



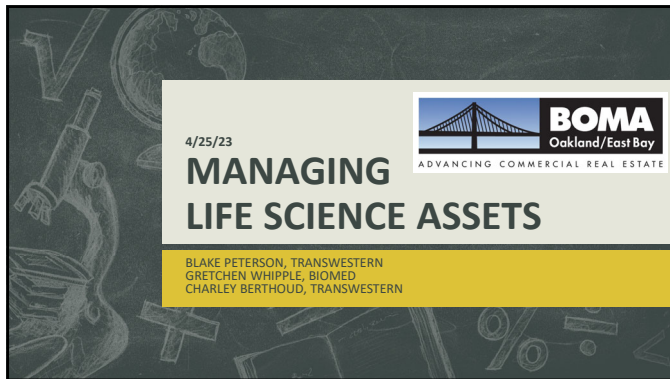
Education & Learning

MANAGING A LIFE SCIENCE PROPERTY

Tuesday, April 25
11:30 am - 1:30 pm
Gate 510 | San Leandro

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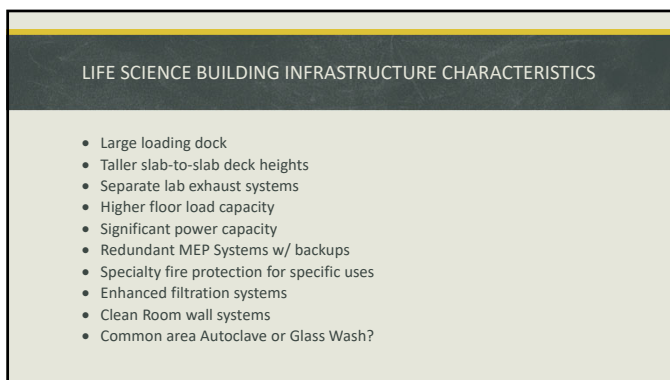
4/25/23

**MANAGING
LIFE SCIENCE ASSETS**

BLAKE PETERSON, TRANSWESTERN
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BOMA
Oakland/East Bay
ADVANCING COMMERCIAL REAL ESTATE

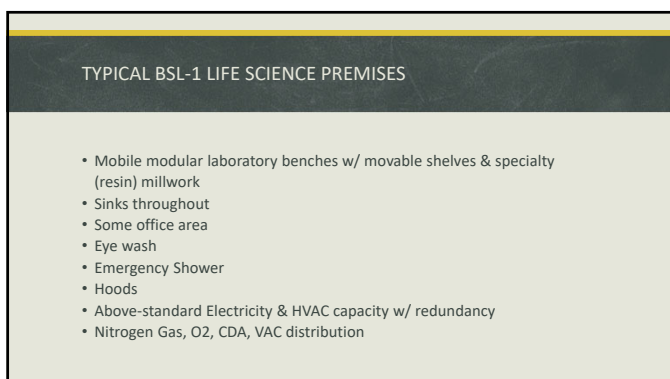
1



LIFE SCIENCE BUILDING INFRASTRUCTURE CHARACTERISTICS

- Large loading dock
- Taller slab-to-slab deck heights
- Separate lab exhaust systems
- Higher floor load capacity
- Significant power capacity
- Redundant MEP Systems w/ backups
- Specialty fire protection for specific uses
- Enhanced filtration systems
- Clean Room wall systems
- Common area Autoclave or Glass Wash?

2



TYPICAL BSL-1 LIFE SCIENCE PREMISES

- Mobile modular laboratory benches w/ movable shelves & specialty (resin) millwork
- Sinks throughout
- Some office area
- Eye wash
- Emergency Shower
- Hoods
- Above-standard Electricity & HVAC capacity w/ redundancy
- Nitrogen Gas, O2, CDA, VAC distribution

3

LIFE SCIENCE PROPERTY MANAGER RESPONSIBILITIES

- 24/7 availability
- Specialty contractors
- Critical relationship between best-in-class engineering team and PM team
- Extended building hours
- Environmental Health & Safety contract & regular inspections & safety training
- Loading Dock Management & Attended
- Fuel maintenance program for generators
- Haz Mat disposal & storage
- Construction coordination
- Tenant Equipment Maintenance
- Tenants included in FLS & access alarms
- Emergency Response Plans
- Tenant Communication Challenges
- PPE & protocol requirements for tenant premises access
- Building Project Coordination w/ Tenant project cycle
- Amenities Space

4

LIFE SCIENCE LEASES MAY INCLUDE

- Specific electrical watts/sf
- Permitted uses
- Access control limitations
- Leak detection requirements
- Tenant provided janitorial
- When HVAC is provided & how submetered
- SDS reporting to Landlord
- Special environmental & pollution liability insurance coverage
- Potential Landlord penalties for extended interruption of utilities/services
- Detailed move-out & restoration requirements decommissioning

5

COMMON LIFE SCIENCE TERMINOLOGY

- Autoclave
- Biosafety Level 1-4 (BSL)
- Biosafety Cabinet (BSC)
- CRISPR Gene Editing
- Clean Dry Air (CDA)
- Environmental Health & Safety (EH&S)
- Fume Hood
- Glass Washer
- Maximum Allowable Quantities (MAQs) for hazmat
- Vivarium
- Vacuum (VAC)
- High Efficiency Particulate Air(filter) (HEPA)
- Safety Data List (SDS) no longer MSDS

6

ACRONYM GUIDE

Every industry has there own specialty terminology which then results in acronyms. Real estate is no different and we speak our own language. Here is a list of commonly used real estate abbreviations and acronyms and what they mean.

ACRONYM	MEANING
1031	1031 Tax Deferred Exchange
ABA	Architectural Barriers Act (for Federal Facilities in conjunction with ADA)
AC	Air Conditioning
ADA	Americans With Disabilities Act
ADAAG	Americans With Disabilities Act Accessibility Guidelines
AFE	Authority For Expenditure
AFF	Above Floor Finish
AFFO	Adjusted Fund From Operations
AGM	Assistant General Manager
AHJ	Authority Having Jurisdiction
AHU	Air Handling Unit
AIA	American Institute of Architects
AP	Accounts Payable
APM	Assistant Property Manager
APR	Annual Percentage Rate
AR	Accounts Receivable
ASHRAE	American Society of Heating, Refrigeration, and AC Engineers
BAE	BOMA Association Executive
BAFO	Best & Final Offer
BAS	Building Automation System
BEEP	BOMA Energy Efficiency Program
BI	Building Improvements
BMS	Building Management System
BOMA	Building Owners and Managers Association
BOMI	Building Owners and Managers Institute
BS	Balance Sheet
BR	Base Rent
BSCAI	Building Service Contractors Association Inc
CAD	Computer Aided Design (or CADD, Computer Aided Drafting & Design)
CAM	Common Area Maintenance
CAP	Capitalization
CAP EX	Capital Expenditure
CBA	Collective Bargaining Agreement
CBD	Central Business District
CBSE	Certified Building Service Executive
CCD	Center City District
CCTV	Closed Circuit Television
CD's	Construction Drawings
CO or CofO	Certificate of Occupancy

ACRONYM GUIDE

ACRONYM	MEANING
COI	Certificate of Insurance
CPA	Certified Public Accountant
CPI	Consumer Price Index
CPM	Certified Property Manager
CRE	Commercial Real Estate
CREW	Commercial Real Estate Women
DE&I	Diversity, Equity & Inclusion
D&I	Diversity & Inclusion
DBA	Doing Business As
DBPR	Department of Business and Professional Regulation
DEP	Department of Environmental Protection
DMARC	Telephone/Data Demarcation - usually where it enters the property
DOE	Department of Energy
EBITDA	Earnings Before Interest, Taxes, Depreciation & Amortization
EC	Electrical Contractor
EER	Experience Exchange Report
EFT	Electronic Funds (or Files) Transfer
EGR	Effective Gross Rent
EMS	Emergency Management System
EPA	Environmental Protection Agency
EPP	Emergency Preparedness Plan
FACP	Fire Alarm Control Panel
FAD	Funds Available for Distribution
FAR	Floor Area Ratio
FE	Fire Extinguishers
FEMA	Federal Emergency Management Agency
FF&E	Furniture, Fixtures and Equipment
FFO	Funds From Operations
FHA	Federal Housing Administration
FICA	Federal Insurance Contributions Act
FMA	Facilities Management Administrator
FMR	Fair Market Rent
FMV	Fair Market Value
FY	Fiscal Year
GC	General Contractor
GL	General Ledger
GM	General Manager
GRM	Gross Rent Multiplier
GSF	Gross Square Footage
HC	Handicapped

ACRONYM GUIDE

ACRONYM	MEANING
HOA	Home Owners Association
HUD	Housing Urban Development
HVAC	Heating Ventilating and Air Conditioning
HW	Hot Water
IAQ	Indoor Air Quality
IDF	Independent Distribution Frame, a secondary information technology/telecom room/closet
IFMA	International Facility Management Association
INC	Incorporated
IPO	Initial Public Offering
IR	Infrared Technology
IREM	Institute of Real Estate Management
IRR	Internal Rate of Return
IWCA	International Window Cleaners Association
JV	Joint Venture
KFA	Known Formerly As
KPI	Key Performance Indicators
LC	Leasing Commissions
LEED	Leadership in Energy and Environmental Design
LEED AP	LEED Accredited Professional
LEED EB	LEED Existing Building
LEED OM	LEED Operations & Maintenance
LL	Landlord
LLC	Limited Liability Corporation
LLP	Limited Liability Partnership
LO	Lease Option
LOC	Letter of Credit
LOI	Letter of Intent
LTV	Loan to Value (Ratio)
LVT	Luxury Vinyl Tile (Flooring)
M&A	Mergers & Acquisitions
MDF	Main Distribution Frame (IT network / telecom room)
MEP	Mechanical, Electrical, Plumbing
MF	Multi-family
MOU	Memo of Understanding
MWBE	Minority or Women Business Entity
NAIOP	National Association of Industrial & Office Properties
NAR	National Association of Realtors
NAV	Net Asset Value
NFPA	National Fire Protection Agency
NNN	Triple Net Lease

ACRONYM GUIDE

ACRONYM	MEANING
NOC	Notice of Commencement
NOI	Net Operating Income
NPV	Net Present Value
OPEX	Operating Expenses
PAC	Political Action Committee
PGI	Potential Gross Income
PIR	Passive Infrared (Motion Detector)
P&L	Profit & Loss Statement
PM	Property Manager or Preventative Maintenance
POTS	Plain Old Telephone Service (analog phone line)
PPE	Personal Protective Equipment
PSA	Purchase Sales Agreement
PSV	Pressure Sensitive Vinyl - related to signage applied to smooth surfaces like glass
PY	Prior Year
Q1	1st quarter of year (calendar Jan, Feb & March, fiscal usually July, Aug & Sept)
Q2	2nd quarter of year (calendar Apr, May & June, fiscal usually Oct, Nov & Dec)
Q3	3rd quarter of year (calendar July, Aug, & Sept, fiscal usually Jan, Feb & March)
Q4	4th quarter of year (calendar Oct, Nov & Dec, fiscal usually Apr, May & June)
REA	Reciprocal Easement Agreement
REIT	Real Estate Investment Trust
REO	Real Estate Owned
RET	Real Estate Taxes
REX	Request to Exit (Sensor)
RFP	Request for Proposal
ROFO	Right of First Offer
ROFR	Right of First Refusal
ROI	Return on Investment
RPA	Real Property Administrator (a BOMI designation)
RSF	Rentable Square Feet
RTU	Rooftop Unit
SD	Security Deposit
SDS	Safety Data Sheets
SEC	Securities and Exchange Commission
SEER	System Energy Efficiency Rating
SF	Square Footage
SIOR	Society of Industrial & Office Realtors
SLA	Service Level Agreement
SMA	Systems Maintenance Administrator (a BOMI designation)
SMT	Systems Maintenance Technician (a BOMI designation)
SNDA	Subordination Non-Disturbance Attornment

ACRONYM GUIDE

ACRONYM	MEANING
SOW	Scope of Work / Statement of Work
SWOT	Strengths, Weaknesses, Opportunities, Threats
TB	Trial Balance
TI	Tenant Improvement
TIC	Tenants in Common
TOBY	The Outstanding Building of the Year
TOV	Timed Override (HVAC)
TSC	Tenant Services Coordinator
TSR	Tenant Service Request
TT	Tenant
UBIT	Unrelated Business Income Tax
UCD	University City District
UPS	Uninterruptible power supply
USF	Usable Square Feet
USGBC	U.S. Green Building Council
VAT	Vinyl Asbestos Tile (Flooring)
VCT	Vinyl Composite Tile (Flooring)
VOIP	Voice Over Internet Protocol
WO	Work order, may be either reactive or preventative maintenance
WOB	Women Owned Business
YOY	Year Over Year
YTD	Year to Date

Common Life Science Terminology

Autoclave
 Biosafety Level 1-4 (BSL)
 Biosafety Cabinet (BSC)
 CRISPR Gene Editing
 Clean Dry Air (CDA)
 Environmental Health & Safety (EH&S)
 Fume Hood
 Glass Washer
 Maximum Allowable Quantities (MAQs) for hazmat
 Vivarium
 Vacuum (VAC)
 High Efficiency Particulate Air(filter) (HEPA)
 Safety Data List (SDS) no longer MSDS