WORKING GREEN

SUSTAINABLE WORKPLACE DESIGN STRATEGIES AT NRDC

A STATEMENT OF PURPOSE

THE NATURAL RESOURCES DEFENSE COUNCIL'S PURPOSE IS TO SAFEGUARD THE EARTH…

…its people, its plants and animals and the natural systems on which all life depends.

We work to restore the integrity of the elements that sustain life – air, land and water – and to defend endangered natural places.

We seek to establish sustainability and good stewardship of the Earth as central ethical imperatives of human society. NRDC affirms the integral place of human beings in the environment.

We strive to protect nature in ways that advance the long-term welfare of present and future generations.

We work to foster the fundamental right of all people to have a voice in decisions that affect their environment. We seek to break down the pattern of disproportionate environmental burdens borne by people of color and others who face social or economic inequities. Ultimately, NRDC strives to help create a new way of life for humankind, one that can be sustained indefinitely without fouling or depleting the resources that support all life on Earth.

When NRDC set out to design a new space for our Washington, DC office, we wanted to translate our mission into a built environment. We worked diligently to create a space that would be an active demonstration of sustainability to our staff, members, and visitors. The environment was omnipresent in our process from building selection, through design, construction, and occupancy. We put all options on the table and set out to discover a new way to "live green" within our work environment.

The plush green wall brings a natural element to an urban location and has become a focal point of the office.

94%

SEATED SPACES WITH A VIEW TO THE EXTERIOR

By moving most management offices to the core of the building, using glass fronted offices and keeping the office perimeter open a tremendous amount of daylight is brought in to the space. The increased visibility fosters collaboration and more accountability in actions and habits.

40%

WATER REDUCTION COMPARED TO A TYPICAL OFFICE

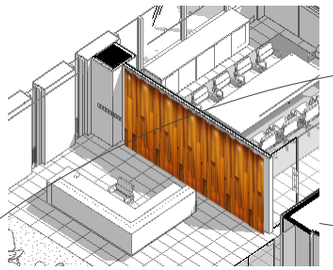
The water fixture flow rates (and the code-allowed rates) are listed below:

Lavatory faucets	.33 gallon/min.	(.5 gallon/min.)
Kitchen sink	.5 gallon/min.	(2.2 gallon/min.)
Water closet	.8/1.6 gallon/flush	(1.6 gallon/flush)
Urinal	.125 gallon/flush	(1.0 gallon/flush)

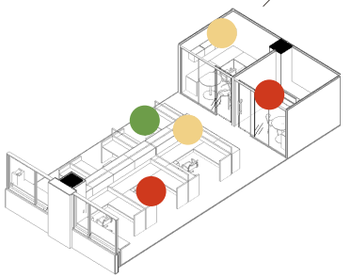
Steel used in the reception desk was reclaimed from steel panels in a Maysville, Kentucky warehouse.

A CULTURAL SHIFT

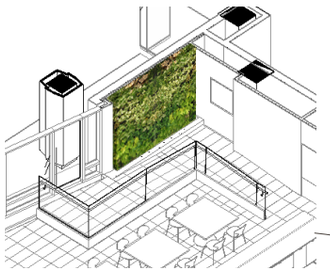
NRDC pursued a number of innovative design solutions to achieve a workplace that provides not only the highest degree of sustainability, but a completely new way for our employees to work. The new DC office of the NRDC is an exceptional example of a workplace design that has brought about a positive cultural shift among staff. The new open plan has helped create a sense of community by shifting staff perception from ***my space*** to ***our space***.



Reclaimed wood feature wall



Typical office



Green wall

KEY FEATURES

- **Water-conserving plumbing fixtures**
  Smart fixture selection reduces water consumption by 30+%.
- **Individual task lighting**
  Low energy LED task lighting has been provided for each employee to allow for a focused and controlled light source.
- **Energy Star appliances**
  Energy Star equipment and appliances have been selected when possible, including kitchen and pantry appliances, copy machines, printers, computers and monitors. 94% of all wattage comes from Energy Star equipment.
- **Resources obtained within 500-mile radius**
  When feasible all building materials and furniture were from recycled material and/or shipped within a 500 miles of the construction site.
- **Building-wide recycling system**
  Building-wide system for occupants to recycle all paper, plastic, metal (aluminum cans), glass, and cardboard items
- **Wood obtained from FSC sources**
  More than 50% of the wood used within the project was harvested from a FSC-certified forest, a measure of safer foresting practices.

INNOVATIVE STRATEGIES

NRDC has taken an strong stance on material and furniture selection. Each product used in the space was chosen because of sustainable attributes. The selection process focused on recycled content, regional availability, and limiting the amount of airborne toxins emitted from furniture, paint, and adhesives.

All calculations on this page exclude mechanical, electrical and lighting systems and were determined based on the cost of each green item as a percentage of the total job cost with the exception of certified wood.

Wood planks used at the entrance were reclaimed from cabin structures in Inglis, Florida.

98%

CONSTRUCTION WASTE RECYCLED

The waste was taken off site. Drywall, metal and wood were separated from other construction materials. The percent recycled is measured by weight in tons.

28%

RECYCLED CONTENT IN CONSTRUCTION

28% of all materials used during construction are composed of recycled content.

60%

MATERIALS MANUFACTURED WITHIN 500 MILES

More than half of the materials used during construction were manufactured or assembled within 500 miles of the NRDC office, reducing the resources needed to transport components to the site.

29%

MATERIALS EXTRACTED AND MANUFACTURED WITHIN 500 MILES

More than a quarter of the materials used during construction were not only manufactured but extracted (mined, recycled, reclaimed) within 500 miles of the site.

51%

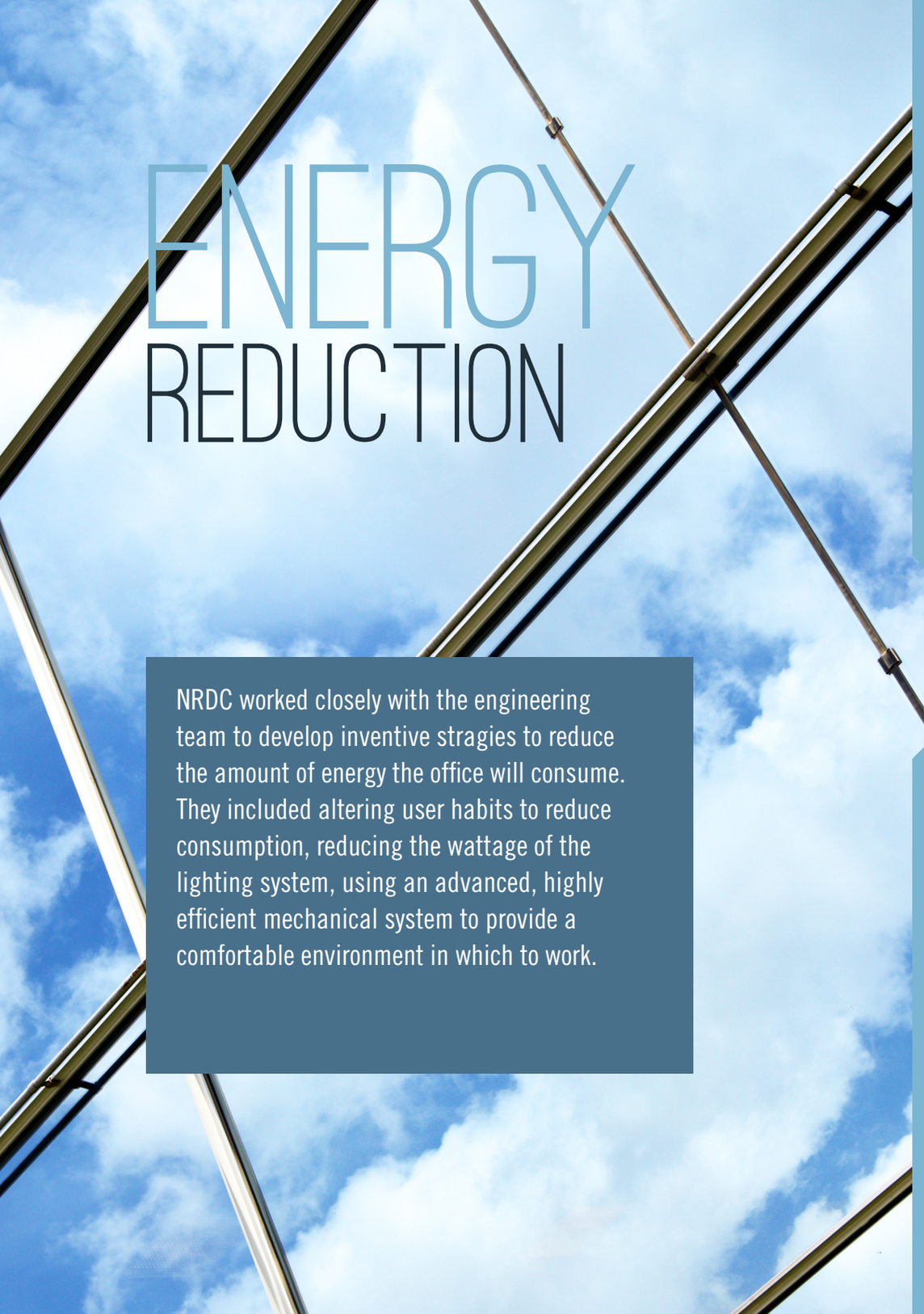
FSC-CERTIFIED VIRGIN WOOD USED

Of all virgin wood used in the space, more than half was harvested from an FSC-certified forest. The value of certified wood was determined as a percentage relative to all virgin wood used. Recycled wood is excluded from this calculation as it is not harvested.

7%

RECLAIMED MATERIALS

A significant amount of materials used in construction were reclaimed, including wood, steel and glass.



ENERGY REDUCTION

NRDC worked closely with the engineering team to develop inventive stragies to reduce the amount of energy the office will consume. They included altering user habits to reduce consumption, reducing the wattage of the lighting system, using an advanced, highly efficient mechanical system to provide a comfortable environment in which to work.

26.8%

LIGHTING POWER REDUCTION BELOW CODE COMPLIANCE

An advanced approach to lighting allows our wattage consumption to drop 26.8% below the code maximum. This was achieved through a combination of technologies. A dimming system near the windows automatically lowers artificial lighting as daylight becomes available. Vacancy sensors for general lighting require occupants to actively turn on lights when needed. Task lights and dimmers in group spaces allow for custom light levels. Unnecessary light has been eliminated leaving the minimum amount of artificial light for the space to function properly. On average, the space will use an average of .73 watts per square foot.

99%

ENERGY STAR RATED EQUIPMENT AND APPLIANCES

Energy Star-rated appliances account for 99% of the equipment wattage used within the space. These appliances include kitchen equipment, servers, laptops, computer monitors, printers, scanners, televisions and more. All equipment that is eligible for the Energy Star System at the time it was manufactured is tracked.

30%

LESS ENERGY USED, AS MEASURED AGAINST THE CODE-ESTABLISHED BASELINE

Miscellaneous personal kitchen equipment, personal printers and scanners were eliminated as part of the move. The combination of the high efficiency lighting system, a high efficiency HVAC system and altering user habits helped to reduce the energy use of NRDC by 30% below code-established baseline.

NRDC

THE EARTH'S BEST DEFENSE

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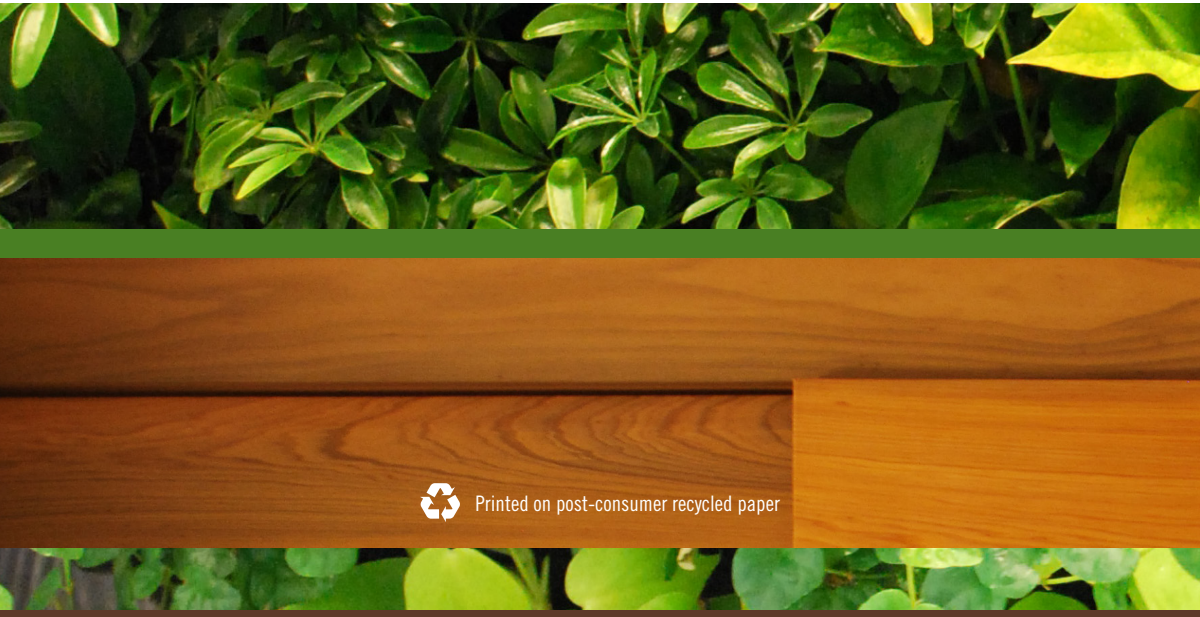

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