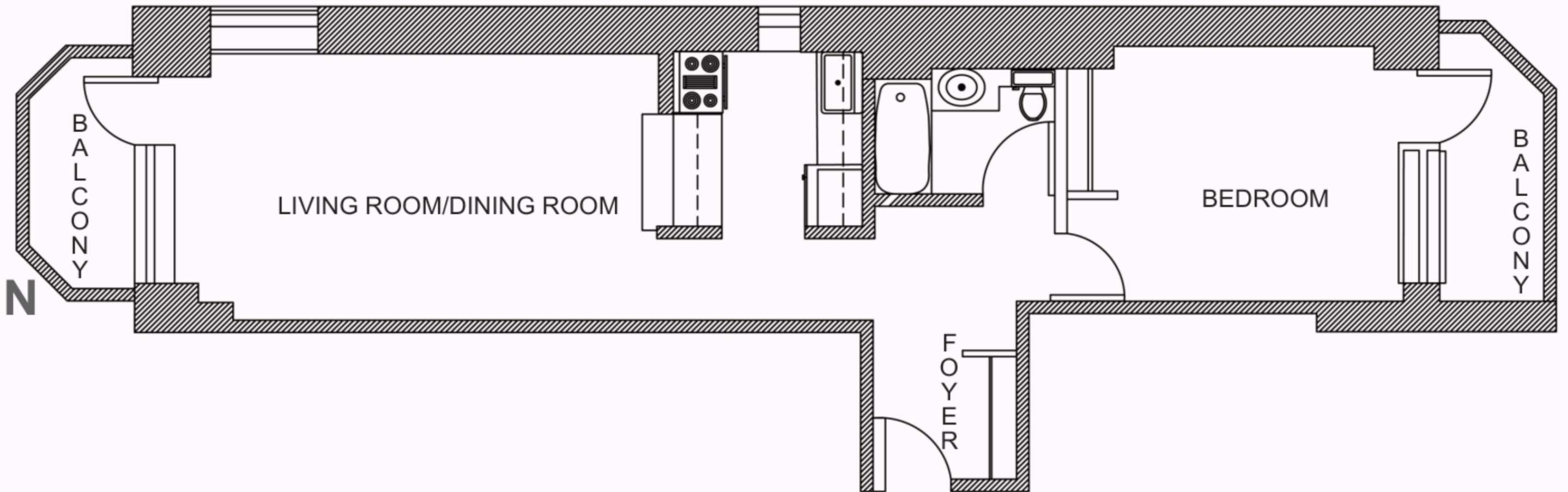
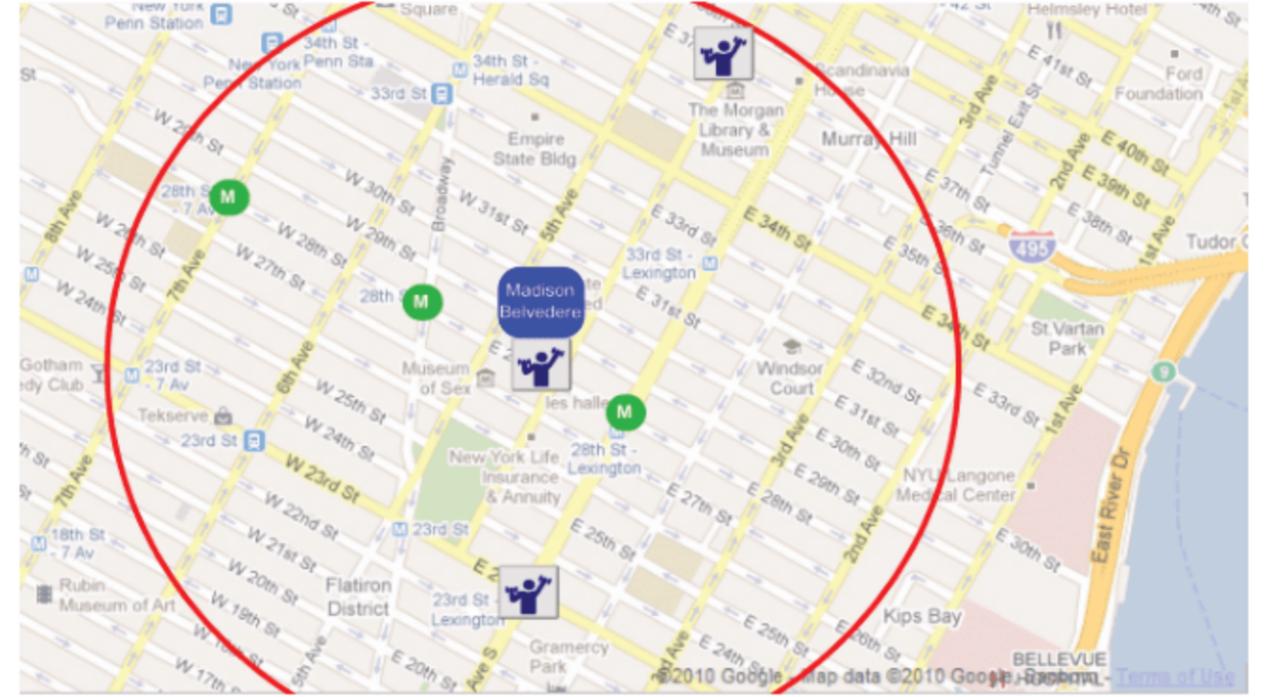




**Madison Belvedere  
10 East 29th Street  
New York City**

**LEED Sustainable Re-Design**

One Bedroom Apartment  
670 square feet  
2 residents



# LEED CREDITS FOR APPLICATION

- ★ Water Efficiency: Pre-requisite 1  
Water Use Reduction
- ★ Energy & Atmosphere: Credit 1.2  
Optimize Energy Performance - Lighting Controls
- ★ Energy & Atmosphere: Credit 1.4  
Optimize Energy Performance - Equipment & Appliances
- ★ Materials & Resources: Prerequisite 1  
Storage and Collection of Recyclables
- ★ Indoor Environmental Quality: Credit 4.2  
Low-emitting Materials - Paints and Coatings

# Water Efficiency: Pre-requisite 1

## Water Use Reduction

**Intent:** To further increase water efficiency within the tenant space to reduce the burden on the municipal water supply and wastewater systems.

**Requirements:** Reduce water usage from baseline by 20% through water closets, urinals, lavatory faucets, showers, kitchen sink faucets, and pre-rinse spray valves.



Kohler-WaterSense  
Toilet

Cimarron® Comfort Height®  
1.28 gpf toilet with  
Class Six® technology



Moen's Caldwell Classic  
brushed nickel two-handle  
low arc bathroom faucet

1.5 GPM



Moen's Envi Chrome  
infinite 8" diameter eco-  
performance showerhead

2.0 GPM



# Water Efficiency: Credit 1

## Water Use Reduction

LEED-CI 2.0 Letter Template  
WE Credit 1: Water Use Reduction

**Baseline Case Table**

Flush Fixture	Daily Uses	Flow Rate [GPF]	Duration [Flush]	Occupant Users	Sewage Generation [gal]
Conventional Water Closet					
Male	3	1.6	1	5	24
Female	3	1.6	1	5	24
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
Flow Fixture	Daily Uses	Flow Rate [GPM]	Duration [sec]	Occupant Users	Sewage Generation [gal]
Shower	3	2.5	300	10	375
Conventional Lavatory	3	2.5	15	10	18.75
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
Total uses by all occupants					90
Total Daily Volume [gal]					441.75
Annual Work Days					250
Total Annual Volume [gal]					110,437.5

**Wastewater  
Generation  
Reduction:  
28.35%**

LEED-CI 2.0 Letter Template  
WE Credit 1: Water Use Reduction

**Design Case Table**

Flush Fixture	Daily Uses	Flow Rate [GPF]	Duration [Flush]	Occupant Users	Sewage Generation [gal]
Low-Flow Water Closet					
Male	3	1.1	1	5	16.5
Female	3	1.1	1	5	16.5
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
—					
Male		0	1		0
Female		0	1		0
Flow Fixture	Daily Uses	Flow Rate [GPM]	Duration [sec]	Occupant Users	Sewage Generation [gal]
Low-Flow Shower	3	1.8	300	10	270
Low-Flow Lavatory	3	1.8	15	10	13.5
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
—		0	0		0
Total uses by all occupants					90
Total Daily Volume [gal]					316.5
Annual Work Days					250
Annual Volume [gal]					79,125
Graywater or Stormwater Reuse Volume [gal]					0
Total Annual Volume [gal]					79,125

# Energy & Atmosphere: Credit 1.2

## Optimize Energy Performance - Lighting Controls

**Intent:** To achieve increasing levels of energy conservation beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use:

### Requirements:

- 1) Install daylight responsive controls in all regularly occupied daylit spaces within 15 feet of windows and under skylights. Daylight controls must switch or dim electric lights in response to the presence or absence of daylight illumination in the space.
- 2) Install occupancy sensors for 75% of the connected lighting load.



Lutron: Radio Powr Savr  
Wireless Daylight Sensor

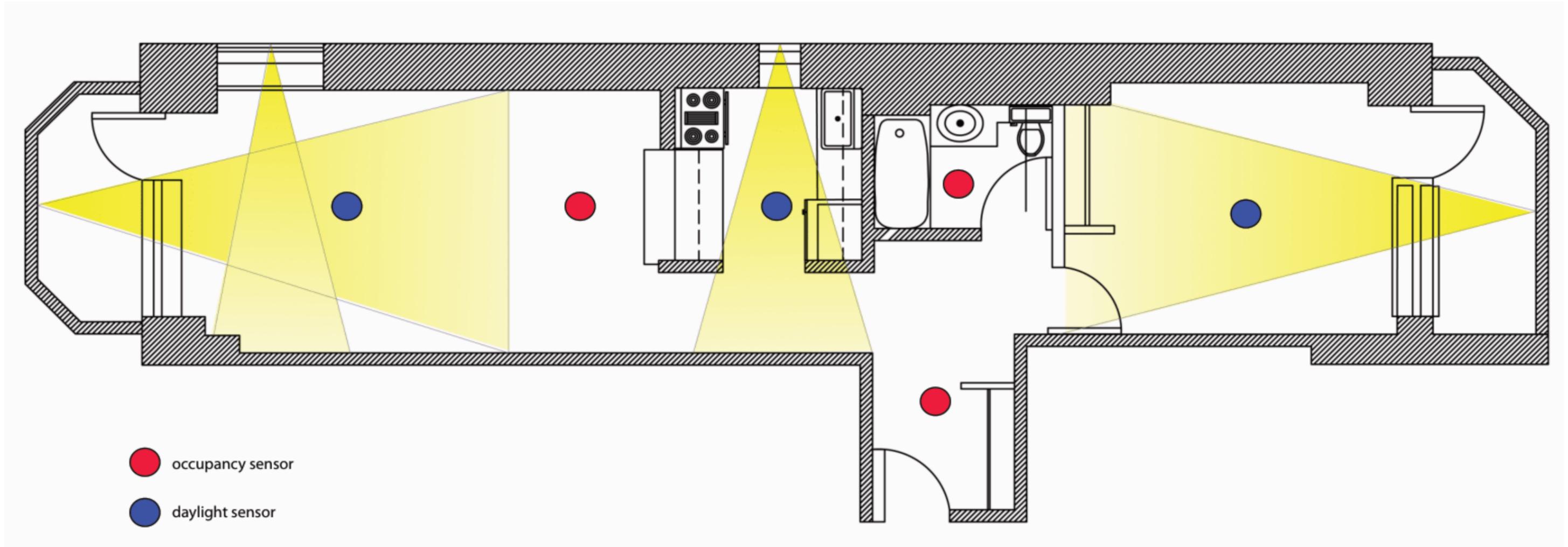


Lutron: Radio Powr Savr  
Wireless Occupancy Sensor



# Energy & Atmosphere: Credit 1.2

## Optimize Energy Performance - Lighting Controls



# Energy & Atmosphere: Credit 1.4

## Optimize Energy Performance - Equipment & Appliances

**Intent:** To achieve increasing levels of energy conservation beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

**Requirements:** Instal appliances of which 70% are ENERGY STAR qualified.



BOSCH - 24" Tall Tub  
Built-In Dishwasher

ENERGY STAR Qualified

300 kWh/year



Whirlpool - 25.1 Cu. Ft.  
Side-by-Side Refrigerator  
with Thru-the-Door  
Ice and Water

ENERGY STAR Qualified

577 kWh/year



Samsung  
LCD HDTV  
Television

ENERGY STAR Qualified

167 kWh/year



Dell Inspiron 1440  
Notebook Computer

ENERGY STAR Qualified

29.2 kWh/year



# Energy & Atmosphere: Credit 1.4

## Optimize Energy Performance - Equipment & Appliances

Energy Star Equipment	Rated Power [watts]	Total Number in Project	Number of Energy Star Rated in Project	Total Power in Project [watts]	Power that is Energy Star Rated in Project [watts]
BOSCH - 24" Dishwasher	300 *	1	1	300	300
Whirlpool Refrigerator	577 *	1	1	577	577
Samsung LCD HD TV	167 *	1	1	167	167
Dell Laptop	29.2 *	1	1	29.2	29.2

**LEED-CI 2.0 Letter Template**  
**EA Credit 1.4: Optimize Energy Performance, Equipment & Appliances**

Total Power in Project for ENERGY STAR Eligible Equipment and Appliances [watts]	1,073.2
Total Power in Project for ENERGY STAR Rated Equipment and Appliances [watts]	1,073.2
Percentage of ENERGY STAR Rated Power for Equipment and Appliances in Project	100

\* Rated power measured in kWh/year

# Materials & Resources: Prerequisite 1

## Storage and Collection of Recyclables

**Intent:** To facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.

**Requirements:** Provide an easily accessible dedicated area or areas for the collection and storage of materials for recycling for the tenant space. Materials must include at a minimum paper, corrugated cardboard, glass, plastics, and metals.



The Container Store 2 Bin Recycling Storage

Step on the pedal and the lid on the top bin opens

The lower bin features a convenient handle so you can pull it open

12" x 10-3/4" x 32-1/2" h

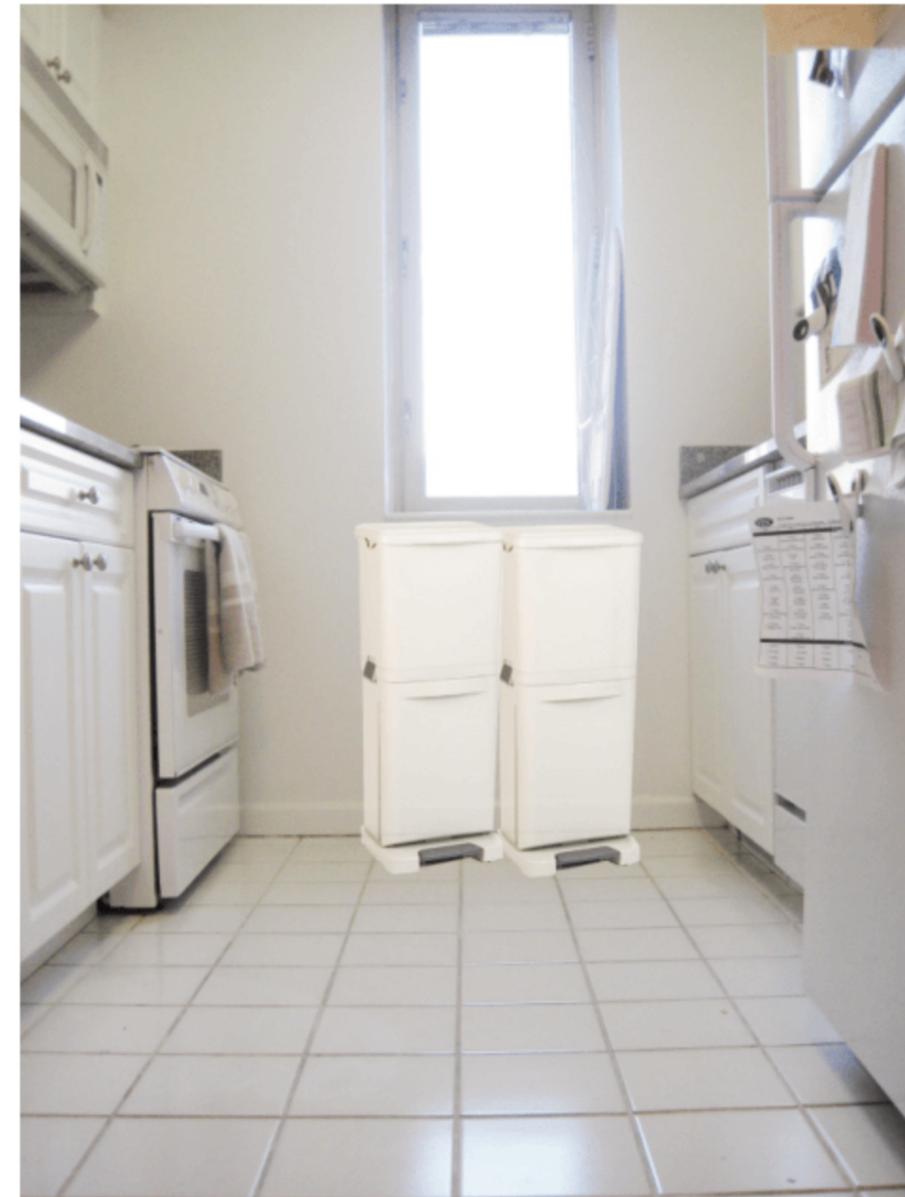


Image of product in kitchen

# Indoor Environmental Quality: Credit 4.2

## Low-emitting Materials - Paints and Coatings

**Intent:** To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

**Requirements:** Paints and coatings used on the interior of the building must comply with the following criteria as applicable to the project scope:



\*Paints and coatings applied to interior walls and ceilings must not exceed the VOC content limits established by GS-11.



\*Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed the VOC content limit of 250 g/L (GS-03).



\*Clear wood finishes, floor coatings, stains, primers, and shellacs applied to interior elements: must not exceed the VOC content limits established in South Coast

# Indoor Environmental Quality: Credit 4.2

## Low-emitting Materials - Paints and Coatings

List of Paints and Coating	Corresponding VOC Levels	Corresponding VOC Limit	Applicable Standard	Classification of Material
Aura Paint by Benjamin Moore	48 g/L	50 g/L	GS-11	paint
Natura Primer by Benjamin Moore	0	50 g/L	GS-11	paint primer
BioShield Natural Floor Finish	100 g/L or less	100 g/L	SCAQMD #1113	clear wood finish



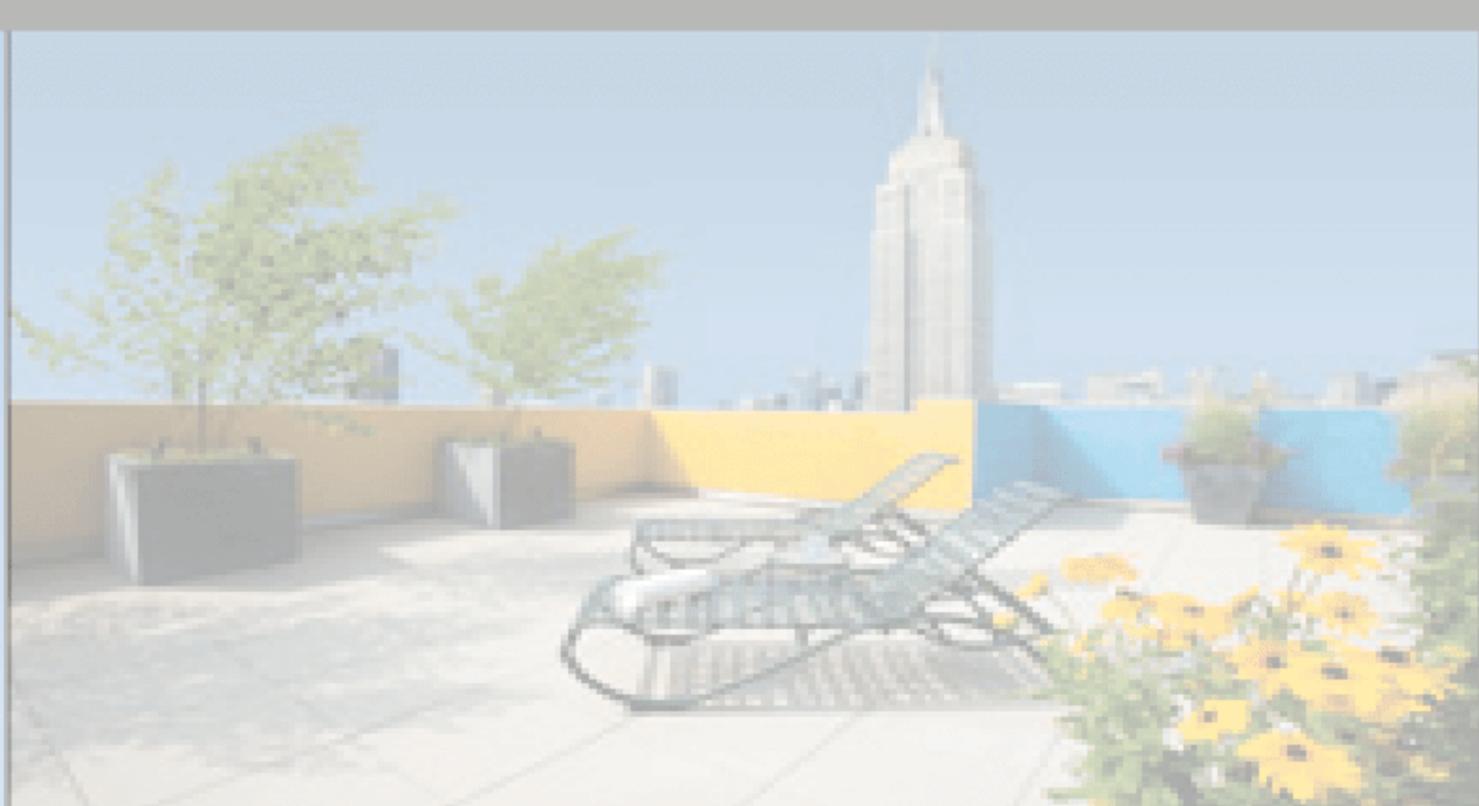
BioShield Natural Resin Wood Floor Finish  
100g/L or less VOC



Aura Interior Paint by Benjamin Moore  
48 g/L VOC



Natura Interior Primer  
Zero VOC



**Thank You**

**LEED Sustainable Re-Design**  
**Amy Robinson**

