

Self-Guided Sustainability Tour

Fort Bradshaw



1 BUILDING ENVELOPE

Behind the historic brick facade lies a highly insulated envelope. This shell helps reduce the site Energy Use Intensity (EUI) by 70%. EUI is an important metric that measures the building's energy use per square foot per year. Fort Bradshaw has been designed to meet a very low EUI of less than 30.

2 WINDOWS

PVC free, energy efficient operable windows, with two layers of glazing plus a film, help reduce heating and cooling needs, and allow for fresh air and a connection to the outdoors.

3 EXTERIOR LIGHTING

All site lighting on this property has been selected to be energy efficient, reduce glare and limit light pollution. The historic lighting has also been restored and retrofitted to meet these goals. Lighting was designed to deter birds from flying towards the building, reducing the chance of collision.

4 HEALTHY INDOOR ENVIRONMENT

Floor mats at all entrances are a passive design strategy and just one of the measures that help to reduce the entry of unhealthy contaminants and improve indoor conditions.

5 LANDSCAPING

All landscaping is composed of native and endemic species from the ecological region to preserve and sustain the local ecosystems. Planting native species reduces the demand on potable water use by rendering irrigation unnecessary; this contributes to this site's average 61,000 gallons of potable water saved per month.

6 MATERIALS

Extensive research was conducted to ensure the materials selected were free from toxins that affect human health and our ecosystems and that the sources of these materials are close to the site. As an example, the roof is covered with slate sourced in neighboring Vermont.

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7 NATIVE HABITAT

Native grasses and rain gardens surround the property, reducing the area of mowed lawn, creating habitat for insects and birds and connecting the landscape - as well as shared sustainable goals - to the larger property of the adjacent Clark Art Institute.

8 WATER USE

A rooftop hot water solar collector and heat recovery system combined with low flow fixtures reduces energy needs and potable water demand. The rooftop solar collector is located on a high, low-slope roof at the back of the building to obscure it from view and achieve greatest exposure to the sun.

9 HEALTHY LIVING

Outdoor bicycle storage, coupled with indoor seasonal storage, has been provided to encourage a walkable, pedestrian oriented community, as well as human powered transportation.

10 GEOTHERMAL ENERGY

The nearly invisible geothermal well system, composed of ten 300-foot deep wells, hidden discretely below grade, reduces the building's carbon footprint and nearly eliminates reliance on fossil fuels.

The project is seeking:



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