BISHOPSGATE

ANNIE PANTELI HEAD OF OPERATIONS 22 BISHOPSGATE JLL

INTRODUCTION

PETER BICKNELL HEAD OF ENGINEERING 22 BISHOPSGATE JLL

JLL presenting on behalf of AXA IM

22 BISIOPSGATE

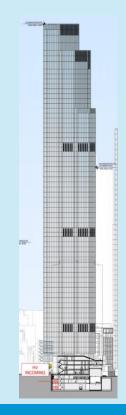
A building with soul collaboration, culture and creativity.

22 is made up of a variety of working environments, aimed at connecting and energising high performance teams. With collaboration, culture and creativity at its heart, we want to make 22 a place for everyone who works here to be inspired, learn, share and enjoy.

"AXA IM appointed JLL based on a shared purpose to create a unique, industry leading property management service at 22 Bishopsgate, placing people at its heart." JAMES GOLDSMITH, LEASING DIRECTOR, AXA



HV, MV, Generators + LV Systems



HV-33000v



MV-11000v

- 14x 11KV/400V Transformers.
- 6 MV panels.
- 1.5 mile of MV cabling
- 6x 2000 KVA Gen sets. 105 Tonne.
- Fuel system with 10 separate tanks.
- 120,760 litres of diesel weighing 108 tonne.
 Enough fuel for a car to drive to the moon and back twice @ over 1 million miles.
- 90%+ load capacity of entire building load

GEN-11000v

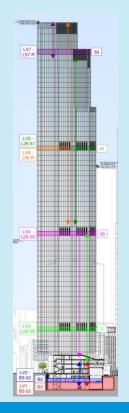
GEN A GEN B

DASENTED:

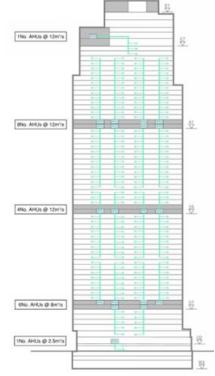
BREAK

- 49 LV panels and automatic transfer switches
 39 bus bar runs
 594 Distribution
 - boardsAll tenants boards plug and play!
 - 22 miles of LV cabling for submain supplies.
 Enough to reach Basildon from where you stand.

LV-400/230v



Ventilation + Water Services

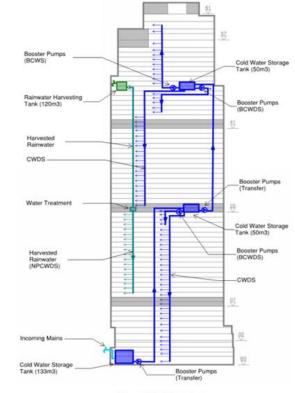




- 28 Air handling units

 (AHU) and 27 fans
 moving 500m³ of air per second at 12mph.

 That is this area twice in air a second.
- 35 miles of ductwork total.

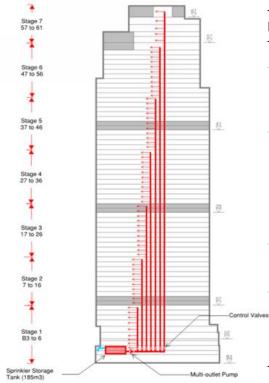


WATER

- Water is provided by 3 water tanks and a pumped up service.
- The floors are fed down from the tanks.
- The tanks have the capacity of 233,000 litres, weighing 233 tonne.

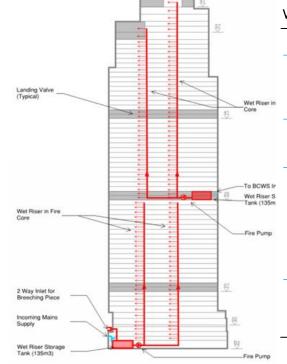
Domestic Cold Water System

WHAT DO WE HAVE? Fire Suppression & Wet Risers



FIRE SUPPRESSION

- 2x 200KW sprinkler pumps with 7 stage activation.
- These are the largest multi-stage pumps in Western Europe giving 34 bar pressure and 1,350 litres per minute flow.
- There are in total 20,000 sprinkler heads.
- The sprinkler tanks holds 185,000 litres of water, weighing in at 185 tonne.



WET RISERS

- The wet riser consists of 2 outlets on each floor for use by the Fire Brigade.
- The system is split in two at level 25.
- The wet riser is served by 2x 135,000 litre tanks and pumps giving 8 bar pressure at the outlet and 1,500 litres per minute.
- At that rate our wet riser could fill 10 baths of water in under a minute.

Sprinkler System

Wet Riser System

Vertical Transportation

VEHICLE LIFTS

- 2 vehicle lifts used for refuse lorries and building deliveries.
- Sized at 11m long by 5m wide.
- Rated at 26 tonne each.
- THESE ARE THE LARGEST VEHICLE LIFTS IN THE CITY OF LONDON.

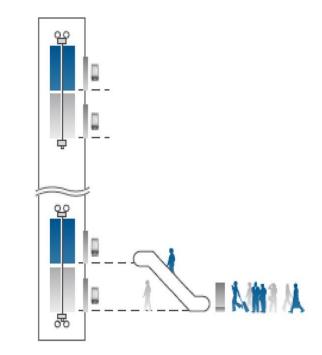
ESCALATORS

- 10 escalators installed within the reception area.
- Multi speed escalators for energy efficiency.

PASSENGER LIFTS

- 53 lifts in total.
- 24 double decker lifts travelling at 17.9mph carrying up to 52 people allowing odd and even floors to be served simultaneously.
- The fastest double decked lifts in EUROPE!
- 3 goods lifts serving floors B3 – 60 with a rating of 3 tonne.
- 2 dedicated express
 viewing gallery lifts with
 the capacity of 60
 people.
- Ground to Level 59 in under 40 seconds.





Life Safety - Fire Alarm + PA/VA

FIRE ALARM

- No. Devices = 9,563

- No. Panels = 108
- 150 miles of cabling for all fire alarm and EVC systems.
- Enough cabling to reach Bruges, Belgium from London.
- Dedicated Fire Command Centre

PA/VA

- No. Panels = 72
- No. Speakers = 5,327
- No. of Amplifiers = 269
- Total power = 40,000W
- That's enough wattage to have a good Rock Concert.





OUR POSITION

THIS IS THE 'SMART BUILDING' OF THE FUTURE.

"Think of it like a living organism. It will collect sensor data through the day about usage patterns of power, heat, light and waste and will breathe in and out with the cycles of human activity."

PROFESSOR MARK SKILTON, WARWICK BUSINESS SCHOOL



WHERE DID WE START?

MOBILISING FIRE SAFETY THE 22 BISHOPSGATE WAY



ENGINEERING TRANSLATION





HUMAN ELEMENT

Tool S

Pick our partners



Lay the foundations



Lean into our experts



Engage the people



HUMAN ELEMENT

"Can the planned evacuation be carried out on a Sunday?"

"Can the alarm test be silenced this week?"



PRACTISE & SUPPORT

- Its more than just an email
- Everyone has a role & a reason
- It's a community collaboration
- We guide, support & lead





WE CAN'T STAND STILL

NOW, WE GO LIVE

Engineering Translation

Human Element

Practise



Do Not Stand Still





NOW HEAR IT FROM THE PEOPLE THAT HELPED DELIVER IT...

