POWERS™

LEED-NC
Green Building Rating System
For New Construction & Major Renovations

Manufacturing and specifying products to promote the conservation of water in residential, commercial, and light-industrial applications.

Version 2.2

The following pages are where Powers (A division of Watts Water Technologies, Inc.) products have the potential to help Engineers acquire LEED credits in the design of "GREEN" Sustainable Buildings.

WE Credit 2 :

Innovative Wastewater Technologies

1 Point

Intent:
Reduce generation of wastewater and potable water demand, while increasing the local aquifer recharge.

Potential Product Application:
Powers manufactures metering faucets (option –A5, -V5), restricted flow of 0.5 gpm and low flow shower heads, restricted flow of 1.85 gpm that will help in the reduction of potable water use for a buildings sewage conveyance by 50%.

Powers Products

- MeterOne Metering Faucets: P1005, P1105, P1405, P1505, P1805, P1815
- Low Flow Shower Heads: 141-800 (1.85 gpm)

WE Credit 3.1 :

Water Use Reduction > 20% Reduction

1 Point

WE Credit 3.2 :

Water Use Reduction > 30% Reduction

1 Point in addition to WE Credit 3.1

Intent:
Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

Potential Product Application:
Powers manufactures Temperature/Pressure valves, High Temperature Shut-off Devices, Infrared Sensor Systems, and Metering Faucets that adhere to the Energy Policy Act of 1992 fixture performance requirements. By supplying valves that operate at lower flows enables the savings of water usage and energy used to heat the water. It also saves on the costs associated with removing the water. This allows for Engineers and Architects to employ strategies that in aggregate use 20%/30% less water than the water use baseline calculated for the building (not including irrigation).

Powers Products:

- HydroGuard Temperature/Pressure Shower Valves: e705, e710
- Thermostatic Tempering Valves: e420
- MeterOne Metering Faucets: P1005, P1105, P1405, P1505, P1805, P1815 (-A5,-V5)
- HydroGuard High Temperature Shut-Off Device: HT115
- HydroGuard Sensor Showers: HydroGuard ESP, HydroGuard ESP 11
- Low Flow Shower Heads: 141-800 (1.85 gpm)

*** The Federal Energy Policy Act of 1992 requires that all faucet fixtures manufactured in the United States restrict maximum water flow at or below 2.5 gallons per minute (gpm) at 80 pounds per square inch (psi) of water pressure or 2.2 gpm at 60 psi. This ensures that most faucet products available will offer at least minimal water efficiency benefits. For additional information refer to the Library of Congress website http://www.loc.gov/index.html*

Energy and Atmosphere - 1 Possible Points

EA Credit 5 :

Measurement & Verification

1 Point

Intent:
Provide for the ongoing accountability of building energy consumption over time.

Potential Product Application:
Powers Tempering Valves allow for water heaters to be operated at higher temperatures, extending the effective system flow rate, preventing the growth of Legionella (When Water Heaters are set above 140 degrees), and reducing the size/BTU requirements needed to provide capacity for peak system demands resulting in lowered Utility consumption.

Powers Products:

- Thermostatic Tempering Valves – e480, e490, e420
- Master Mixing Valves – e430
- HiLO – 1430, 430
- PowerStation – Single-Valve PowerStation, Two-Valve PowerStation

Materials & Resources - 11 Possible Points

MR Credit 1.1 :
Building Reuse > Maintain 75% of Existing Walls, Floors & Roof
1 Point
MR Credit 1.2 :
Building Reuse > Maintain 95% of Existing Walls, Floors & Roof
1 Point in addition to MR Credit 1.1

Intent:
Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Potential Product Application:
Powers manufactures durable products made of high quality recycled materials that will help the life cycle of existing buildings and reduce the environmental impacts of new buildings.

With these two credits the LEED-NC rating system suggests the removal of elements that pose contamination risk to building occupants by upgrading components. When upgrading old shower heads and faucets, look to the benefits of using Powers low-flow options and electronic shower systems!

Powers Products:
- MeterOne Metering Faucets: P1005, P1105, P1405, P1505, P1805, P1815 (-A5,-V5)
- Low Flow Shower Heads: 141-800 (1.85 gpm)
- HydroGuard “ESP Electronic Shower Systems”: 450-100Ico3WDFSP

MR Credit 1.3 :

Maintain 50% of Interior Non-Structural Elements

1 Point

Potential Product Application:
Powers manufactures durable products made of high quality recycled materials that will help the life cycle of existing buildings and reduce the environmental impacts of new buildings.

With these two credits the LEED-NC rating system suggests the removal of elements that pose contamination risk to building occupants by upgrading components. When upgrading old shower heads and faucets, look to the benefits of using Powers low-flow options and electronic shower systems!

Powers Products:

- MeterOne Metering Faucets: P1005, P1105, P1405, P1505, P1805, P1815 (-A5,-V5)
- Low Flow Shower Heads: 141-800 (1.85 gpm)
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MR Credit 2.1 :
Construction Waste Management > Divert 50% from Disposal
1 Point
MR Credit 2.2 :
Construction Waste Management > Divert 75% from Disposal
1 Point

Intent:
Divert construction, demolition and land-clearing debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

Potential Product Application:
Powers products are made of recyclable material or material that can be recycled. Examples include but are not limited to: Domestic and Import Bronze Ingot and Brass Rods, Plastic, and Stainless Steel.

Powers also makes use of corrugated post-consumer cardboard when shipping products. Corrugated cardboard manufactured from recycled pulp uses around 75% of the energy used in the manufacture of corrugated cardboard made from virgin pulp. Construction sites may eliminate disposal fees by preparing the cardboard for hauler pickups or delivering it (drop-off) to a recycling facility.

Watts Products:
- All products

MR Credit 3.1 :
Materials Reuse: 5%
1 Point
MR Credit 3.2 :
Materials Reuse: 10%
1 Point in addition to MR Credit 3.1

Intent:
Reuse building materials and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

Potential Product Application:
Powers products incorporate the use of salvaged, refurbished, and reused materials that are made of high quality materials that can be reused to extend the life cycle of existing buildings or to reduce environmental impacts of new building construction.

Powers Products:

- All of Powers products adhere to the LEED-NC MR Credit 3.1 & 3.2: Materials Reuse

MR Credit 4.1 :
Recycled Content > 10% (post-consumer + ½ pre-consumer)
1 Point
MR Credit 4.2 :
Recycled Content > 20% (post-consumer + ½ pre-consumer)
1 Point in addition to MR Credit 4.1

Intent:
Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extracting and processing of virgin materials.

Potential Product Application:
Powers uses material with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (Based on cost) of the total value of the materials in the project.

Powers products:
All products that are made of Bronze rods and Brass ingots utilize 97% recycled material. Plastic components make up 20% recycled material.

** Post-consumer material – defined as waste material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.*

** Pre-consumer material – defined as material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it*

MR Credit 5.1 :
Regional Materials > 10% Extracted, Processed & Manufactured Regionally
1 Point
MR Credit 5.2 :
Regional Materials > 20% Extracted, Processed & Manufactured Regionally
1 Point in addition to MR Credit 5.1

Intent:
Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

Potential Product Application:
Powers has manufacturing facilities in the United States thus allowing the product to be within 500 miles of a project site.

Powers Manufacturing facilities:

- Franklin, NH
- Springfield, MO

Indoor Environmental Quality - 2 Possible Points

EQ Credit 5 :

Indoor Chemical & Pollutant Source Control

1 Point

Intent:
Minimize exposure of building occupants to potentially hazardous particulates and chemical pollutants.

Potential Product Application:
Powers Thermostatic Valves allow for water heaters to be operated at higher temperatures. When water heaters are set above 140 degrees the potential for occupants to come in contact with Legionella is greatly reduced.

Powers Product:

- Thermostatic Tempering Valves – e480, e490, e420
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Innovation & Design Process – 1 to 4 Possible Points

ID Credit 1-1.4 :

Innovation in Design

1 to 4 Points

Intent:
To provide design teams and projects, the opportunity to be awarded points for exceptional performance above the requirements set by the LEED-NC Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED-NC Green Building Rating System.

Potential Product Application:
Powers goal of providing for safe and sustainable "Green" buildings will help all Engineers and Architects with strategies, submittals, and drawings to help meet the Innovation in Design points.

Example of applications for Innovation in Design Credits:
"Powers Low Flow Safety Advantage" – When specifying a low flow shower head (1.85 gpm or lower) it is imperative not to jeopardize performance, since the ASSE 1016 standard only provides a guarantee of accurate temperature control at 2.5 gpm.

The Powers e700 (1/2 gpm compliant) and e420 (1 gpm compliant) pressure balance valves surpass the ASSE 1016 test flow rate of 2.5 gpm, assuring compliance with low flow shower heads (GUARANTEED).

Any questions can be directed to the following:

Taylor Grist

Specification Manager

Watts Water Technologies

Fgrist1@carolina.rr.com

** Information obtained from (LEED-NC Version 2.2 Reference Guide October 2005)*

*** Watts Water Technologies, Inc. USGBC Member*