



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 Watts (A division of Watts Water Technologies, Inc.) products have the potential to help Engineers acquire LEED credits in the design of “GREEN” Sustainable Buildings.

Sustainable Sites - 2 Possible Points

SS Credit 5.2 :

Site Development > Maximize Open Space

1 Point

Intent:

Provide a high ratio of open space to development footprint to promote biodiversity.

Potential Product Application:

Watts offers innovative products that can be installed in vertical, horizontal, and N shaped patterns to save space in the development footprint (defined as the total area of the building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%.

Watts Products:

- Reduced Pressure Zone Backflows – 957, 957N, 957Z, 994BLT, 994HMB, 909, 009, 919, 995
- Reduced Pressure Detector Assemblies – 957RPDA, 957NRPDA, 994RPDA, 909RPDA
- Double Check Assemblies – 757, 757N, 757a, 757Na, 774, 774X, 709, 007, 719, 775
- Double Check Detector Assemblies – 757DCDA, 757NDCDA,
- 757a DCDA, 757NaDCDA, 774DCDA, 774XDCDA, 709DCDA, 007DCDA
- Dual Check Valves – 9, 7, Cu7, L7U2-2
- Irrigation Control Valves – (ACV) 813, 815, 815SA, 815-4, 815-4SA, 816, 818
- Above Ground Compact Rock Enclosures - WattsRock
- Vacuum Breakers – 800M4QT, 800M4FR, 008PCQT
- Pre-Engineered Valve Stations – PVS-1000

** For additional product information refer to Watts catalog: C-WR0638 or online at <http://www.watts.com/>

SS Credit 6.1 :

Stormwater Design > Quantity Control

1 Point

Intent:

Limit disruption of natural water hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff, and eliminating contaminants.

Potential Product Applications:

Watts manufactures trench drain systems that can be implemented into the stormwater management plan to prevent the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the one and two-year 24-hour design storms.

Watts trench drain systems can also be used to channel stormwater for reuse in non-potable uses such as landscape irrigation, toilet and urinal flushing and custodial uses.

Watts Products:

- Trench Drains – TD-920, TD-940, (Polycast Trench Drain) 600 Series, 700 Series, 800 Series

*** For additional product information refer to Watts catalog: PL-WD0701 or online at <http://www.watts.com/>*

Water Efficiency - 3 Possible Points

WE Credit 1.1 :

Water Efficient Landscaping > Reduce by 50%

1 Point

Intent:

Limit or eliminate the use of potable water, or other natural surface or subsurface water resources available on or near the project site, for landscape irrigation.

Potential Product Application:

Watts manufactures a plethora of valves dedicated solely to Irrigation efficiency. These valves have the potential to attribute in the reduction of potable water consumption for irrigation by 50% from a calculated mid-summer baseline case.

Watts Products

- Reduced Pressure Zone Backflows – 957, 957N, 957Z, 994BLT, 994HMB, 909, 009, 919, 995
- Double Check Assemblies – 757, 757N, 709, 007, 775
- Vacuum Breakers – 800M4QT, 800M4FR, 188A, 8
- Dual Check Valves – 9, 7, Cu7
- Water Pressure Regulators – U5, 25AUB-Z3, N35B, N45B, N55B, 223, 223S, N223N, N223BS, 26A, 263A, 560, IR-56, P50, P60, 215
- (Globe) Pilot Operated Automatic Control Valves – 813, A
- Pre-Engineered Valve Stations – PVS-1000

** For additional product information refer to Watts catalog: PG-Irrigation0420 or online at <http://www.watts.com/>

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:

Watts manufactures lavatory faucets and showers that adhere to the Energy Policy Act of 1992 fixture performance requirements. This allows for Engineers and Architects to employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation).

Watts Products:

- Lavatory Faucets: E200, E200A, E200M, E220, E220A, E220M, E300, E300M, E300L, E320, E320M, E320L, E302, E350, E400, E400M, E401, E401M, E402, E500, E500M, E501, E501M, E501L, E510, E511M, E330, E390, WB901CP, 4-4-1, 4-6-1
- Showers: E800, E800M, E800SG, E800MSG, E805A, E805M, E805ASG, E805MSG, E820, E810, E830, E840

*** For additional product information refer to Watts catalog: PL-WB&T0701 or online at <http://www.watts.com/>*

*** 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:

Watts 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 131 degrees), and reducing the size/BTU requirements needed to provide capacity for peak system demands resulting in lowered Utility consumption.

Watts Products:

- Tempering Valves – MMV-M1, 1170-M2, L1170-M2, USG-B, USG-P, L111, 70A, L70A, N170-M2, N170L-M2

*** For additional product information refer to Watts catalog: PG-MXV0521 or online at <http://www.watts.com/>*

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:

Watts manufactures durable fused epoxy coated cast iron drains for use in the floor or on the roof. By reusing existing, previously occupied buildings there is no need to tear these drains out.

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 Urinals to either low flow or waterless, we at Watts suggest the removal of old Closet Carriers and upgrade to an Industry Standard Carrier utilizing the following features and benefits:

Features

- Proven flanged Compression Seal with ASTM C564 compression gasket
- Smooth nipple seal covers 4x more surface area than traditional threaded nipple/O-ring seal

Benefits

- Eliminates damaging and costly behind-the-wall carrier leaks
- Moisture cannot penetrate seal and trigger mold formation problems
- Positively holds air or water test first time

Watts Products:

- Floor Drains – All
- Roof Drains – All
- Cleanouts – All
- Floor Sinks – All
- Trench Drains – All
- Grease Interceptors – All
- Oil Interceptors – All
- Shower Drains – All
- Industry Standard Closet Carriers – ISCA-101, ISCA-121, ISCA-131, ISCA-141, ISCA-151

** For additional product information refer to Watts catalogs: *PL-WD 0701, PF-WD-CA-IS-1 0515* or online at <http://www.watts.com/>

MR Credit 1.3 :

Maintain 50% of Interior Non-Structural Elements

1 Point

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:

Watts products 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.

With this credit the LEED-NC rating system suggests the removal of elements that pose contamination risk to building occupants by upgrading components. When upgrading Urinals to either low flow or waterless, we at Watts suggest the removal of old Closet Carriers and upgrade to an Industry Standard Carrier utilizing the following features and benefits:

Features

- Proven flanged Compression Seal with ASTM C564 compression gasket
- Smooth nipple seal covers 4x more surface area than traditional threaded nipple/O-ring seal

Benefits

- Eliminates damaging and costly behind-the-wall carrier leaks
- Moisture cannot penetrate seal and trigger mold formation problems
- Positively holds air or water test first time

Watts Products:

- All of Watts products adhere to the LEED-NC MR Credit 1.3: Building Reuse Credit
- Industry Standard Closet Carriers – ISCA-101, ISCA-121, ISCA-131, ISCA-141, ISCA-151

** For additional product information refer to Watts catalog: PG-LR0510, L-WD0701, PF-WD-CA-IS-10515 or online at <http://www.watts.com/>

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:

Watts 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, Ductile Iron, Plastic, and Stainless Steel.

Watts 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 of Watts 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:

Watts products 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.

Watts Products:

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

** For additional product information refer to Watts catalog: PG-LR 0510, PL-WD 0701 or online at <http://www.watts.com/>

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:

Watts 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.

Watts products:

All products that are made of Bronze and Brass

Example: Watts Regulator small diameter backflows have 45% post-consumer content and 5% post-industrial content.

- Reduced Pressure Zone Backflows – 909, 009, 919
- Double Check Assemblies – 007, 719

** 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:

Watts has manufacturing facilities in the United States thus allowing the product to be within 500 miles of a project site.

Watts Manufacturing facilities:

- North Andover, MA
- Spindale, NC
- Sacramento, CA
- Springfield, MO

Indoor Environmental Quality - 2 Possible Points

EQ Credit 4.2 :

Low-Emitting Materials > Paints & Coatings

1 Point

Intent:

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Potential Product Application:

Watts products utilize a durable blue, grey, and red fused epoxy anti-rust and anti-corrosive coating on all cast iron backflows, ACV Valves, and drains. The coatings NSF () and VOC () contents are low so they are not harmful for installers and occupants.

Watts Regulator Products:

- Reduced Pressure Zone Backflows – 957, 957N, 957Z, 909, 009
- Reduced Pressure Detector Assemblies – 957RPDA, 957NRPDA, 994RPDA, 909RPDA
- Double Check Assemblies – 757, 757N, 757a, 757Na, 774, 774X, 709, 007
- Double Check Detector Assemblies – 757DCDA, 757NDCDA,
- 757a DCDA, 757NaDCDA, 774DCDA, 774XDCDA, 709DCDA, 007DCDA
- Valve Setters: WVS, RK-W-STD
- Automatic Control Valves – 110 Series, 113 Series, 114 Series, 115 Series, 116 Series, 118 Series, 127 Series
- Flanged Ball Valves – G4000-FDA, G4000M-FDA
- Gate Valves – 408-OSY-RW
- Check Valves – 411, CSM-81-F, CSM-81
- Strainers - 77F-DI-FDA-125
- Butterfly Valves – DBF Series, BF Series
- Watts Drainage – All Products

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:

Watts manufactures a patented Industry Standard Closet Carrier that when installed will eliminate damaging and costly behind-the-wall carrier leaks, ensures that moisture cannot penetrate seal and trigger mold formation problems, and will positively hold air or water tests the first time.

Watts Product:

- Industry Standard Closet Carriers – ISCA-101, ISCA-121, ISCA-131, ISCA-141, ISCA-151

** For additional product information refer to Watts catalog: PL-WD 0701, PF-WD-CA-IS-1 0515 or online at <http://www.watts.com/>

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:

Watts 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:

Watts A2C-M1 Intelliflow Automatic Washing Machine Shutoff Valve to automatically close the water supply valves when the washing machine shuts off thus virtually eliminating water pressure on the supply hoses when the machine is not in use: prevents disastrous flooding from burst hoses.

Watts FloodSafe Braided Stainless Steel Connectors to protect against catastrophic water damage. Watts Pre-engineered Valve Stations are custom configured water flow control systems that are assembled from proven, reliable Watts’ components to meet exacting project application requirements. Watts pre-engineered valve stations are factory pre-assembled tests and optionally certified by independent agencies to ensure flow performance for critical building demands.

Watts Product:

- Automatic Washing Machine Shutoff Valve – A2C-M1, Intelliflow
- Braided Stainless Steel Connectors – FS-CDC-S, FS-CFC-S,
- FS-CIC-S, FS-CTC-S, FS-CWM-S
- Pre-engineered Valve Stations – PVS-1000

*** For additional Innovation & Design Credits contact Specification Manager - Watts*

Any questions can be directed to the following:

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

*** Watts Water Technologies, Inc. USGBC Membership is pending*