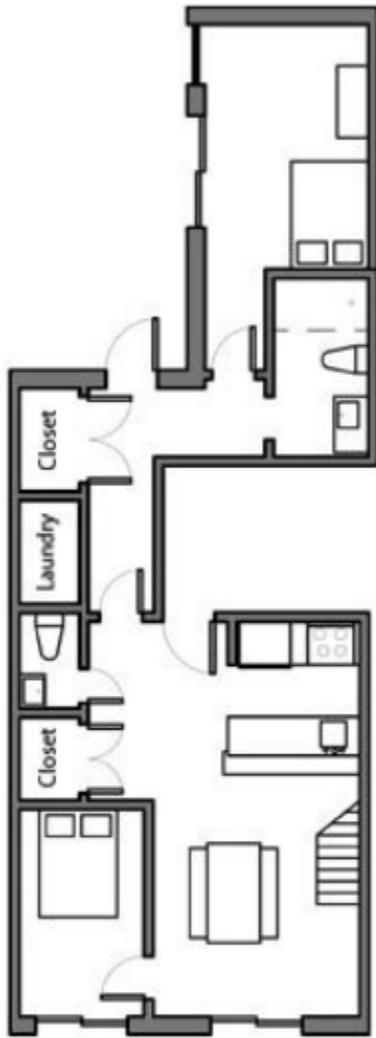


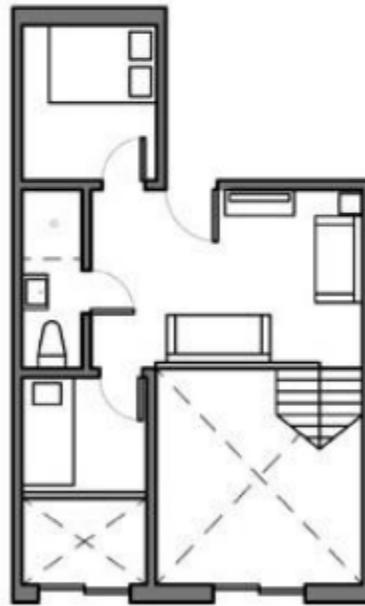
**18 Meserole Street  
LEED Assessment**

*Avery Sorrels*

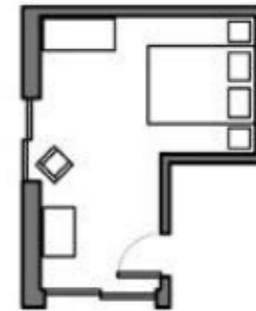
# Apartment floor plan



First floor



Second floor



Third floor

# LEED Credits

EA Credit 1.4: Optimize Energy Performance: Equipment and Appliances

MR Prerequisite 1: Storage and Collection of Recyclables

WE Prerequisite 1: Water Use Reduction

IEQ Credit 4.2: Low-Emitting Materials – Paintings and Coatings

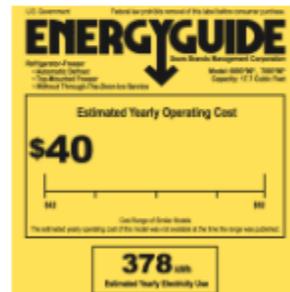
Additional Measure: External Daylight Control

# Energy and Atmosphere

## EA Credit 1.4: Optimize Energy Performance – Equipment and Appliances

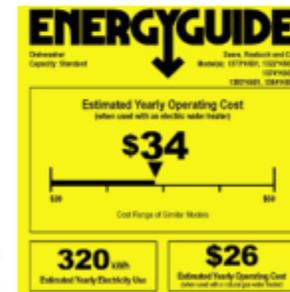
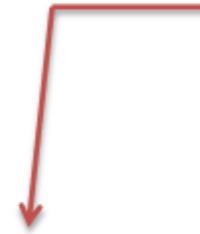
**Intent:** To achieve increasing levels of energy conservation beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.





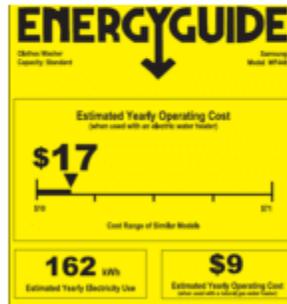
Stainless Steel Kenmore 17.5 cu. Ft.  
Bottom Freezer Refrigerator (6093)  
378 kWh

The SmartWash™ cycle on this dishwasher automatically determines to right amount of time, water and energy needed to get excellent cleaning results using fewer resources.



Stainless Steel Kenmore 24" Built-  
In Dishwasher (1374)  
320 kWh

This is the most efficient washer in the industry and uses 77% less water & 81% less energy and is able to wash up to 18 pairs of jeans in a single load.



Whirlpool WFW9750WW  
Washing Machine  
162 kWh



What about the dryer?

ENERGY STAR does not label clothes dryers because most dryers use similar amounts of energy, which means there is little difference in the energy use between models.

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]
Kenmore Refrigerator	378	1	1	378	378
Kenmore Dishwasher	320	1	1	320	320
Whirlpool Washing Machine	162	1	1	162	162
Total Power in Project for ENERGY STAR Eligible Equipment and Appliances [watts]					860
Total Power in Project for ENERGY STAR Rated Equipment and Appliances [watts]					860
Percentage of ENERGY STAR Rated Power for Equipment and Appliances in Project					100

**100% of eligible power appliances are ENERGY STAR rated.**

# Water Efficiency

## **WE Prerequisite 1: Water Use Reduction**

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

**Requirements:** Employ strategies that in the aggregate use 20% less water than the water use baseline calculated for the tenant space (not including irrigation).



Baseline Case Table

Flush Fixture	Daily Uses	Flow Rate [GPF]	Duration [Flush]	Occupant Users	Sewage Generation [gal]
Conventional Water Closet					
Male	5	1.6	1	3	24
Female	5	1.6	1	2	16
Flow Fixture	Daily Uses	Flow Rate [GPM]	Duration [sec]	Occupant Users	Sewage Generation [gal]
Kitchen Sink	3	2.5	15	5	9.38
Shower	1	2.5	300	5	62.5
Hand Wash Fountain	5	0.5	15	5	3.13
---		0	0		0
---		0	0		0
---		0	0		0
---		0	0		0
---		0	0		0
---		0	0		0
Total uses by all occupants					70
Total Daily Volume [gal]					115.01
Annual Work Days					
Annual Volume [gal]					0
Total Annual Volume [gal]					0

Flush Fixture	Daily Uses	Flow Rate [GPF]	Duration [Flush]	Occupant Users	Sewage Generation [gal]
Low-Flow Water Closet					
Male	5	1.1	1	3	16.5
Female	5	1.1	1	2	11
Flow Fixture	Daily Uses	Flow Rate [GPM]	Duration [sec]	Occupant Users	Generation [gal]
Low-Flow Kitchen Sink	3	1.8	15	5	6.75
Low-Flow Shower	1	1.8	300	5	45
Low-Flow Lavatory	5	1.8	15	5	11.25
---		0	0		0
---		0	0		0
---		0	0		0
---		0	0		0
---		0	0		0
Total uses by all occupants					70
Total Daily Volume [gal]					90.5
Annual Work Days					
Annual Volume [gal]					0
Graywater or Stormwater Reuse Volume [gal]					0
Total Annual Volume [gal]					

Low-flow fixtures provide  
**21% savings**  
 in daily water use

# Low-Emitting Materials

## IEQ 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-beings of installers and occupants.





Aura paints by Benjamin Moore has been third party tested and shown to meet or exceed Green Guard and LEED requirements.\*

\*Compliant with Green Seal Standard GS-11, Paints, 1<sup>st</sup> Edition, May 20, 1993.

# Collection of Recyclables

## MR Prerequisite 1: Storage and Collection of Recyclables

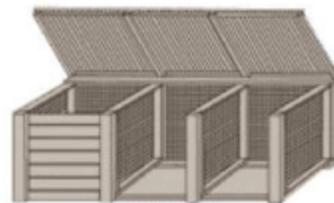
**Intent:** To facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.

**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 minimum paper, corrugated cardboard, glass, plastics, and metals.

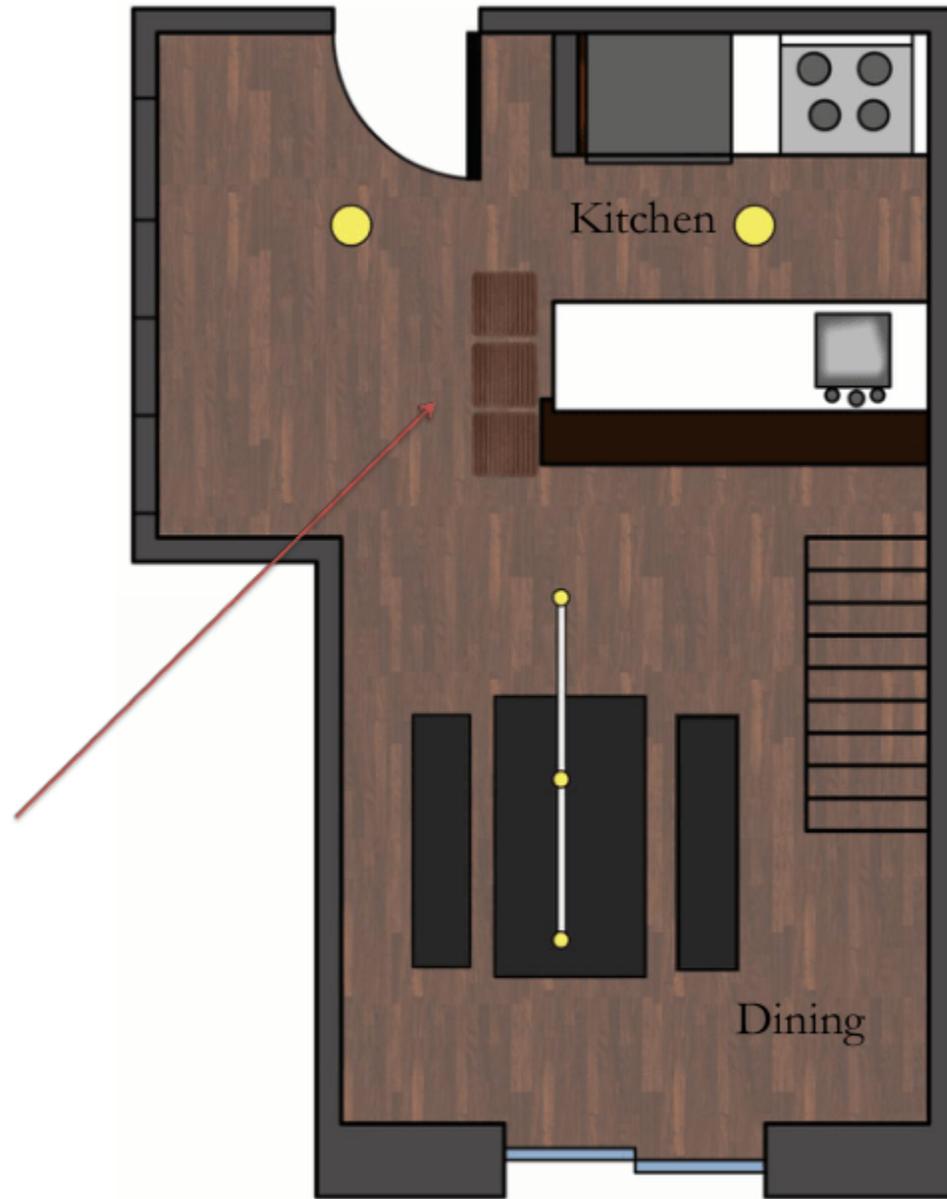




Use scrap wood from local lumber warehouse to construct a new recycling container.

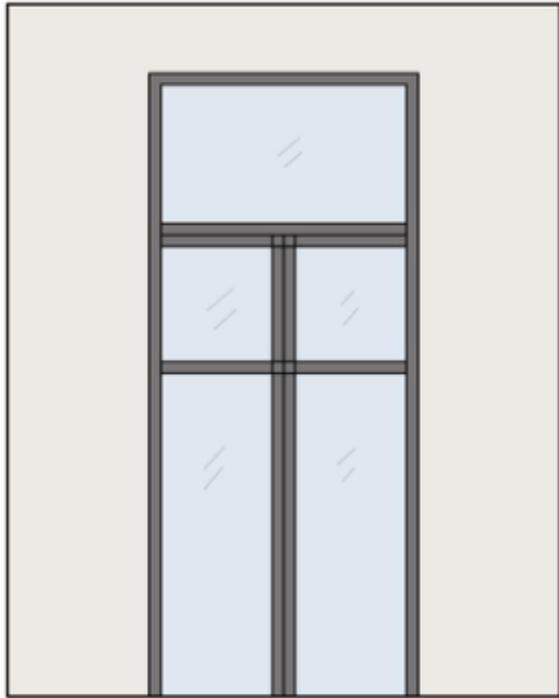


Designated area for  
sorting recyclables

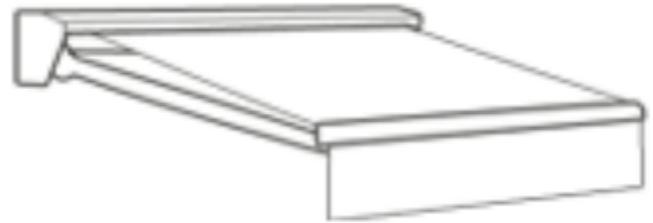


# Additional measure: External Daylight Control

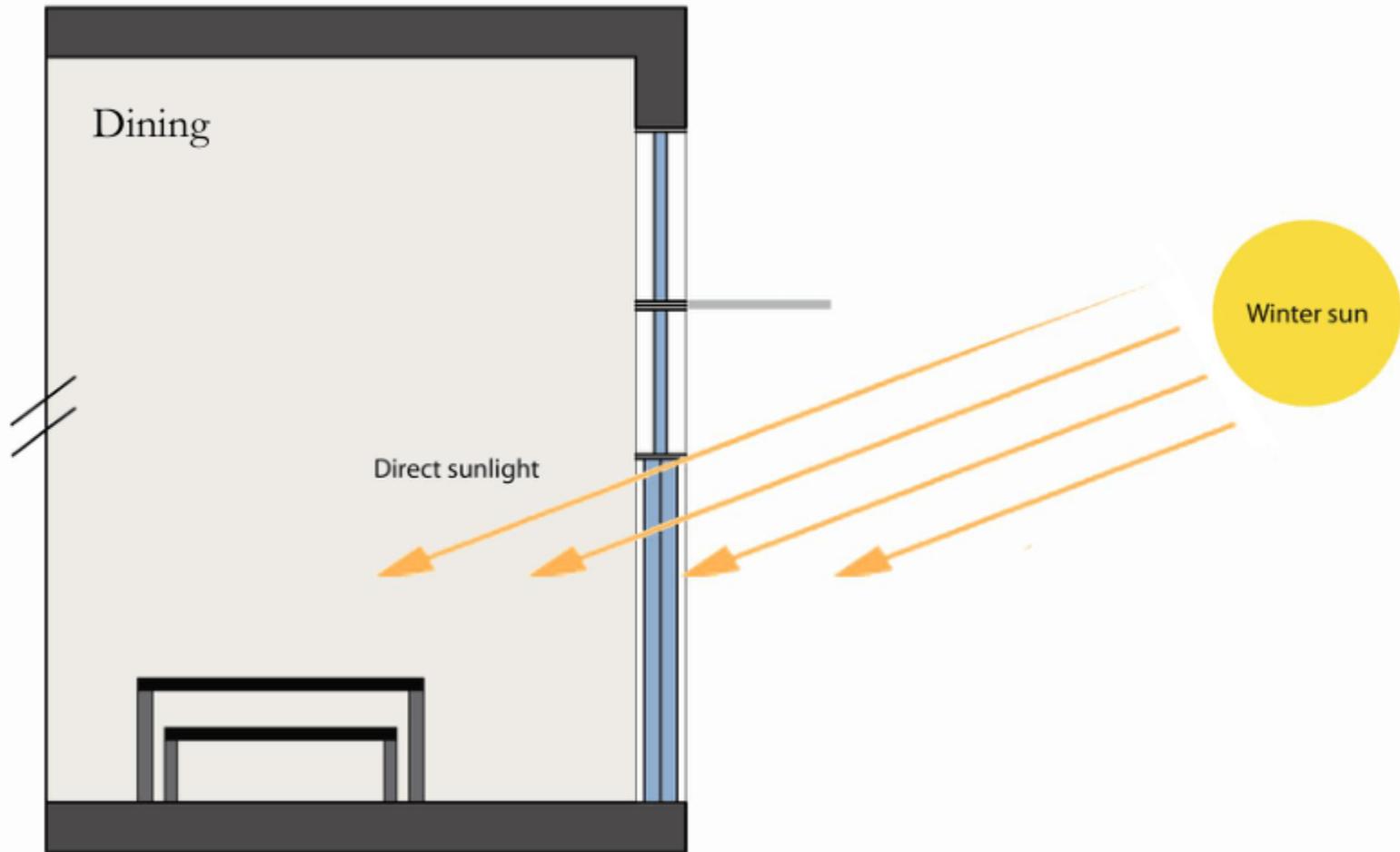




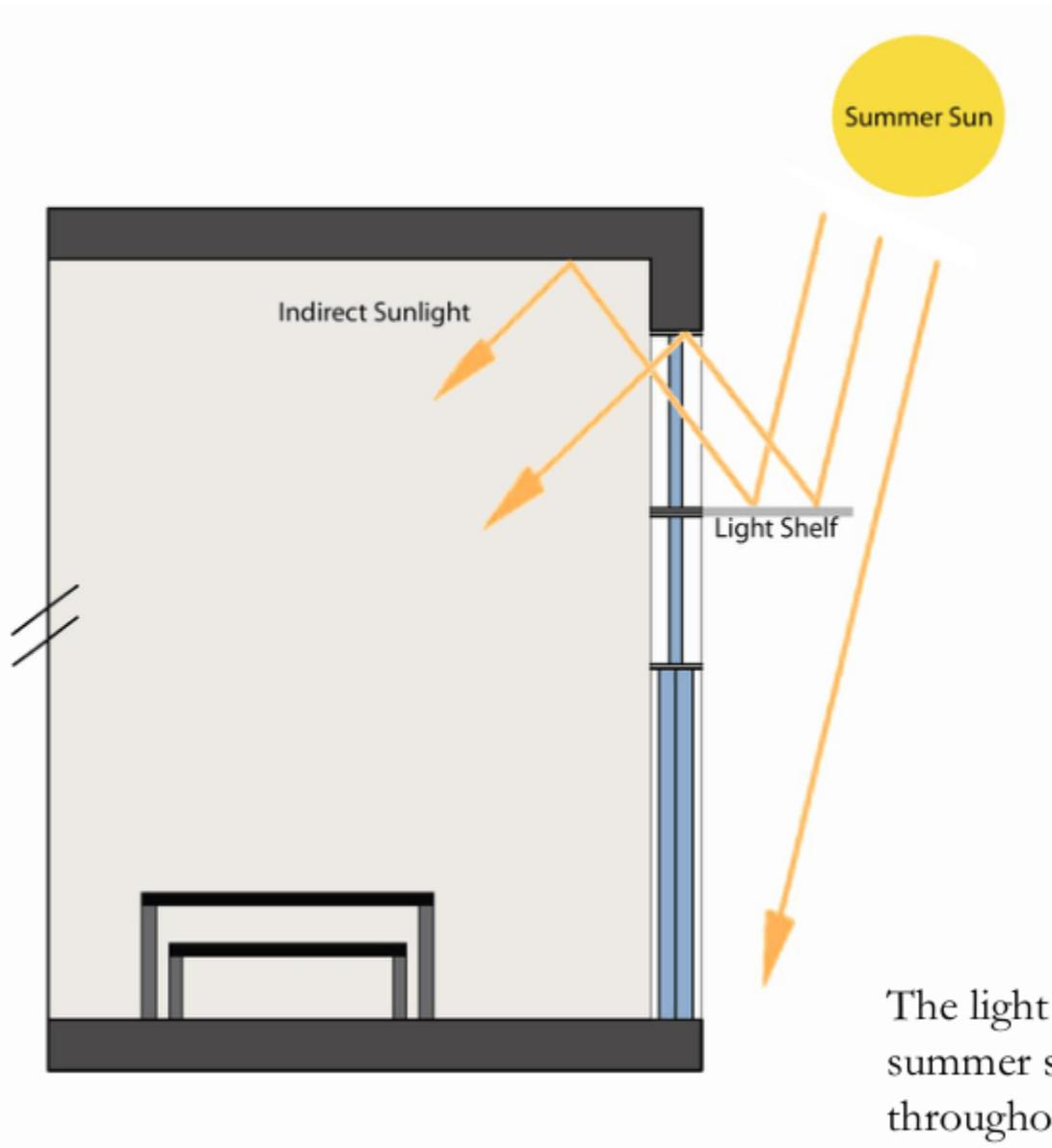
Dining room window  
14' tall



Light shelf



During cold winter months, sun rays enter the space, reducing heating and energy costs.



The light shelf reflects harsh summer sun, diffusing light throughout the dining room.

**Avery Sorrels**  
**Environmental Design**  
**Prof. Kent Hikida**