ONE BRYANT PARK

New York NY 10036

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AGENDA

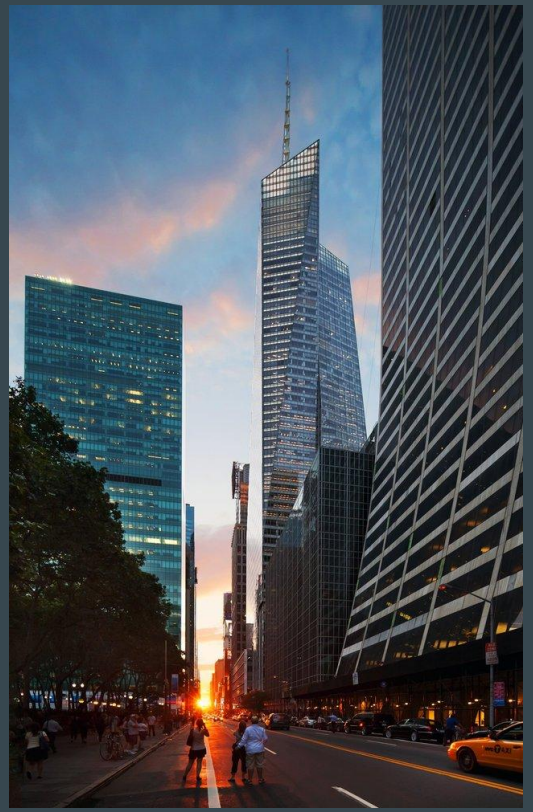
1. ABOUT ONE BRYANT PARK
2. ONE BRYANT PARK DESIGN
3. DURST X BANK OF AMERICA
4. BUILD GREEN
5. LEED

ABOUT ONE BRYANT PARK

The Bank of America Tower at One Bryant Park sets a new standard in high-performance buildings, for both the office workers who occupy the tower and for a city and country who have awakened to the modern imperative of sustainability. Drawing on concepts of biophilia or humans' innate need for connection to the natural environment the vision at the occupant scale was to create the highest quality modern workplace by emphasizing daylight, fresh air, and an intrinsic connection to the outdoors. At the urban scale, the tower addresses its local environment as well as the context of midtown Manhattan, to which it adds an expressive new silhouette on an already-iconic skyline.

ONE BRYANT PARK DESIGN

The Bank of America Tower at One Bryant Park in midtown New York, designed by Cook + Fox Architects, is the first commercial high-rise to achieve LEED Platinum certification. The design and high performance of this building is intended to set a new standard for commercial construction and for the office-work environment. By focusing on ways to emphasize daylight, fresh air and a connection to the outdoors, the architects redefine the parameters of the skyscraper as more than a glass box.



DURST X Bank of America

WHO IS DURST?

Durst are responsible for the development of One Bryant Park also known as the Bank of America Building.

DURST MISSION STATEMENT:

We build, own, and operate many of the world's most innovative and efficient buildings. We create value for our tenants and partners by developing sustainable residential and commercial properties in which people live, work, and thrive.

BUILD GREEN

One Bryant Park's most lasting achievement is to merge the ethics of the green building movement with a twenty-first century aesthetic of transparency and re-connection. On an urban level, the project also represents the culmination of The Durst Organization multigenerational efforts to revitalize the Times Square area, and gives back to the city with a street-level Urban Garden Room, a mid-block pedestrian passage/performance space, and the first "green" Broadway theater, the LEED Gold certified Stephen Sondheim Theater

WHO IS LEED?

LEED short for Leadership in Energy and Environmental Design is a third-party green building certification program and the globally recognized standard for the design, construction and operation of high-performance green buildings and neighborhoods. The rating system approach focuses on efficiency and leadership to deliver the triple bottom line returns of "people, planet and profit."

Appropriate for all building types and phases, including new construction, interior fit-outs, operations and maintenance, and core and shell, LEED gives building owners and operators the tools they need to have an immediate and measurable effect on the performance of their spaces.

LEED CERTIFICATION

Achieving LEED certification requires satisfying all prerequisites and earning a minimum number of credits. Reference guides, designed to help project teams, explain credit criteria, describe the benefits of complying with the credit and suggest approaches to achieving credit compliance. The levels of certification generally follow these thresholds:

- Certified: 40–49 points
- Silver: 50–59 points
- Gold: 60–79 points
- Platinum: 80+ points

WHY CERTIFY FOR LEED?

PEOPLE'S HEALTH

green buildings creates spaces that promote health and comfort

COST EFFECTIVE

economic benefits can’t be overlooked. Operating cost savings, shorter payback periods and increased asset

ENVIRONMENTAL SOLUTION

Green buildings help reduce carbon, water, energy and waste.

GREEN BUILDING ARE COST EFFECTIVE

Upfront investment in green building also makes properties more valuable, with a growing number of building owners seeing a 10 percent or greater increase in asset value.

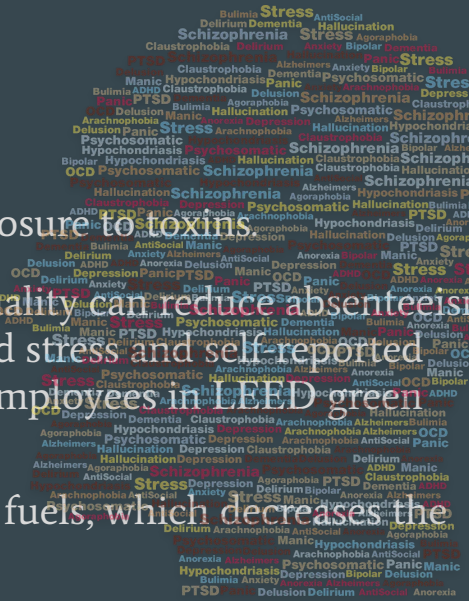
Green buildings reduce day-to-day costs year-over-year. LEED buildings have reported almost 20 percent lower maintenance costs than typical commercial buildings

Green building retrofits typically decrease operating costs by almost 10 percent in just one year.

traditional (non-LEED certified) buildings receive an average of $2.16/ft2, tenants were willing to pay $2.91/ft2 for LEED certified space.(LA MARKET)

The law enables New York to exempt green projects and renovations from property taxes for up to 10 years

PEOPLE'S HEALTH



Green building resonate the most with clean air and water and less exposure to toxins.

Green buildings positively affect public health. Improving indoor air quality can reduce absenteeism and work hours affected by asthma, respiratory allergies, depression and stress and self-reported improvements in productivity. USGBC's own research reinforces that employees in LEED green buildings feel happier, healthier and more productive.

Energy and Atmosphere – Energy efficient residences burn fewer fossil fuels, which decreases the associated air pollution from buildings.

Ventilation and Enhanced Ventilation – Proper ventilation brings fresh air into a home while flushing

Exhaust contaminated air out, making indoor air cleaner and healthier for occupants.

Air Filtering – Proper air filtering removes indoor air contaminants (dust, mold spores, etc.) from the air that occupant breath.

ENVIRONMENTAL SOLUTIONS

Green buildings help reduce carbon, water, energy and waste. The Department of Energy reviewed 22 LEED-certified building managed by the General Services Administration and saw CO2 emissions were 34 percent lower, they consumed 25 percent less energy and 11 percent less water, and diverted more than 80 million tons of waste from landfills.

Green buildings help building owners and managers, architects, developers and product manufacturers navigate this transition and verify performance.

By improving energy efficiency, green buildings also help reduce indoor air pollutants related to serious health issues.

Water-efficiency efforts in green buildings help reduce water use and promote rainwater capture, as well as the use of non-potable sources.

Standard building practices use and waste millions of tons of materials each year; green building uses fewer resources and minimizes waste. LEED projects are responsible for diverting more than 80 million tons of waste from landfills.

SO,,,

HOW DID ONE BRYANT PARK SCORE A “PLATINUM LEED” CERTIFICATION?

SUSTAINABILITY ACHIEVEMENT

- An environmentally responsible high-rise office building, focusing on sustainable siting, water efficiency, indoor environmental quality, and energy conservation
- First high-rise to achieve LEED Platinum certification
- Reduce energy consumption by a minimum of 50%
- Reduce potable water consumption by 50%
- Reduce stormwater contribution by 95%
- Utilize 50% recycled material in building construction
- Obtain 50% of building material within 500 miles of site

HIGHER CEILING AND TRANSLUCENT INSULATING GLASS

+8 POINTS

BENEFITS

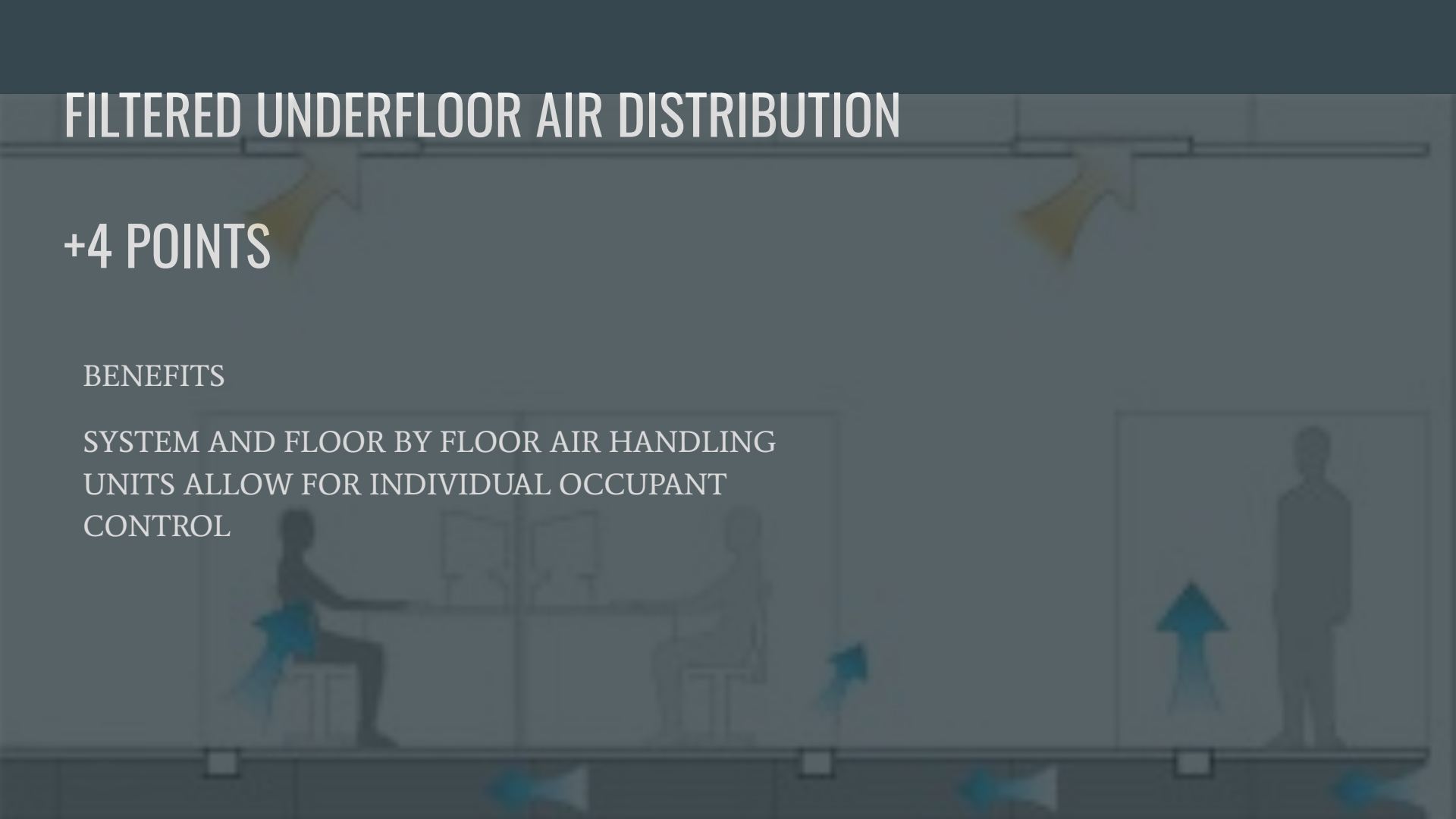
HIGHER CEILING INCREASE PEOPLE'S MOOD AND HEALTH BEING FOR THE OCCUPANTS, REDUCE ARTIFICIAL ILLUMINATION. PERMITS MAXIMUM DAYLIGHT AND OPTIMAL VIEWS.

FILTERED UNDERFLOOR AIR DISTRIBUTION

+4 POINTS

BENEFITS

SYSTEM AND FLOOR BY FLOOR AIR HANDLING UNITS ALLOW FOR INDIVIDUAL OCCUPANT CONTROL



CARBON DIOXIDE MONITORS

+1 POINT

BENEFITS

AUTOMATICALLY ADJUST THE AMOUNT OF FRESH AIR WHEN NECESSARY

GRAY WATER SYSTEM

+8 POINTS

BENEFITS

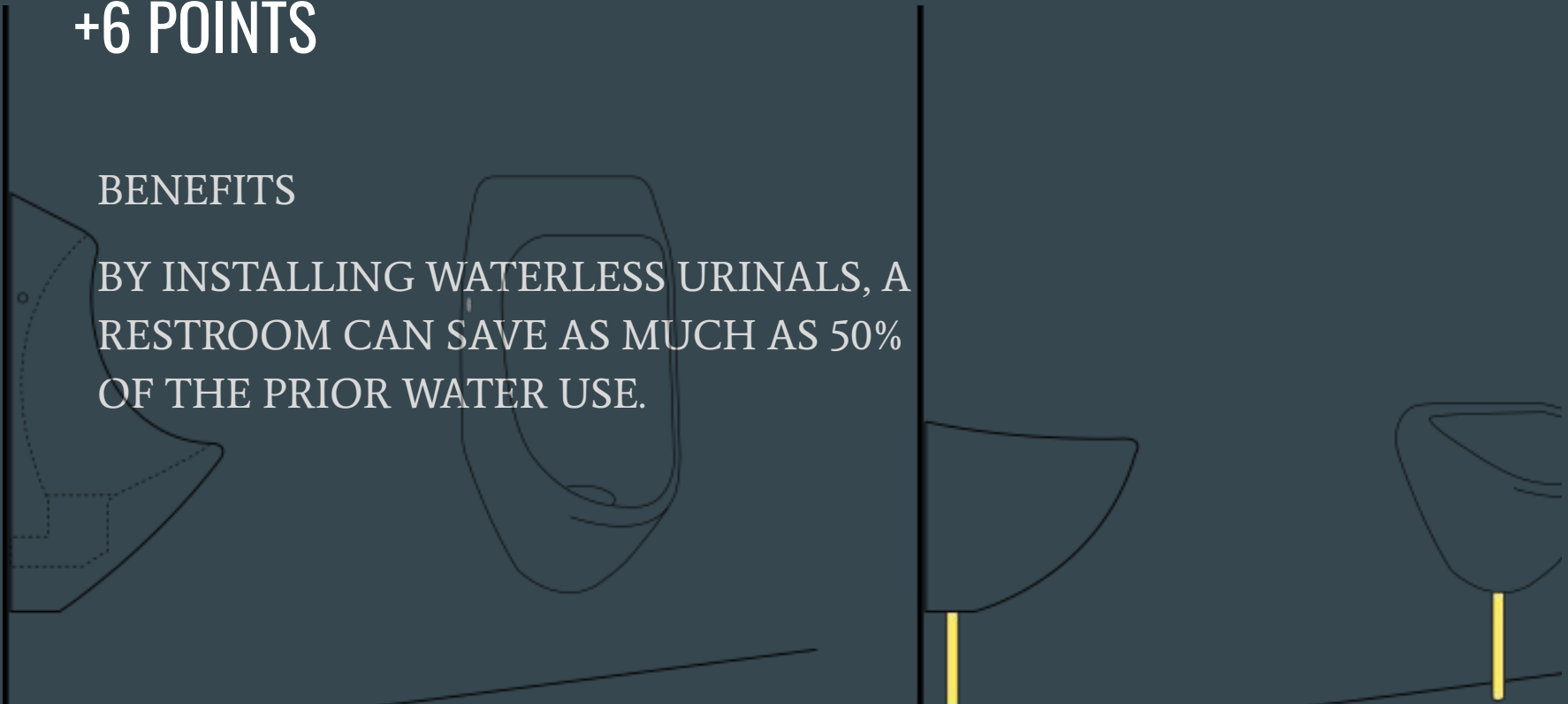
CAPTURES AND RE-USE RAINWATER, SAVING MILLION OF GALLONS OF WATER ANNUALLY

WATERLESS URINALS AND LOW-FLOW FIXTURES

+6 POINTS

BENEFITS

BY INSTALLING WATERLESS URINALS, A RESTROOM CAN SAVE AS MUCH AS 50% OF THE PRIOR WATER USE.

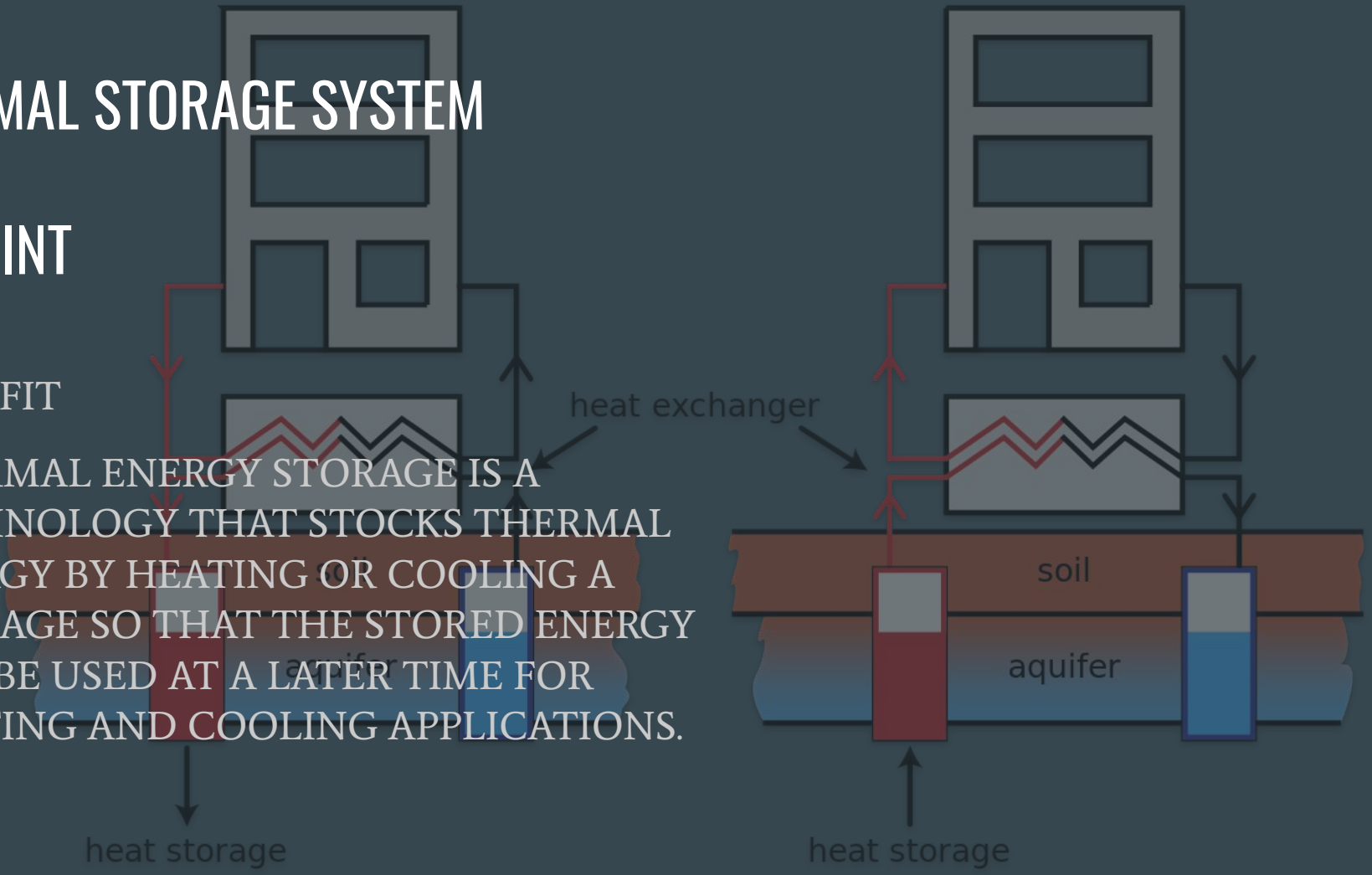


THERMAL STORAGE SYSTEM

+2 POINT

BENEFIT

THERMAL ENERGY STORAGE IS A TECHNOLOGY THAT STOCKS THERMAL ENERGY BY HEATING OR COOLING A STORAGE SO THAT THE STORED ENERGY CAN BE USED AT A LATER TIME FOR HEATING AND COOLING APPLICATIONS.



DAYLIGHT DIMMING LED LIGHTS

+2 POINTS

BENEFITS

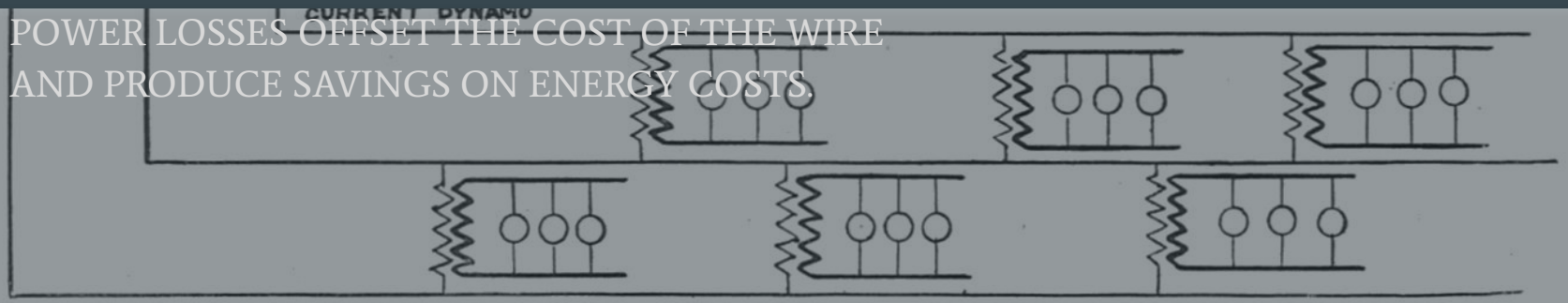
LIGHT DIMMERS SAVE ENERGY BY REDUCING THE ELECTRICITY TO THE BULB AND ALLOWING LIGHT TO OPERATE WITH LOWER POWER OUTPUTS. SINCE LIGHTS UNDER LESS STRESS SHINE LONGER, DIMMERS ARE KNOWN TO EXTEND THE LIFE-SPAN OF YOUR BULBS, TOO.

OVERSIZED ELECTRICAL CONDUCTORS

+18 POINTS

BENEFITS

REDUCE VOLTAGE DROP IN THE FEEDERS TO 2%BY INCREASING THE WIRE SIZE, REDUCED POWER LOSSES OFFSET THE COST OF THE WIRE AND PRODUCE SAVINGS ON ENERGY COSTS.



RECYCLABLE AND RENEWABLE BUILDING MATERIALS

+7 POINTS

BENEFITS

MATERIAL USED SUCH AS STEEL, WOOD, DRYWALL, BLAST FURNACE ARE ALL RECYCLE AND RENEWABLE. GREEN BUILDING MATERIALS ARE COMPOSED OF RENEWABLE, RATHER THAN NONRENEWABLE RESOURCES.

GREEN ROOF

+4 POINTS

BENEFITS

GREEN ROOF REDUCES AND SLOW STORMWATER RUNOFF IN URBAN ENVIRONMENTS, REMOVE AIR PARTICULATES, PRODUCE OXYGEN AND PROVIDES SHADES. GREEN ROOFS ALSO REDUCE ENERGY COSTS BY ABSORBING HEAT INSTEAD OF ATTRACTING IT AND PROVIDING NATURAL INSULATION FOR BUILDINGS.

STATE OF THE ART ONSITE COGENERATION PLANT

+19 POINTS

BENEFITS

PROVIDES 4.6 MEGAWATTS OF CLEAN AND EFFICIENT POWER. THE PROCESS OF COGENERATION PRODUCES HEAT AND POWER. HOWEVER DURING THE SUMMER MONTHS THE HEAT GENERATED MAY NOT BY FULLY UTILISED ON SITE. COGENERATION IS USING THE THE EXCESS HEAT TO OPERATE AN ABSORPTION CHILLER WHICH CAN PROVIDE ELECTRICITY HEATING AND COOLING FOR AIR CONDITIONING

LEED for Neighborhood Development Location

+16 POINTS

BENEFITS

PROJECT LOCATION IS WITHIN THE BOUNDARY OF A DEVELOPMENT CERTIFIED UNDER LEED FOR NEIGHBORHOOD DEVELOPMENT

ACCESS TO QUALITY TRANSIT

+5 POINTS

BENEFITS

BUILDING PROVIDE ACCESS TO BEST OF NYC PUBLIC TRANSPORTATION.

BIKE FACILITIES

+1 POINTS

BENEFITS

PROVIDING PEOPLE WHO USE BIKES A PLACE TO STORE THEIR BIKES REDUCES TRANSIT POLLUTION.

PLATINUM LEED

Platinum LEED Certification required 80+ points:

TOTAL POINTS:

104 > 80

PLATINUM CERTIFICATE

Higher ceiling and translucent insulating glass	8
Filtered underfloor air distribution	4
Carbon dioxide monitors	4
ray-water system	1
Waterless urinals and low-flow fixtures	8
Thermal storage system	8
Daylight dimming and LED lights	2
Oversized electrical conductors	18
Recyclable and renewable building materials	7
Green roof	4
State-of-the-art onsite co-generation plant	18
LEED for Neighborhood Development Location	16
Access to quality Transit	5
Bike Facilities	1
TOTAL POINTS:	104

References:

www.durst.org

www.usgbc.org

www.thebalancesmb.com

www.sustainability.ncsu

www.coned.com/en

All photos used are from google search

QUESTIONS?

Q & A

Does Bryant Park use 100% renewable energy?

A 4.6-megawatt, natural gas-fired cogeneration plant provides two thirds of the buildings electrical demand and is expected to reach 77% efficiency (greenroofs.com)

What do you think it's going to happen to office buildings as jobs transition to being remote?

Statement by Durst organization The Durst Organization is open for business and we are adapting and managing in this new environment. Many of us are working remotely and our on-site staff are at our buildings keeping people healthy and safe. (durst.org)

What are some of the new technologies implemented?

The building's advanced technologies include a clean-burning, on-site, 5.0 MW cogeneration plant, which provides approximately 65% of the building's annual electricity requirements and lowers daytime peak demand by 30%. A thermal ice storage system further helps reduce peak load on the city's over-taxed electrical grid by producing ice at night, which is then melted during the day to provide cooling. Rain and snow that fall on the site are captured and re-used as gray water to flush toilets and supply the cooling towers. (durst.org)

What kind of arrangement or facility are there for the disabled to enter this building?

The new theater will be fully handicapped accessible with 20 wheelchair-viewing positions (only found one fact about wheelchair access) (durst.org)

How does the building reduce its potable water consumption by 50%?

Gallon of water harvest. One Bryant Park collects every drop of rainwater that falls on its site, nearly 48 inches per year. A series of collection tanks distributed throughout the floors can store over 329,000 gallons of water that is used for irrigating plants and flushing the building's toilets (schindler.com)

What is the performance of the windows? Technical? Renewable?

Windows are 9.5-feet-tall, from floor-to-ceiling made of “low iron” glass, manufactured and fabricated into windows by Italy's Permasteellisa. They are at once more transparent than conventional glass yet still highly insulating Windows are not renewable. (up to 50% of materials are renewable) (durst.com)

Explain the thermal storage system for this building. What is it, what does it look like, how does it operate?

Thermal storage system at cellar level produces ice in the evening when electricity rates are lowest to reduce peak daytime demand loads on the city (durst.com)

What is one Bryant park rated at in Leed certification?

Bryant park is still rated one of highest among leed certified buildings around the city. (durst.com)

Is One Bryant Park one of the most sustainable buildings in NYC?

One of them, along with the Schermerhorn, world trade, and empire state building. (Even though recent news is that one bryant park uses twice as much energy per square ft than the empire state.) (intercongreen.com)

Per sq ft to build leed?

Specifically one bryant park was $175 (the real deal)

What is the carbon footprint for this building?

Creates net zero carbon dioxide emissions. (greenroofs.com) How is clean air handled in this building? Be specific to the equipment and measurement. The air inside the building is pulled in through intakes at least 100 feet (30 meters) above the street, cleaned through a filter that captures about 95 percent of particulates, and then cleaned again before it is distributed throughout the building. (greenroofs.com)

Is the building only certified in LEED or is there another rating?

No other certification are shown on the official web (durst.org)

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