Sometimes change is

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"Can't you see I'm busy?"

What is "Green" Cleaning?

"Green" Cleaning Definitions.

Green cleaning may be most simply defined as:

"Cleaning to protect health without harming the environment." Stephen P. Ashkin, The Ashkin Group, LLC

> The Federal Government, through Executive Order 13101 has defined "Green" as:

".....products and services that reduce the health and environmental impacts compared to similar products and services used for the same purpose."

What does "Green" cleaning really mean?

- <u>Choosing Environmentally Preferred Products</u>
 - Green Seal or-
 - Something better than you were using
- Source Reduction, Recycling
 - Concentrated Cleaners
 - Recycled paper
- Procedures and Processes
 - Clean with less impact
- Air Quality and Contamination
 - Matting and filtration
- <u>Stewardship</u>
 - Get involved Learn Promote



Product is the beginning







Process is the action



What you do Is key to a total **Green** process





Consumption is key





Sustainability is the focus

Reduce



Reuse

Recycle





Getting Started

- Begin Discussion with the Stakeholders
 - (Building Owner, Building Superintendent, Facility Mgr.)
 - What is the Goal?
 - Is LEED Certification the objective?
 - (OR) Simply Environmental Improvement?
- Evaluate and Document Current Program (survey)
 - What already qualifies as "Green"?
 - Where is improvement needed?

LEED-EB Version 2.0 Registered Building Checklist

Building Name:

Building Address:

Yes	?	No	_		
			Sustaina	ble Sites Possible P	oints 14
Y			Prereq 1	Erosion & Sedimentation Control	Required
X/)			Prereq 2	Age of Building	Required
			Credit 1.1	Plan for Green Site & Building Exterior Management - 4 specific actions	1
			Credit 1.2	Plan for Green Site & Building Exterior Management - 8 specific actions	1
			Credit 2	High Development Density Building & Area	1
			Credit 3.1	Alternative Transportation - Public Transportation Access	1
			Credit 3.2	Alternative Transportation - Bicycle Storage & Changing Rooms	1
			Credit 3.3	Alternative Transportation - Alternative Fuel Vehicles	1
			Credit 3.4	Alternative Transportation - Car Pooling & Telecommuting	1
			Credit 4.1	Reduced Site Disturbance - Protect or Restore Open Space (50% of site area)	1
			Credit 4.2	Reduced Site Disturbance - Protect or Restore Open Space (75% of site area)	1
			Credit 5.1	Stormwater Management - 25% Rate and Quantity Reduction	1
			Credit 5.2	Stormwater Management - 50% Rate and Quantity Reduction	1
			Credit 6.1	Heat Island Reduction - Non-Roof	1
			Credit 6.2	Heat Island Reduction - Roof	1
			Credit 7	Light Pollution Reduction	1

Yes ? No

		Water Ef	ficiency	Possible Points 5
Y	F	Prereq 1	Minimum Water Efficiency	Required
Ŷ	F	Prereq 2	Discharge Water Compliance	Required
		Credit 1.1	Water Efficient Landscaping - Reduce Water Use by 50%	1
		Credit 1.2	Water Efficient Landscaping - Reduce Water Use by 95%	1
		Credit 2	Innovative Wastewater Technologies	1
		Credit 3.1	Water Use Reduction - 10% Reduction	1
		Credit 3.2	Water Use Reduction - 20% Reduction	1

(es ?	No		
	Energy &	Atmosphere Po	ssible Points 23
Y	Prereq 1	Existing Building Commissioning	Required
Y	Prereq 2	Minimum Energy Performance - Energy Star 60	Required
Y	Prereq 3	Ozone Protection	Required
	Credit 1.1	Optimize Energy Performance - Energy Star 63	1
	Credit 1.2	Optimize Energy Performance - Energy Star 67	1
	Credit 1.3	Optimize Energy Performance - Energy Star 71	1
	Credit 1.4	Optimize Energy Performance - Energy Star 75	1
	Credit 1.5	Optimize Energy Performance - Energy Star 79	1
	Credit 1.6	Optimize Energy Performance - Energy Star 83	1
	Credit 1.7	Optimize Energy Performance - Energy Star 87	1
	Credit 1.8	Optimize Energy Performance - Energy Star 91	1
	Credit 1.9	Optimize Energy Performance - Energy Star 95	1
	Credit 1.10	Optimize Energy Performance - Energy Star 99	1
	Credit 2.1	Renewable Energy - On-site 5% / Off-site 25%	1
	Credit 2.2	Renewable Energy - On-site 10% / Off-site 50%	1
	Credit 2.3	Renewable Energy - On-site 20% / Off-site 75%	1
	Credit 2.4	Renewable Energy - On-site 30% / Off-site 100%	1
	Credit 3.1	Building Operation & Maintenance - Staff Education	1
	Credit 3.2	Building Operation & Maintenance - Building Systems Maintenance	1
	Credit 3.3	Building Operation & Maintenance - Building Systems Monitoring	1
		Additional Ozone Protection	1
	Credit 5.1	Performance Measurement - Enhanced Metering (4 specific actions)	1
	Credit 5.2	Performance Measurement - Enhanced Metering (8 specific actions)	1
		Performance Measurement - Enhanced Metering (12 specific actions)	1

Credit 5.4 Performance Measurement - Emission Reduction Reporting Credit 6 Documenting Sustainable Building Cost Impacts

		Materials	s & Resources	Possible Point	ts 16
Ý		Prereg 1.1	Source Reduction & Waste Management - Waste Stream Audit	Re	quired
×.		Prereq 1.2	Source Reduction & Waste Management - Storage & Collection	Re	quired
Y		Prereq 2	Toxic Material Source Reduction - Reduced Mercury in Light Bulbs	Re	quired
		Credit 1.1	Construction, Demolition & Renovation Waste Management - Recycle	50%	1
		Credit 1.2	Construction, Demolition & Renovation Waste Management - Recycle	75%	1
		Credit 2.1	Optimize Use of Alternative Materials - 10% of Total Purchases		1
		Credit 2.2	Optimize Use of Alternative Materials - 20% of Total Purchases		1
		Credit 2.3	Optimize Use of Alternative Materials - 30% of Total Purchases		1
		Credit 2.4	Optimize Use of Alternative Materials - 40% of Total Purchases		1
		Credit 2.5	Optimize Use of Alternative Materials - 50% of Total Purchases		1
		Credit 3.1	Optimize Use of IAQ Compliant Products - 45% of Annual Purchases		1
		Credit 3.2	Optimize Use of IAQ Compliant Products - 90% of Annual Purchases		1
		Credit 4.1	Sustainable Cleaning Products & Materials - 30% of Annual Purchases		1
		Credit 4.2	Sustainable Cleaning Products & Materials - 60% of Annual Purchases		1
		Credit 4.3	Sustainable Cleaning Products & Materials - 90% of Annual Purchases		1
		Credit 5.1	Occupant Recycling - Recycle 30% of the Total Waste Stream		1
		Credit 5.2	Occupant Recycling - Recycle 40% of the Total Waste Stream		1
		Credit 5.3	Occupant Recycling - Recycle 50% of the Total Waste Stream		1
		Credit 6	Additional Toxic Material Source Reduction - Reduced Mercury in Light	Bulbs	1

Yes ?	No	
		Points 22
¥ ¥ ¥ ¥	Prereq 1 Outside Air Introduction & Exhaust Systems Prereq 2 Environmental Tobacco Smoke (ETS) Control Prereq 3 Asbestos Removal or Encapsulation Prereq 4 PCB Removal Credit 1 Outside Air Delivery Monitoring Credit 2 Increased Ventilation Credit 3 Construction IAQ Management Plan Credit 4.1 Documenting Productivity Impacts - Absenteeism & Healthcare Cost Impacts Credit 4.1 Documenting Productivity Impacts - Other Impacts Credit 5.2 Indoor Chemical & Pollutant Source Control - Reduce Particulates in Air System Credit 5.2	Required Required Required 1 1 1 1 1 1 1
	Credit 6.1 Controllability of Systems - Lighting Credit 6.2 Controllability of Systems - Temperature & Ventilation Credit 7.1 Thermal Comfort - Compliance Credit 7.2 Thermal Comfort - Permanent Monitoring System Credit 8.1 Daylight & Views - Daylight for 50% of Spaces Credit 8.2 Daylight & Views - Daylight for 75% of Spaces Credit 8.3 Daylight & Views - Views for 40% of Spaces Credit 8.4 Daylight & Views - Views for 80% of Spaces	1 1 1 1 1 1 1 1
	Credit 9 Contemporary IAQ Practice Credit 10.1 Green Cleaning - Entryway Systems Credit 10.2 Green Cleaning - Isolation of Janitorial Closets Credit 10.3 Green Cleaning - Low Environmental Impact Cleaning Policy Credit 10.4 Green Cleaning - Low Environmental Impact Pest Management Policy Credit 10.5 Green Cleaning - Low Environmental Impact Pest Management Policy Credit 10.6 Green Cleaning - Low Environmental Impact Cleaning Equipment Policy	1 1 1 1 1 1

Yes ? No

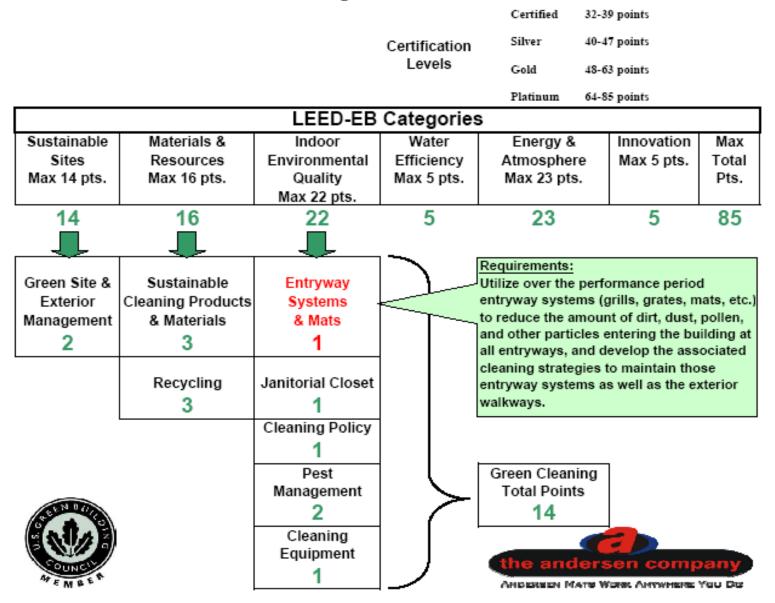
	Innovatio	on in Operation & Upgrades Possible Po	oints 5
	Credit 1.1	Innovation in Operation & Upgrades	1
	Credit 1.2	Innovation in Operation & Upgrades	1
	Credit 1.3	Innovation in Operation & Upgrades	1
		Innovation in Operation & Upgrades	1
	Credit 2	LEED™ Accredited Professional	1

Yes ? No	
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Totals (pre-certification estimates) Possible Points

Certified 32 to 39 points Silver 40 to 47 points Gold 48 to 63 points Platinum 64 or more points

LEED-EB and Green Cleaning



Green Cleaning *Products and Systems*

- Environmentally Preferred Chemicals
- Chemical Control and Dilution Systems
- Entrance Matting
- Recycled Paper and Liners
- Control Use Paper Systems
- High Filtration Vacuums/Filters
- Efficient and Effective Equipment (that lasts)
- Micro Fiber Cloths
- Flat Mopping Systems
- Auto Faucet System



Do Something.....

- For your Environment
- For the Health of the Building Occupants
- For the Safety of Your Employees
- To Reduce Liability

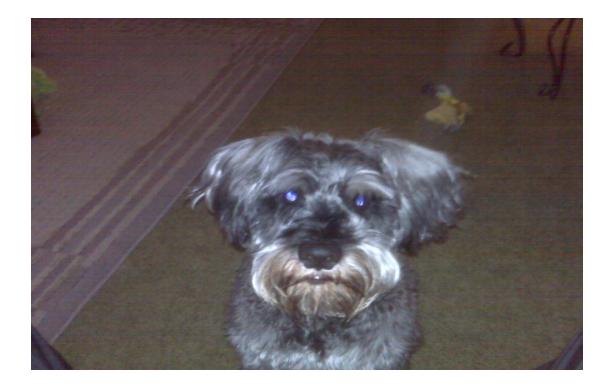
Green Cleaning success

It takes involvement by all parties



Environmental Stewardship begins with the concept that <u>everyone</u> in the facility has an impact on the facility's environment.

Questions?



Supply/orks® A Home Depot Company

Our Commitment to Sustainability For Pacific University

Dear Valued Customer,

At Supplyworks we are passionate about sustainability, safety and the environment in which we live and work. We are committed to reducing risk, protecting human health and the environment, and supporting our customers to do the same. Our Green Cleaning Solutions are designed with you in mind and help to make significant environmental impacts you can see and feel.

Our Super & Hyper Concentrated Chemicals:

The last thing we want to do is waste natural reassures by shipping water around the country. Diversey's chemists have been able to super and hyper concentrate chemicals so they can be diluted on site with tap water. With dilution rates up to 1:750, one bottle of concentrated chemical saves 495 one gallon containers from having to be shipped and then discarded.

Recyclable Packaging

Diversey's EnviroBox[®], J-Fill[®] and RTD[®] packages are 100% recyclable after they are used. Diversey's quart bottles and trigger sprayers are also 100% recyclable after use.

Our Certified Floor Finish and Strippers: Aquaria and Pro Strip SC both meet GS-40 standards and are certified by Green Seal[®].

Our Certified Products:

Alpha-HP Multi-Surface, Stride Neutral Cleaner, Prominence Floor Cleaner, Glance NA Glass Cleaner, and Crew Bathroom Cleaner & Scale all carry Green Seal[®] and/or EcoLogo[®] certifications. In addition all these products meet the GREENGUARD[®] Certification for Indoor Air Quality.

Our Disinfectants:

Cleaning disinfectants are exempt from green certifications but our AHP disinfectants like Oxivir and Alpha-HP have hydrogen peroxide as their active ingredients which breaks down to hydrogen and oxygen. Virex II 256 is a quat based disinfectant which when diluted, the VOC content is 0.01%.

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Pacific University's Diversey Chemicals:

Floor Cleaners:

Prominence- Green Seal Certified Stride Citrus- Green Seal Certified, Greenguard Gold and included in Healthy High Performance Cleaning Program (HHPC)

General Cleaners:

Alpha HP Multi Purpose cleaner- Green Seal Certified, GreenGuard Gold Crew 44 Bathroom Cleaner- Green Seal Certified, Ecologo Glance NA Glass Cleaner- Green Seal Certified, Greenguard Gold, Ecologo, and included in HHPC program

Disinfectants:

Virex II 256- VOC .01% in diluted form Oxivir Five 16- No VOCs, Alpha HP technology

Carpet Spotters:

General Purpose Spotter- Ecologo, wool safe Tannin Stain remover- wool safe Gum remover aerosol- wool safe Paint/Oil Gel Remover- wool safe Red Juice Stain remover- Not wool safe

Floor finishes:

Aquaria- Green Seal Certified and meets GS-40 standard Plaza Plus- not certified Carefree Matte- not certified

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- Clean with less impact

Air Quality and Contamination

– Matting and filtration

- CONTROLLED USE
- ROLL TOWEL And Toilet Tissue
- TECHNICAL DATA SHEET
- Features:
- •
- Green Seal[™]-certified
- •
- Renown Select Green Seal-certified controlled
- roll towels are made with innovative ATMOS
- technology offering enhanced strength, absorb
- · ency, and softness to upgrade the hand-drying
- experience. Towels feature a unique weave pattern
- creating high absorbency, meaning fewer are
- needed per hand dry. Made of high-quality 100%
- recycled fibers with a minimum of 50% post-
- · consumer waste, these roll towels are a premium
- solution for facilities th
- at are concerned about
- image and the environment

Sustainable

Green SealTM certified as environmentally preferable.

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Renown Select paper products designed for enhanced comfort superior performance. Manufactured in the USA with ATMOS papermaking technology that uses 100% recycled fibers, Renown Select products deliver unparalleled softness, institutional strength, exceptional brightness, unrivaled absorbency, and modern sustainability. All Renown Select towel and tissue products are Green SealTM certified and meet strict performance, material, and packaging standards. Rely on Renown Select for sustainable paper solutions that provide the style and feel of consumer tissue and paper with robust durability necessary for institutional applications.

Renown Select Advantages

- Designed for enhanced comfort superior performance.
- Manufactured in the USA with ATMOS papermaking technology that uses 100% recycled fibers
- Unparalleled softness
- Institutional strength
- Exceptional brightness
- Unrivaled absorbency
- Modern sustainability
- Green SealTM-certified to meet strict performance, material, and packaging standards.

Rely on Renown Select for sustainable paper solutions that provide the style and feel of consumer tissue and paper with robust durability necessary for institutional applications.

ATMOS Technology - Creating Comfort

Advanced Tissue Molding System or ATMOS technology produces quality Green SealTM-certified products, that deliver exceptional performance and an unparalleled appearance. ATMOS uses up to 40% less energy than "Through-Air-Dried" or TAD processes by using a vacuum roll rather than hot air; and allows premium grade paper and tissue to be made completely from recycled fibers.

Renown Select is created using specialized molded fabrics. A thick individual quilted layer delivering premium softness and durability typically reserved for premium 2 ply products. Renown Select sets the new standard for style in the away-from home market. Rely on Renown Select for the most sustainable solutions in the premium towels and tissue.

	ATMOS	TAD
Uses structured fabric	YES	YES
Produces high quality paper	YES	YES
Uses 100% recycled fibers	YES	NO



Allows for Green SealTM Certification Energy efficient YES YES

NO