG	INCREASE ROOF R VALUE	20
E2	BEST THERMAL PRACTICES	REDUCE ENERGY & GHG	REDUCE THERMAL DISCONTINUITIES	4
E3	COOL ROOF SYSTEMS	REDUCE ENERGY, GHG & HEAT ISLANDS	INSTALL COOL ROOF OR EQUIV.	8
E4	ROOF AIR/MOISTURE BARRIER	REDUCE ENERGY & GHG	INSTALL AIR/MOISTURE BARRIER	4
E5	ROOFTOP ENERGY SYSTEMS	PRODUCE CLEAN ENERGY	INSTALL SOLAR/WIND ENERGY	10
E6	ROOFTOP DAYLIGHTING	PRODUCE CLEAN ENERGY	INSTALL DAYLIGHTING	4
				50



### SECTION 2: MATERIALS MANAGEMENT ROOFPOINT LS

CREDIT	TITLE	PRIMARY INTENT	STRATEGY	POINTS
M1	RECYCLED CONTENT	REDUCE SOLID WASTE	INCREASE RECYCLED %	4
M2	MATERIAL REUSE	REDUCE SOLID WASTE	INCREASE MATERIAL REUSE	5
M3	WASTE MANAGEMENT	REDUCE SOLID WASTE	REDUCE WASTE/SCRAP	4
M4	LOW-VOC MATERIALS	REDUCE OZONE	REDUCE VOC CONTENT	3
				16



### SECTION 3: WATER MANAGEMENT

CREDIT	TITLE	PRIMARY INTENT	STRATEGY	POINTS
W1	ROOF STORM WATER RETENTION	REDUCE STORM WATER RUNOFF AND RELATED WATER POLLUTION	INSTALL VEGETATED OR WATER-RETAINING ROOF	5
W2	ROOF-RELATED WATER USE REDUCTION	REDUCE NON-POTABLE WATER REQUIREMENTS	CAPTURE ROOF WATER FOR LANDSCAPING	2
				7



### SECTION 4: DURABILITY/LIFE CYCLE MANAGEMENT

D1 [	DURABLE ROOF INSULATION	REDUCE INSULATION DAMAGE	INSTALL DURABLE INSULATION SYSTEM	2
D2 F	ROOF DRAINAGE DESIGN	REDUCE WATER ENTRY	ASSURE POSITIVE ROOF DRAINAGE	1
D3 F	ROOF TRAFFIC PROTECTION	REDUCE SURFACE DAMAGE	INSTALL TRAFFIC PROTECTION	2
D4 I	INCREASED WIND RESISTANCE	REDUCE STORM DAMAGE	INCREASE WIND UPLIFT RATING	2
D5 ł	HYGROTHERMAL ANALYSIS	REDUCE MOISTURE DAMAGE	PROJECT MOISTURE MANAGEMENT	2
D5 (	CONSTRUCTION MOISTURE MANAGEMENT	REDUCE MOISTURE DAMAGE	PROJECT MOISTURE MANAGEMENT	2
D6 [	DURABILITY ENHANCEMENTS	INCREASE SYSTEM DURABILITY	INSTALL SYSTEM UPGRADES	3
L1 F	ROOF MAINTENANCE PROGRAM	INCREASE SERVICE LIFE	ONGOING MAINT. PROGRAM	4
L2 F	PROJECT INSTALLATION QUALITY	INCREASE SERVICE LIFE	CONTRACTOR QA PROGRAM	4
				22

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### SECTION 5: INNOVATION IN ROOFING

CREDIT	TITLE	PRIMARY INTENT	STRATEGY	POINTS
IR1	INNOVATION IN DESIGN	RECOGNIZE DESIGN & PRODUCT INNOVATION	EXTRA CREDIT FOR FIRST-TIME INNOVATION	2
IR2	EXEMPLARY PERFORMANCE	RAISE INDUSTRY STANDARDS	EXTRA CREDIT FOR EXCEEDING STATE-OF-THE-ART	2
IR3	ROOFPOINT™ PROFESSIONAL	FACILITATE/CONFIRM PROJECT DESIGN	USE ROOFPOINT™ PROFESSIONAL	1
				5

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### WEIGHTING SYSTEM

SECTION **AVAILABLE POINTS PERCENT WEIGHT** ENERGY MANAGEMENT 50 50% MATERIALS MANAGEMENT 16 16% WATER MANAGEMENT 7 7% DURABILITY/LIFE CYCLE 22 22% MANAGEMENT **INNOVATION IN ROOFING** 5 5% 100 100%

"The Guideline weighting approach relies primarily on weighting principles established by the National Institute of Standards and Technology (NIST) in its Building for Environmental and Economic Sustainability (BEES) model for building sustainability and related research. Because the BEES model serves as a starting point for the Guideline weighting methodology, the Guideline places the greatest weighting on energy-related credits, especially credits involving the long-term operational aspects of buildings and roofing systems. Credits involving material management, especially the reduction of material waste throughout the life cycle chain, follow as a second priority. Because the BEES system involves an extensive analysis of the life cycle and economic aspects of building material performance, the Guideline also establishes durability / life cycle management as a secondary priority. Following the emphasis on energy, materials and life cycle management, the Guideline establishes water management and environmental innovation at a third level of priority."



**ROOFPOINT LS** 

POINTS	CATEGORY	ELIGIBLE ROOF SYSTEM
45 TO 49	BASIC	ANY NON-ENERGY <sup>1</sup> , NON-WATER <sup>2</sup>
50 TO 54	SILVER	ANY NON-ENERGY, NON-WATER
55 TO 59	GOLD	ANY NON-ENERGY, NON-WATER
60+	PLATINUM	ANY NON-ENERGY, NON-WATER
55+	SILVER PLUS	ANY SILVER PLUS ENERGY OR WATER
60+	GOLD PLUS	ANY GOLD PLUS ENERGY OR WATER
65+	PLATINUM PLUS	ANY PLATINUM PLUS ENERGY OR WATER

1. "Energy" refers to a rooftop energy system (solar PV, solar thermal, wind)

2. "Water" refers to a vegetated or non-vegetated storm water retention system



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### WHERE ROOFPOINT IS GOING

2010 AND BEYOND



- comment has been established for RoofPoint LS (<u>www.roofpoint.wikispaces.com</u>)
- The first round of public comment was completed May 1, 2010
- A summary of comments and a revised RoofPoint LS draft will be released in July, 2010
- A second round of comments will be completed and a final RoofPoint LS draft will be released in September, 2010





## ROOFPOINT 2015 - 2020

WHERE ROOFPOINT

#### RoofPoint 2015

- 50 Million Sq. Ft. of RoofPoint Roofs (25,000 Roofs)
- Hundreds of RoofPoint Roofing Professionals
- Millions in Added Industry Revenue

#### RoofPoint 2020

- 1 Billion Sq. Ft. of RoofPoint Rooftops (250,000 Roofs)
- Thousands of RoofPoint<sup>™</sup> Roofing Professionals
- Billions in Added Industry Revenue

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#### WWW.ROOFINGCENTER.ORG

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