EMPIRE STATE REALTY TRUST

ESRT IEQ & ESRT Turnkey Suites

ESRT ESG & IEQ

Environmental Sustainability

Increases Employee Recruitment, Retention and Productivity





INDOOR ENVIRONMENTAL QUALITY (IEQ)

MERV 13 filters

Ventilation

Active bi-polar ionization*

Space-specific air handlers

Portfolio-wide low/no VOC materials



HEALTHY BUILDINGS

Air + water quality management

Green certified cleaning & sanitation

Waste reduction training

Health Service resources

Stakeholder engagement



ENERGY EFFICIENCY

100% renewable wind powered

Reduction in greenhouse emissions

Save \$1+ per square foot

Reduce operating costs

Portfolio Awards & Achievements







Energy Star
Partner of the Year















ESRT ESG & IEQ

Carbon Neutrality



REDUCED EMISSIONS

by 43% in our entire portfolio and 54% at the Empire State Building



PURCHASED WIND RECS

for 100% of the commercial portfolio's electrical usage as of January 2021, and for the Empire State Building
Since January 2011



PARTNERED WITH 18 RESERVES AND ACT

to support the preservation of biodiverse forest ecosystem and offset 100% of non-electric fossil fuel usage across entire portfolio

This is just one step in our commitment to our operational carbon neutrality target of 80% emissions reduction at ESB by 2030 and for 100% of the commercial portfolio by 2035. As we reduce emissions through our ESRT 2.0 work, we will offset our fossil fuel emissions through accredited sources until we reach our reduction goals.

ESRT ESG & IEQ

ESRT IEQ





Indoor Environmental Quality (IEQ) improves employee health and productivity.

We've created a program of industryleading healthy suites to provide tenants with the opportunity to maximize their IEQ, employee recruitment and retention, and their bottom line.



LIGHT QUALITY

Natural Light with Views

78% of employees state access to natural light and views improves their wellbeing; 70% report improved work performance.

-Harvard Business Review

Daylight Dimming

Workers in naturally lit offices report >50% reduction in eye strain, headaches, and drowsiness.

-Harvard Business Review



AIR QUALITY

Bi-Polar Ionization

Neutralizes 99.92% of coronaviruses.

-Microchem Laboratory

CO₂ Sensors

Workers with low levels of CO₂ perform 50% better on cognitive tasks.
-Harvard School of Public Health

MERV 13 Filters

Removes 85% of harmful air particles (e.g. allergens, viruses, and bacteria).

-Center of Disease Control

Ventilation

Mitigates indoor air pollution, a top 10 cause of illness in humans.
-World Health Organization



HEALTHY PRODUCTS

Low/No VOC Materials & No Red List Materials

VOCs are typically 10x higher indoors, which has adverse effects on human health and the environment.

-Center for Disease Control

ESRT Turnkey Suites

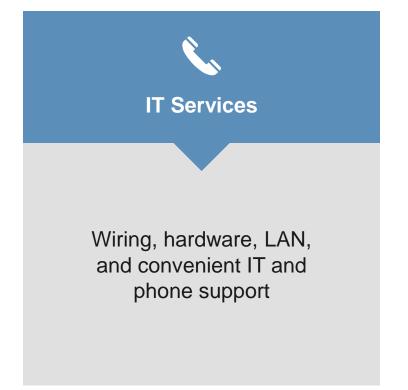
EMPIRE STATE

ESRT Turnkey Suites

Turnkey Services







OFFICE FRONT OPTIONS



Clear Anodized Metal and Butt-Glazed System



Butt-Glazed Wall with Aluminum Top/Bottom Channel



Black Metal and Butt-Glazed System



Wood and Glass

PANTRY FINISH OPTIONS

Pantry Finish Options



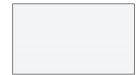
Solid Surface Countertop Manufacturer: Hanstone Color: Royal Blanc Thickness: 1-1/4"



Solid Surface Countertop Manufacturer: Caesarstone Color: Pure White 1141 Thickness: 1-1/4"



Pantry Millwork Manufacturer: Pionite Item: WW160SD Color: Pralines & Cream Finish:Textured



Pantry Millwork
Manufacturer: WilsonArt
Item: D354K-01 Laminate
Color: Designer White
Finish: Gloss



Furniture Island Manufacturer: OFS Item: Kintra Color: Steel (Other finishes available upon request) Finish: Veneer or Laminate



HVAC STYLE OPTIONS



Exposed or Painted Rectangular Duct



Exposed Flat Oval Duct



Soffited Duct

PANTRY FINISHES

Option 1



Option 2



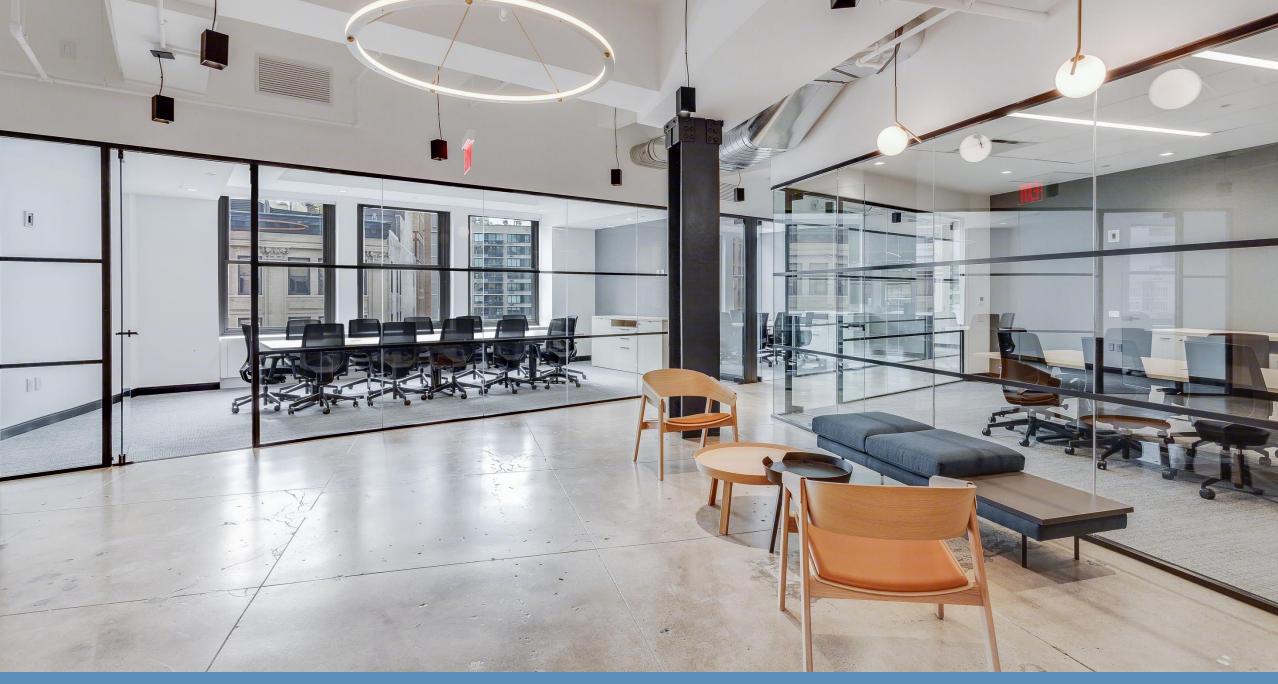
Option 3

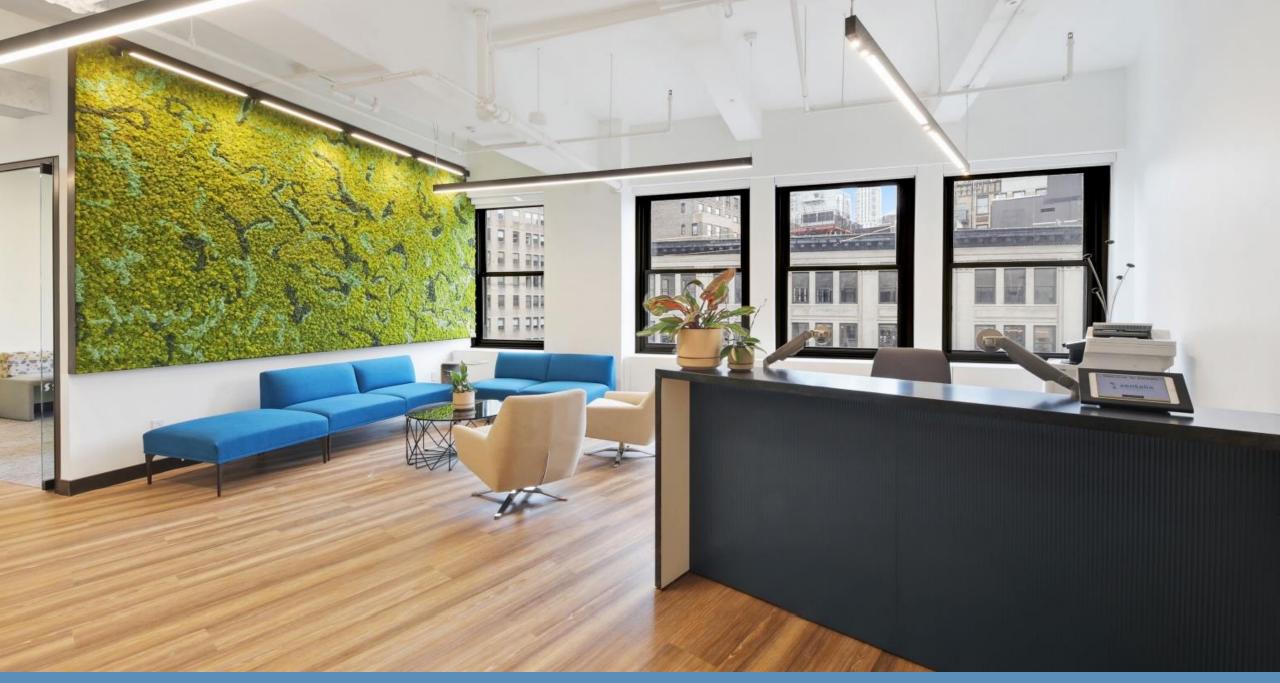


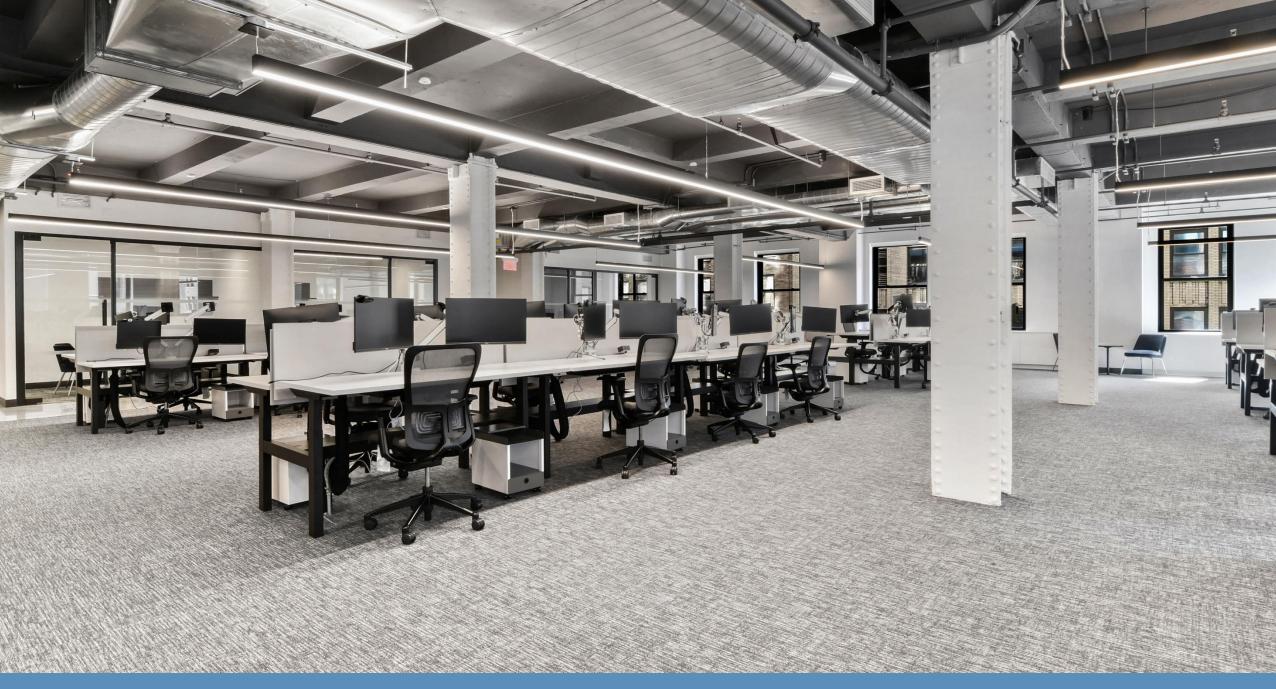












Indoor Environmental Quality + Health and Wellness

- MERV 13 Filters in 100% of ESRT controlled HVAC systems
- Meet or exceed ASHRAE 62.1 Ventilation in all properties
- Increased ventilation throughout pandemic
- Bi-polar Ionization Purification
- Comprehensive air and water testing in all properties
- Green cleaning products in all properties
- Integrated Pest Management in all properties
- No/Low VOC and no Red List Materials for all projects
- CO2 Sensors and DCV
- Pilot real-time IEQ Monitoring



AIR FILTRATION

- Space-specific 24/7 HVAC
- MERV 13 filters (which filter everything from dust, pollen, and mold to bacteria)

PERFORMANCE VERIFICATION

 Annual comprehensive third-party air and water quality testing

OPERATIONS

- Integrated pest management practices
- Certified Green Cleaning products

Vision for the Future

ESRT's Environmental Goals

- Our commitments toward energy efficiency and carbon reduction:
 - Reduce emissions 40X30 and 80X50
 - Net zero emissions for the Empire State Building by 2030
 - Net zero emissions for the commercial portfolio by 2035 (Empire Building Challenge)
 - Entire commercial portfolio complies with LL97 and will have no fines through 2030
 - 100% renewable wind power for the full portfolio as of January 2021
 - (100% renewable wind power for the Empire State Building since 2011)
- Reduce energy use intensity 20% by 2024 (Better Buildings Challenge)
- Target 30% reduction in water intensity by 2035
- Target 75% waste diversion rate by 2035
- Data driven performance for energy procurement and management

Our High-Performance Sustainable Healthy
Design and Construction Guidelines,
for tenant fit-outs provide requirements and
recommendations for environmental
management systems, energy and GHG
emissions management, water and waste
management, IEQ, sustainable procurement
and climate change adaptation and resilience

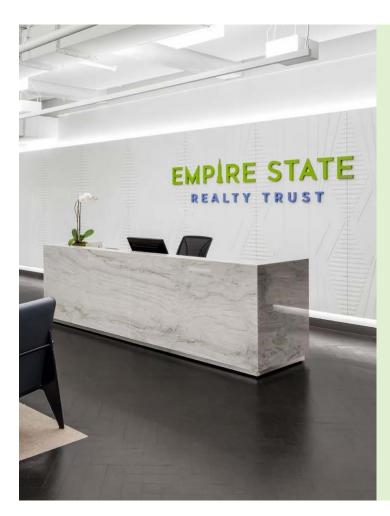
Thought Leadership + Industry Engagement

- RE Roundtable Sustainable Policy Advisory Committee
- NYC Sustainability Advisory Board
- LL97 Advisory Board + Working Group Co-Chair
- WELL Living Lab / Mayo Clinic
- REBNY Sustainability Committee
- NAREIT Real Estate Sustainability Committee
- Urban Green Board of Directors
- ULI Tenant Energy Optimization Program
- NYC Mayor's Carbon Challenge
- The Clean Fight (Final Round Judge)
- RER SPAC Chair
- LEED Steering Committee

Our properties are Innovation Labs, where we test new technologies that measurably improve the performance of our assets and tenant spaces

ESRT Solidly Stands Apart

Financial Stability



In a volatile market, it is critical for tenants to partner with a financially stable, service-oriented owner on real estate decisions.

Empire State Realty Trust, a publicly traded company with a best-in-class balance sheet maintains a solid financial platform and leads the way on healthy buildings with premier indoor environmental quality (IEQ), industry-leading sustainability and energy efficiency practices, and unmatched amenities.

TENANT ADVANTAGES

Certainty of owner performance/service

Consistent, high-level service/maintenance

No cut corners on construction or operations

High-end finishes

Flexibility of offerings such as terms & options

Expedited response time with no need for lender/partner approvals

FINANCIAL STABILITY

\$1.2B in liquidity

No Debt Maturity until 11/24

Well laddered Debt Maturity schedule

5.6x Net debt/Adj. EBITDA (REIT peer average: 9.3x)

\$1B spent on property upgrades

No floating rate debt

ESRT is a service firm and a true partner to its tenants with **255 expansions** which total over **2.4M RSF** since it went public in 2013. This partnership allows our tenant family to move within the ESRT portfolio hassle free with a commitment to **100% commission** paid on lease signing.

EMPIRE STATE REALTY TRUST

Thank You! Let's connect.