

# WRT is Green

Our congregation is proud to have incorporated sustainable building practices throughout the construction and renovation of our campus. This project is a physical example of one of our congregation's five pillars: *Tikkun Olam - Repairing the World.* We are honored to be a model for places of worship in New York and around the country.

Everywhere you step, look, drink, and breathe you will discover thoughtful choices that make Westchester Reform Temple a truly green community. From the walk off mats in this entryway that minimize and control pollutant entering the building, to the introduction of natural light in common and office space, to the use of materials from Forest Stewardship Council (FSC) certified forests, this building is a step towards more responsible living.

The building and campus have won numerous awards for design and sustainability. We are one of the first synagogues in the country to build in accordance with green standards and to apply for LEED certification (Leadership in Energy and Environmental Design).

Here are some *Green Facts* about WRT that provide more information about our sustainable initiatives. We hope to inspire you to be a partner in our efforts to be responsible keepers of our world.

# Green Fact: Water, water everywhere and now there's more to drink.

We've all heard that we should shut-off the water while brushing our teeth (which could save three gallons of drinkable water a day, or 1,095 gallons per year), but how can our synagogue save water with so many people coming and going for services, programs, classes and events?

By carefully selecting faucets with aerating delivery systems and automatic shutoff sensors, mounting low flow toilets and installing efficient showerheads, this project has reduced potable water use by 37.5% from a calculated baseline.

So go ahead and take sip of water...thanks to some thoughtful planning there is plenty to go around.

#### Green Fact: What you can't smell might help you.

You smell them in everyday products from cleaning supplies to house paints to permanent markers. They are VOCs or Volatile Organic Compounds. VOCs include a variety of chemicals that evaporate easily into the air. We breathe them in and, over time, exposure to some may have short- and long-term health effects including allergies, asthma and even cancer.

Suddenly afraid to take a deep breathe? You can in this building!

All the adhesives and caulking in the sanctuary and social hall, from the flooring membranes to the glues used on the pews, are low VOC with minimal off gassing. The paints in the new sections of the building, including the Religious School, are also low VOC, and the carpets are Green Label or Green Label Plus, the Carpet and Rug Institute's standard criteria for low emissions.

To reduce the addition of everyday VOCs throughout the building, the majority of office equipment, such as copiers and printers, has been moved to one location and our maintenance team uses green cleaning products. WRT is also committed to a 100% smoke free synagogue for its congregants, friends and neighbors.

So breathe deep, because what you can't smell in this space is good for you!

## Green Fact: Our campus knows how to Reduce, Reuse and Recycle

When recycling our soda cans and bottles, we know they are reused for something. But did you know that some of the products made from recycled materials are on this campus?

The carpets you walk on in the sanctuary, social hall and Religious School use recycled textile fibers and plastics, often found in soda bottles. Outside the building, our concrete includes fly ash—a byproduct of coal manufacturing. The fly ash strengthens the concrete and reduces the amount of this by-product that often ends up in landfills.

Speaking of landfills, WRT used a green disposal plan during construction to reduce our impact on the local environment by diverting over 90% of construction waste from landfills.

So sort away! You never know what your junk mail will be next.

# Green Fact: The grass and tress are just a few of the green things about WRT's campus.

Walking along the pathways of WRT's campus feels just as serene as entering the sanctuary; but the campus is as green as it is serene.

When WRT's new site plan was developed, the team focused on protecting the existing habitat to minimize the impact on the existing eight-acre campus. The design also encourages alternate means of transportation to the campus by providing congregants and local users with bicycle racks and showers in the building.

Concerned with storm water management, the new system was designed to treat, filter, and detain rainwater on site before out falling to the village streams and brooks. This process limits flooding and erosion, as well as preventing sedimentation in receiving waterways.

In the evening visitors notice the site lighting uses faceted light poles that focus light in the direction needed and emit minimal uplighting above 90-degrees. These elements mean that WRT is "Dark Sky Compliant." Not only are we using less energy, but we also can see the stars and have reduced the effects of unnatural lighting on the nocturnal environment.

So enjoy our campus inside and out and know that we are green all over.

## Green Fact: We save how much energy?!

Westchester Reform Temple's sustainable design is resulting in energy savings near 13% below the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) energy code baseline each year. Building elements above, below, and around you are actively assisting with energy savings.

The new roof was designed to reflect the sun's heat away from our building and the new spaces have a high performance building envelope, including cavity walls, increased insulation and insulated glass panels. The result is a lower heating and cooling demand on the building.

What is the HVAC (Heating, Ventilating, and Air Conditioning) in the building? The team installed a new, high efficiency system for the entire complex. In particular, the sanctuary uses an airfloor system, which is an energy efficient alternative to standard overhead distribution. This product provides energy and material savings with uniform thermal comfort from low level supply and radiant effect. The result is a tempered comfort zone while not needing to heat or cool the entire volume. Since the air is distributed low in the space, the air speed is reduced, therefore reducing energy usage.

Yes, it is comfortable in our building, and we are saving energy in the process.

# Green Fact: Lights, Wind, ENERGY

Westchester Reform Temple is using alternative energy—everywhere in this building!

The new spaces were designed to create physical connections and views between indoor and outdoor areas, and since all rooms have windows to introduce natural light to the interior space, the end result is the reduced need for artificial lighting sources.

Light is also a power source at WRT. The eternal flame, above the ark in the sanctuary, uses solar or photovoltaic (PV) cells to harness the ever-present energy of the sun.

But did you know that 100% of WRT's energy use is alternative? By purchasing energy from wind and solar farms, we are preventing 283,854 pounds (129 metric tons) of carbon dioxide emissions from being emitted into the atmosphere, the equivalent of 289,647 miles not driven by an average passenger car.

Alternative energy is alive and well at WRT—who knows where you will see it next.

#### Green Fact: Thinking Globally, Buying Locally

Where you get your materials from is just as important as the materials that are used. By purchasing materials from with-in a 500-mile radius of WRT, we reduced carbon emissions related to transportation while supporting local employment.

In the new building, many of the materials are from places closer than you may think. The concrete is from White Plains, New York, and the stucco is from a local producer in Westchester County. The glass you look through is from Geneva, New York, (distance from WRT, ~209

miles). The gypsum plasterboard was produced in Aliquippa, Pennsylvania (distance from WRT, ~416 miles). The cedar in our sanctuary is from a Forest Stewardship Council (FSC) certified forest, using environmentally responsible forest management, in Woodbury, Connecticut (distance from WRT, ~63 miles).

When you plan your next shopping trip just up the road, or a family vacation to support local economies, please stop by Geneva, NY, Aliquippa, PA, and Woodbury, CT, and let them know that we are enjoying their materials immensely.