MILWAUKEE SOLAR ZONING
Zoning and Permitting with Ease
Milwaukee Shines

- **Solar America City: 2008**
  - Increase installations
  - Increase installers
  - Reduce cost of solar
  - Support manufacturing

- **Solar Rooftop Challenge: 2012**
  - Reduce “soft costs”
  - Financing solutions
  - Improve permitting, zoning & inspection
  - Create replicable models
Solar Zoning

• WHY UPDATE ZONING CODE?
  • Currently solar not defined. If not defined, seen as not permitted
  • Fewer questions or conflicts as number of installs increase

• WHAT IS INCLUDED?
  • Definitions
  • Setback Requirements
  • Permitted Uses
No political subdivision may place any restriction on installation or use of solar energy system, unless it satisfies one of the following conditions:

1. Serves to protect public health or safety
2. Does not significantly increase cost of system or decrease efficiency
3. Allows for alternative system of comparable cost and efficiency.
- **SOLAR COLLECTOR**
  - A device that is used to transform solar energy into thermal, mechanical or electrical energy (PV and SHW)

- **SOLAR ARRAY**
  - An accessory system that is roof-mounted or ground-mounted w/ poles or racks used to collect radiant energy directly from the sun.
Solar Zoning
Accessory Structures

• SETBACKS
  • None for roof-mounted systems
  • Ground-mounted systems have 1 ½ foot set back on all sides
    • Would not conflict with state statute

• PERMITTED USES
  • Permitted in all areas.
  • Historical Preservation Office reviews building permits for any concerns and compromises that may be developed.
Solar Zoning

Primary Use

- **SOLAR FARM**
  - An array of multiple solar collectors on ground-mounted racks or poles that is the **primary** land use for the parcel

- **SETBACKS**
  - Cannot exceed setback requirements for principal structures as primary use
    - Determined by zoning district
Solar Zoning
Primary Use

- PERMITTED USES
  - Solar farm as primary land use
  - Board of Zoning Appeals reviews “Special” applications

<table>
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<tr>
<th>ZONING DISTRICT</th>
<th>USE</th>
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<tbody>
<tr>
<td>Residential</td>
<td>Permitted</td>
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<tr>
<td>Commercial</td>
<td>Special</td>
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<td>Commercial Services</td>
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<td>Downtown</td>
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<td>Special (Schools)</td>
<td>Permitted</td>
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<tr>
<td>Lakefront Overlay</td>
<td>Special</td>
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Solar Permitting

• MAKING SOLAR EASY
  • Created step-by-step process
    • For installers and staff
  • Provide contact information
  • Provide forms in one location
    • Building, Electrical, Plumbing
  • Checklist for installers
    • Make sure you submit everything

• www.MilwaukeeShines.com
Solar Permitting

City of Milwaukee: Solar Permitting Guide

HOW TO INSTALL SOLAR: STEP BY STEP PROCESS

The City of Milwaukee Department of City Development (DCD) works to ensure the quality and safety of a solar electric and solar hot water installation. There are requirements to install solar in Milwaukee. This website provides an outline of the step-by-step permitting and inspection process that solar installers and homeowners must navigate.

CHECKLIST: Installers are encouraged to use this helpful these help checklists to aid in the process to make sure they have the materials needed when submitting permits for a solar project. Use the SOLAR ELECTRIC checklist or the SOLAR HOT WATER checklist depending on your installation.

- Home or Business Owners: For more information about solar energy, and how to connect with installers, incentives and resources, contact the City of Milwaukee's solar program, Milwaukee SHINES.
- Solar Installers: For more information about state or federal incentives or training opportunities, visit our FOR PROFESSIONALS section or contact the City of Milwaukee's solar program, Milwaukee SHINES.

- SOLAR ELECTRIC REQUIREMENTS
- SOLAR HOT WATER REQUIREMENTS
- PERMIT SUBMITTAL PROCESS AND INSPECTION (for PV or SHW)
- INTERCONNECTION PROCESS AND INSPECTION (only for PV)

Looking for Permits?
Solar Panel Installation

Contractor calls to schedule an electrical inspection

Electrical Inspection
- Inspector must have access to roof however installer completed installation

Building Permit Issued

Contractor calls to schedule a building inspection

Building Inspection

Interconnection Inspection

Installer Calls to schedule Interconnection Inspection

Interconnection Agreement Signed

Solar Installation Complete

Electrical Inspection Approved
- Inspector faxes approval to WE Energies

Building Inspection Approved
- Inspector faxes approval to WE Energies
RESOURCES

- Grow Solar Wisconsin
  - www.growsolar.org

- Solar America Board of Codes and Standards
  - Expedited Solar Permit, Webinars, Trainings
  - http://www.solarabcs.org/

- Solar 3.0
  - Training and toolbox for permitting, codes, zoning
  - http://solar30.org/

- DSIRE
  - Current Incentives & Policies
  - http://www.dsireusa.org/
THANK YOU.

QUESTIONS?

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www.growsolar.org

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