Chicago & IL Energy Code, Green, Garden Roofs, Energy and Drainage / Water Retention

CRC / CRCA @ Chicago Center for Green Technology
June 7, 2012
CRC/CRCA @ CCGT

• Outline
  – Who is CRC, CRCA, Local 11 & Chicagoland JATC?
  – What’s Illinois’ Roofing Licensing Law
    • “The Details make the Difference”
  – Chicago & Suburbs Roof Energy Code Requirements
  – Rooftop Harvesting Options
  – Questions…as we go.
CRC/CRCA @ CCGT

- Who is CRC/CRCA?
  - CRC Members Cover the Region
    - No. Illinois
    - No. Indiana
    - So. Wisconsin
    - Downstate IL

- Roofs - Low Slope, Steep Slope
  - Traditional BUR, Single Ply, Reflective and Ballasted Green Roofs, Vegetative Green Roofs, Photovoltaics
  - Waterproofing & Dampproofing, Air Barriers
CRC/CRCA @ CCGT

- **CRC / CRCA Members are Involved...**
  - CRCA Membership Meetings
    - Education – Energy, Insurance, Safety, Codes
    - Relationships - Luncheons
    - Celebrate Students – Scholarship
    - Contractors, Manufacturers, Distributors, Consultants, Others...
CRC/CRCA @ CCGT

- **CRCA Members are Involved...**
  - CRCA Members are IL Licensed Contractors
    - CRCA Membership means Value
      - Education
      - Seminars – OSHA, City of Chicago
      - Committees
      - **Website Listing @ Chicagoroofing.org .....**
CRC/CRCA @ CCGT

• **CRCA Members are Involved...**
  – Committees
    – Industry Affairs – Chicago Code, ICC Code, Legislative
    – Safety – Fire, Fall Protection
    – Program - Meetings
    – Contract & Insurance - Programs

• Annual Legislative Reception
CRC/CRCA @ CCGT

Legislative Committee –
Chicago, State of IL
– Advocacy for the Roofing Industry
  • State of IL Licensing
– Chicago Energy Code &
  Urban Heat Island Ordinance
– International Building, Fire,
  Green and Energy Code
Development
Learning Objectives

To understand Rooftop Harvesting

- Water - Slow water drainage
- Energy – Reflectivity, Insulation
- Power – Wind, Solar
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Professional Roofing Contractor’s Life

• “The Life of the Roofing Contractor”
  – Technical Issues – Comply with….
    • Wind, Weight, Ventilation, Underlayment, Insulation, Drainage
  – Workforce Education & Safety – ‘Culture’
  – Insurance Required – WC, GL … FOR ROOFING WORK
  – Warranty
  – Specification Sections – Division 07
  – International Building Code – Chapter 15, 11,
  – International Residential Code – Chapter 9
  – International Fire Code
  – Chicago Energy Code & Chicago Municipal Building & Fire Code
  – Installed Cost – Competitive Market
  – Licensing – Limited / Unlimited

• CRC Members - Experience, Safety Culture, Value
Building consumption & envelope contribution

Heating 23%
Cooling 13%
Lighting 18%
Ventilation 3%
Water Heating 10%
Electronics 7%
Appliances 12%
Computers 2%
Other 12%

Has Impact on 57% of Loads

Andre Desjarlais, ORNL
What is a Green / Cool Roof?

- Energy Efficient, Energy Producing...
  - Insulation – Roofs…Optimization?
- Mass, Reflective, Power
  - Vegetative Garden Roof
  - Light Color Surfaces
  - Ballast > 15lbs./SF
  - Photovoltaics, Solar Thermal
  - Wind Turbines
What is a Green / Cool Roof?

In 2009 *Chicago Energy Code*

Reflectivity, Mass Effect, Insulation

- .72 or .50 AGED 3 Years
- Insulation – R-20ci
What is a Green / Cool Roof?

In 2009 *Chicago Energy Code* –

Residential Reflectivity, Insulation

- **2”-5”/12** – Medium Slope
  - .15 AGED Initial…50% or more of gross SF, 36 mos. prior
- **High Slope**
  > > 5-1/2” / 12” – Exempt from Reflectivity
- **Insulation** – R-49ci…R-38 ‘deemed to comply’ when uncompressed insulation extends over top of wall plate at eaves.
What is a Green / Cool Roof?

- In Suburbs – IECC –
- International Energy Conservation Code
- Low Slope Insulation…no Reflectivity
  - 2009 – INSULATION - R-20
  - 2012 – INSULATION – R-25…JUNE??
  - IGCC DRAFT 2.0 – R30 +10% = R33
  - No PV, Wind Mandate…
  - IBC Chapter 15 Governs Rooftops
- Diminishing Returns?
What is a Green / Cool Roof?

- In Suburbs – IECC
- International Energy Conservation Code – Steep Slope Insulation…no Reflectivity
  - 2009 – INSULATION - R-38
  - 2012 – INSULATION – R-48??…JUNE??
- IGCC DRAFT 2.0 – Does not apply to Single Family
- No PV, Wind Mandate…
- IBC Chapter 15 Governs Rooftops
- Diminishing Returns?
What is a Green / Cool Roof?

- **In Suburbs – IECC**
- **International Energy Conservation Code**
- **Steep Slope Insulation...no Reflectivity**
  - No PV, Wind Mandate...
  - PV Allowed...more later
- **IRC Chapter 15 Governs Rooftops**
- **Diminishing Returns?**
As a Result...Codes

Cool / Green & Insulated Roofs

- Roof surfaces with high solar reflectance & Insulation
  - Low Sloped Roofs

- In Chicago Code – 72% or 50% Solar Reflectance
  - Exceptions – 15lbs. Ballast; Reroofing
    - Ballast is ‘means to hold the roof’ – ‘Mass is Mass’
    - Garden Roofs
    - Photovoltaics

- In ICC IECC 2009 Code; ASHRAE 90.1
  - Reflectivity Not Required
  - R20 Insulation is required...
  - R25 Insulation for 2012
ROOF ENERGY SAVINGS - REFLECTIVITY

Savings, $/ft² per year

City

Knoxville  Phoenix  Chicago  Knoxville  Phoenix  Chicago

R70E90  R65E10  R50E40

R-5  R-15

Andre Desjarlais, ORNL
BALLAST STUDY - INSTRUMENTATION

10 lb/ft² Stone

17 lb/ft² Stone

24 lb/ft² Stone

24 lb/ft² Paver

Thermocouples

Heat Flux Transducer

Andre Desjarlais, ORNL
Surfacing

Protects against UV, Heat, and traffic

Andre Desjarlais, ORNL
Alternatives to a White Reflective Green Roof?

- Cool colors
- More insulation
- Ballasted roofs
- Above sheathing ventilation
- Thermochromic surfaces
Test Results –
Six Month Exposure Data

- Bare Black EPDM
- Under 10 lb/ft² Stone
- Under 24 lb/ft² Stone
- Bare White TPO
- Under 17 lb/ft² Stone
- Under Uncoated Paver

Membrane Temperature (°F)
Heat Flux through Insulation [Btu/(h·ft²)]

Andre Desjarlais, ORNL
Insulation Calculations?

- Oak Ridge National Labs, US DOE

- NRCA’s Energy/Wise
  - [http://energywise.nrca.net/](http://energywise.nrca.net/)

- Diminishing Returns at…
Insulation Calculations?

- Total Heat Flow Reduction with Increased Insulation Thickness (Massave.com)
CRC/CRCA @ CCGT

- Insulation Effect = Immediate
  - Reduce Heating Loads
  - Some Cooling Loads

- Study – Center for Innovation for Roofing
  - 100,000 SF Warehouse
    - R-15 to R-20 Insulation
    - Heating/Cooling Bill cut by 1/3!!
Insulation Effect – Another Study

Energy Wise Calculator

10,000 SF - Heating/Cooling costs
– R-20 to R-30+???
  - R-10    $1,952.38
  - R-20    $ 993.24 – Saved $959.14
  - R-20 to R-30 - $666.04 – Saved $293.10
Insulation Effect - Study – Energy Wise

10,000 SF - Heating/Cooling costs

- R-20 to R-30 - $666.04 – Saved $293.10
- Adding R-10 – $1.60/SF
  - Adds 2” (R12.0)Insulation, Fastening, Labor $1.60/sf
  - 54 year payback…but roof IgCC is 20 years….
  - PLUS…raise HVAC Units, Windows, Doors…
Insulation Effect - Study – Energy Wise

10,000 SF - Heating/Cooling costs & Heat Flow

- R-10 $1,952.38
  - R-12=89% Reduction of Heat Flow
- R-20 $993.24 – Saved $959.14
  - R-18=92% Reduction of Heat Flow
  - R-24=94% Reduction of Heat Flow
- R-30 $666.04 – Saved $293.10
  - R-30=95% Reduction of Heat Flow
- R-40 $501.00 – Saved $165.06
- R-50 $405.98 – Saved $95.08
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- Photovoltaic & Other Solar Panels
  - Payback Period vs. Roof Life
- Code Requirements
  - Fire Resistance
  - Wind Uplift
- Roof Compatibility
  - Dark Color & Roof Effect
  - Age of Roof Membrane
- Research
  - http://www.sri-engineering.com/mrca/
  - Payback??
- Investment
  - GE, Dow BOTH IN NOW

  - MRCA Photo
CRC/CRCA @ CCGT

- Solar Electric – Photovoltaic
  - Solar Panels – Semiconductor Materials convert sunlight directly to Electricity
    - Utility Grid Interconnected
      - No Battery Storage
      - Buys power on cloudy days
    - Off-Grid – Independent
      - Battery storage for later use.
      - $$, Fire Resistance Rated Rooms
    - Grid – Tied with Battery Backup – ‘bi-modal’.
      - Both, Batteries, Grid
      - $$, Fire Resistance Rated Rooms
GE’s Solar Carport - Rooftop Charging Station, for Electric Vehicles – April, 2011
GE Power Inverters

Dow Chemical’s ‘POWERHOUSE’ Solar Shingles – Announced 2009
Dow Chemical’s ‘POWERHOUSE’ Solar Shingles – Announced 2009
CRC/CRCA @ CCGT

• Solar Panels on Steep Residential Roof Construction
  – 30% Federal Tax Credit
  – Aesthetics?
  – Research –
  – Available in CA, CO, TX ONLY
CRC/CRCA @ CCGT

• Solar Thermal Collectors Heat Water, send to heat exchanger, to water tank, then used for hot water, radiant heat.

  • Flat Plate Collectors – Aluminum Boxes with tempered glass, liquid, heats up to 180F
  • Evacuated tube collectors – Rows of transparent glass tubes.
  • Outdoor Swimming Pools

• Source: Tour.Illinoissolar.org
CRC/CRCA @ CCGT

- Solar Electric – Photovoltaic
  - Solar Panels – Semiconductor Materials convert sunlight directly to Electricity

- Source: Tour.illinoissolar.org
# DOB Green Permit Requirements

<table>
<thead>
<tr>
<th>PROJECT TYPE</th>
<th>BENEFIT TIER I</th>
<th>BENEFIT TIER II</th>
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<tbody>
<tr>
<td></td>
<td>Expedited permit¹ (goal &lt;30 days)</td>
<td>Expedited permit¹ (goal &lt;30 business days)</td>
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<tr>
<td></td>
<td></td>
<td>Partial permit fee waiver, up to $25,000</td>
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<td><strong>RESIDENTIAL</strong></td>
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<tr>
<td>Market Rate Single Building (&lt;10 units)</td>
<td>Not applicable</td>
<td>Chicago Green Homes★★ + 2 Menu Items</td>
</tr>
<tr>
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<td>Not applicable</td>
<td>Chicago Green Homes★★ + 3 Menu Items</td>
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<tr>
<td>20% Affordable Multiple Buildings (&lt;10 units/building)</td>
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<td>Market Rate Multifamily, under 80 ft. (including hotels)</td>
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<td>LEED Silver² + 2 Menu Items</td>
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<tr>
<td>Market Rate Multifamily, over 80 ft. (including hotels)</td>
<td>LEED Silver² + 1 Menu Items</td>
<td>LEED Silver² + 2 Menu Items</td>
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<tr>
<td>20% Affordable Multifamily</td>
<td>Chicago Green Homes★★ + 2 Menu Items</td>
<td>Chicago Green Homes★★★★ + 2 Menu Items</td>
</tr>
<tr>
<td><strong>INSTITUTIONAL</strong></td>
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</tbody>
</table>

¹ Expedited permit is subject to availability of sufficient staff.
² LEED certification is subject to availability of sufficient staff.
Chicago Green Homes Program Overview

The Chicago Green Homes Program (CGHP) is a voluntary certification program for Chicago homeowners, residential builders, and developers looking to incorporate sustainable design into their residential building. The CGHP provides a flexible framework for innovative construction, while promoting environmental awareness and sustainable living throughout the City.

The CGHP was modeled after U.S. Green Building Council guidelines, and grants certification to new and renovated, single and multi-family unit homes according to a point-based, three-star rating scale. Recognition opportunities are also available for condos and apartment buildings.

The CGHP strives to achieve sustainable environments, and lower carbon dioxide emissions in support of Chicago Climate Action Plan goals. As a participant, you also receive:

- **Cost savings, low environmental impact** – attain healthier indoor air quality; greater energy efficiency; reduced waste, pollution, and water usage; improved home durability and reduced maintenance; and preservation of natural resources.

- **Expedited, discounted permits** – homes enrolled in the CGHP are eligible for expedited permitting and discounted consultant fees through the Chicago Green Permit Program.

- **Access to resources** – the CGHP grants access to experienced green industry professionals, encouraging ideas and sharing best practice guidelines.

- **Comprehensive support** – receive help from the CGHP team, City departments, along with access to the Chicago Center for Green Technology’s Green Building Resource Center.
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• Chicago Green Homes Checklist & Building Owner Incentives
  – Improved Energy Efficiency
  – Healthier Indoor Air
  – Reduced Water Usage
  – Preserve Natural Resources
  – Durable, reduced maintenance Materials

CRC/CRCA @ CCGT

- Solar Panels on Low Sloped Roofs
  - Cost
    - Panels - 50,000 SF = $1.2 million = $24/SF
    - Roof Tear off & Replace - $8-$10/SF
  - Total Cost - $34/SF
  - Payback – 25-30++ Years in IL
CRC/CRCA @ CCGT

• Chicago Green Homes Programs Resources – Links to Cool sites
  – http://www.greenbeanchicago.com/
  – http://www.chicagogreentech.org/

- [http://www.chicagoclim ateaction.org/](http://www.chicagoclim ateaction.org/)
- Retrofit 50% of Commercial/Industrial Buildings - 30% Energy Reduction
- Retrofit 50% of Residential Buildings - 30% Energy Reduction
- Trade in Appliances
- Conserve Water, Cool with Trees/Green Roofs
- Update City Energy Code (2012, State)
- Establish Renovation Guidelines
- Take Easy Steps
CRC/CRCA @ CCGT

- Chicago Green Climate Action Plan Strategies
  - 2 – Clean & Renewable Energy Resources
  - 3 – Improved Transportation Options
  - 4 – Reduced Waste & Industrial Pollution
  - 5 - Adaption
CRC/CRCA @ CCGT

- **Wind Turbines on Roofs**
  - Technologies?
  - Water, Ice, Roof Wind Turbulence
  - Aesthetics?
  - Payback Period vs. Roof Life?
  - Code – Chapter 15 & 16 IBC
    - Wind Uplift
    - Fire Resistance…

- **Links?**
  - [http://www.wind-works.org/articles/RoofTopMounting.html](http://www.wind-works.org/articles/RoofTopMounting.html)

- Do your own research…
• Ventilation - ‘Unconditioned Spaces’
  – Attics
  – Unheated areas
CRC/CRCA @ CCGT

- Recycling – Shingles, PVC, etc.
  - Shingle Recycling - IL Tollway
    - Adds 5% to Pavement Mix
    - Increases Pavement binder replacement to 65% from 40% of Hot Mix Asphalt
  - How does this work at home?
    - Limited to Residential Occupancy <4 units
    - Contractor hired haulers
    - Sorts - Asbestos, Wood, Free
CRC/CRCA @ CCGT

• Recycling – Low Sloped Roofs
  – EPDM – Ballast, Playgrounds
  – PVC - TPO - Reground and reused
  – BUR – Modified Bitumen - Gravel Re-used

• Sorting Services Subcontracted
  – Manufacturer Partnerships
  – Local Sort Services
Building Green in Chicago
Why Chicago’s Garden Roofs?

• Chicago’s Landscape….& Water Issues
  – Flat, Marshy Land
  – Heavy Clay Underbase, Glacial Lake Chicago
  – Poor drainage
    • Short, Sluggish Chicago / Calumet Rivers
  – Human Alterations
    • Shoreline Filled
    • City Raised
    • Reversed River Flow
    • New Lagoons, Ponds, Harbors
    • Suburbs = less drainage

» Source: Encyclopedia of Chicago
CRC/CRCA @ CCGT
Chicago’s Water Drainage History

- Flooding in Chicagoland
  - 12 Biggies since 1849 –
  - Most record setting crests set after 1948
  - Suburban Development....

- Drainage Project Solutions
  - Illinois & Michigan Canal - 1848
  - Reverse Chicago River – 1900
  - Sanitary & Ship Canal – 1900
  - North Shore Channel – 1910
  - Cal-Sag Channel – 1922
  - Locks – Chicago River – 1938
  - TARP – Deep Tunnel
CRC/CRCA @ CCGT

SOLUTION:
Garden Roofs for Chicago
CRC/CRCA @ CCGT
Chicago’s Water Drainage Solutions

• Solutions?
  – Water Retention & Energy
    • Holds until Saturated
    • Time to Runoff?
    • Mass Effect
CRC/CRCA @ CCGT  
Chicago’s Water Drainage Solutions

• Solutions??
  – Chicago’s Garden Roofs
    • Slow Drainage, Store Water on Roofs
      ....a typical green roof with about 3 inches of growing media can be designed to reduce annual runoff by more than 50 percent....  
    – Drainage / Water Retention Boards
      » .6 - .11 GAL/SF Water Held on Roof
      » Source: American Wick Drain

Source, Website: CityofChicago.org
CRC/CRCA @ CCGT
Chicago Energy Code

• URBAN HEAT ISLAND EFFECT – Def.
  – A microclimatic condition wherein large amounts of dark absorbing surfaces (such as asphalt paving and dark roofs) trap energy from sunlight and release it back into the atmosphere, causing higher ambient temperatures and higher pollution levels.

  – Secondary Effect – Garden Roofs for UHI = Slowed Water Runoff
CRC/CRCA @ CCGT
Chicago 2009 Energy Code

• *Projects Permitted after* April 22, 2009
  – Urban Heat Island Effect Ordinance – Reduce Temp..

  • **Reflectivity** - Lower temperature & save energy
    – Low Slope Roofs - <2” : 12” … .50 aged 3 yrs.
    – Medium Slope Roofs – 2” :12” to 5” : 12” … .15 initial

• **Vegetative** Roof Overburden Systems - Exception

• **Photovoltaics** - Exception

  – Insulation Requirement – R-20now, R 25 2012/2013??
CRC/CRCA @ CCGT
Chicago Energy Code

• Requirements – 2009 Energy Code
  – Reflectivity - Lower temp. & save energy
    • Low Slope- <2”:12” ….72 NEW, .50 AGED 3 years
  – Vegetative Roof Overburden Systems
    • Intensive
    • Extensive
    • Pre Vegetative Modules
    • .30 Reflectivity Allowance for 50%
      – Fire Breaks
CRC/CRCA @ CCGT
Chicago Energy Code - Reflectivity

- Single Ply Smooth & Ballasted
  - TPO Smooth
  - PVC
  - EPDM
- BUR & Gravel (.30)
  - Asphalt, Coal Tar
- SBS Modified Bitumen
- Hot Rubberized Asphalt
CRC/CRCA @ CCGT
Why Vegetative Green Roofs?

- Energy Savings – R-20
- Mass Effect – Slow to Heat/Cool
CRC/CRCA @ CCGT
Why Vegetative Green Roofs?

• **Urban Heat Island Effect Reduction**
  – Earth Tone, Light Color
  – Reflectivity = Cool Chicago
CRC/CRCA @ CCGT  Why Vegetative Green Roofs?

• Adds Value to Building
  – More Usable Space....
  – Aesthetically Pleasing
CRC/CRCA @ CCGT
Why Vegetative Green Roofs?

• **Limitations**
  – **Structural Stability**
  – **Added Weight - DRY & WET**
CRC/CRCA @ CCGT
How to Specify Green Roofs?

- CSI/CSC’s MasterFormat 2004 – 2010
- Reflective, Ballasted Green Roofs
  - 07-50-00 – Membrane Roofing
    - Overburden Specified as a System
    - ‘...and other items integral to the roofing assembly’.
- Vegetated Green Roofs
  - Specifications Classified In Division 7, Roofs
  - 07-33-63 - Vegetated Roofing

- PV & Solar Thermal Green Roofs
  - 07-31-00 – Solar Collector Roof Shingles
  - 48-14-00 - PV Solar Generating Equip
  - 26-31-00 - PV Collectors 2
  - 22-33-00 – Solar Water Collectors
  - References to 07-50-00...Wind, Fire, Warranty
CRC/CRCA @ CCGT
Garden Roof Standards

• ASTM Standards – Under Development

  – Wind Uplift
    • NRCA Wind Study – Southern Illinois University
    • Official Results Pending
    • FM Approval Standard for Vegetative Roof Systems, Class 4477
    • ASTM still working on Wind

  – Fire – No Testing Standards Yet….
    • Fire Testing occurring at UL
CRC/CRCA @ CCGT Garden Roof
Code Requirements

• ICC Code Requirements –
  – 2012 International Fire Code
    • Wind, Fire Performance, per Chapter 15, Roofing
    • “Immediate removal of Dry Plants”
    • Fire Breaks every Approx. 15,000SF
    • NOTE: Chicago Municipal Code – 10,000 SF

  – 2012 International Building Code
    • Wind, Fire Performance, per Chapter 15, Roofing
CRC/CRCA @ CCGT  Vegetative Green Roof - Installation Critical

• IT’s ABOUT THE ROOF, and Everything else too!!
  • Roofing Contractor = Prime Contractor
    – Manage Roofing Construction Process
    – Culture of Roofer – Understands Working at Heights
      • Safety
      • Supervise trades on roof
      • WC & GL ‘Roofer’ Classification
      • Over 2,000,000 SF Above Grade

  – Roof that Doesn’t Leak!
CRC/CRCA @ CCGT  Garden Roof
Installation Critical

• IT’s ABOUT THE ROOF, and Everything else too!!

• **Single Source Warranty**
  – Roofing System, Deck Up
    • Roof, Protection Boards
    • Drainage/Water Retention Boards
    • Root Barriers, Irrigation System
    • Soils
    • Plants

• **One Roof, One Call - Chicagoland’s Professional Roofing Contractors & Local 11 Workforce**
CRC/CRCA @ CCGT Garden Roof Installation Critical

- One Roof, One Call, Single Source
  - Licensed as Roofing Contractors, Safe Workforce
CRC/CRCA @ CCGT

WATER SOLUTION:
Garden Roofs for Chicago
How to Specify Green Roofs?

- CSI/CSC’s MasterFormat 2004 – 2010

- Reflective, Ballasted, Vegetated, PV, Solar Thermal Green Roofs …
  - 07-50-00 – Membrane Roofing
    - Overburden Specified as a System
    - ‘…and other items integral to the roofing assembly’.

- PV & Solar Thermal Green Roofs
  - 07-31-00 – Solar Collector Roof Shingles
  - 48-14-00 - PV Solar Generating Equip
  - 26-31-00 - PV Collectors 2
  - 22-33-00 – Solar Water Collectors
  - References to 07-50-00…Wind, Fire, Warranty

- Wind Power Generating Equipment
  - 48-15-00
How to Specify Green Roofs?

• However....
  • ICC International Building Code
  • ICC International Existing Building Code
  • International Fire Code
    – Roof – References IBC Chapter 15 & 16
    – Reference PV, Solar Thermal ON ROOFS
• 07-50-00…Membrane Roofing
CRC/CRCA @ CCGT
Code Requirements

• International Green Construction Code
  – Not Applicable to Residential

• More at CRCA’s 2012 Trade Show & Seminars....
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Code Requirements

• International Green Construction Code
  – Indigenous Materials – 500 Miles
  – Recycled Content – 65%
  – Construction Operations
    • Recycled Construction Waste
  – Building Service Life Plan
  – Verifications??

• More …

CRCA 2012 Trade Show & Seminars….
CRC/CRCA @ CCGT

Reflective, Ballasted, Insulated, Garden Vegetative, PV, Wind, “Green” Roofs
CRC/CRCA @ CCGT

• Why IL Licensing for Roofing Contractors??

“…safeguard the life, health, property, and public welfare of its citizens….”

Why? Sets Minimum Requirements for Roofing Contractors for roofing purchaser protection…
Why IL Licensing for Roofing Contractors??

A Professional Roofing Contractor has:

– Proper WC and GL Insurance
– Pays into IL State WC Insurance funds as Roofing Contractors, and pays workers tax liability as the employer…

– much more…
• IL Roofing License Types

• Definition: "Limited roofing license"
  – …means a license made available to contractors whose roofing business is limited to residential roofing, including residential properties consisting of 8 units or less…
CRC/CRCA @ CCGT

• IL Roofing License Types

• Definition: “Limited roofing license"
  – Limited License - DOES NOT INCLUDE COMMERCIAL, INDUSTRIAL, INSTITUTIONAL STEEP SLOPE BUILDINGS…
CRC/CRCA @ CCGT

• IL Roofing License Types

• Definition: "Unlimited roofing license"
  • ...means a license made available to contractors whose roofing business is *unlimited in nature* and includes roofing on *residential, commercial, institutional and industrial properties*...
CRC/CRCA @ CCGT

• Speakers
  – Rod Petrick
    • CRC Past Chair
    • CRCA Industry Affairs Chair
CRC/CRCA @ CCGT

• Once Licensed…IL LAW STATES
  –LICENSE NUMBER and ROOFING CONTRACTOR LICENSEE NAME AS IT APPEARS ON LICENSE …
  • ‘…Affix to Contracts and Bids’
  • ‘…Affix Commercial Vehicles’
  • ‘…on all Advertising’
  • ‘…at conspicuous place at place of business

  –Expiration Date …on all licenses
CRC/CRCA @ CCGT

IL Licensing Violations & Penalties

• How to Report?
  • Complaints
    • https://www.idfpr.com/dpr/FILING/Complaint.asp

  – IDFPR Website ……. Complaint Forms
    • http://www.idfpr.org
    • https://www.idfpr.com/dpr/FILING/Complaint.asp

• How to Find Roofing Professions Licensed by IL DFPR
  • http://www.idfpr.com/dpr/who/roof.asp

  • http://www.Chicagorooﬁng.org
CRC/CRCA @ CCGT
‘Roofing Contractor Licensing’

• CRC / CRCA Member Contractors
  – http://www.crca.org
    • CRC Member List, Resources
    • IL Roofing Contractor Licensing Law
    • IL Licensed Contractor List
CRC/CRCA @ CCGT

• http://www.chicagoclimateaction.org/pages/research__reports/8.php
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• http://www.greenbeanchicago.com/


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• http://www.dowsolar.com/pdfs/How-It-Works-Poster.pdf

• http://buildingturbines.com/
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Chicago & IL Energy Code, Green, Garden Roofs, Energy and Drainage / Water Retention

CRC / CRCA @ Chicago Center for Green Technology
June 7, 2012