



Engineer's Team LTD

Web site: www.innodez.co.uk

Email: hello@innodez.co.uk

CLIENT: FEDOR PECHININ

ADDRESS: 100 BUNHILL ROW, LONDON, EC1Y 8ND

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE DESIGNER AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT CONSENT OF THE DESIGNER.

NOTES:

1. ALL DIMENSIONS HEREIN ARE IN METRIC UNITS UNLESS STATED OTHERWISE.
2. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT DESIGNER, ENGINEER OR SPECIALIST DRAWINGS AND SPECIFICATIONS.
3. THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

Air System Sizing Summary for HVAC 10P BOARDROOM

Air System Name HVAC 10P BOARDROOM
Equipment Class CASSETTE UNIT
Air System Type SZCAV
Number of zones 1
Floor Area 25.2 m²
Location London - Bunhill Row, United Kingdom

Sizing Calculation Information
Calculation Months Jan to Dec
Sizing Data Calculated
Zone L/s Sizing Sum of space airflow rates
Space L/s Sizing Individual peak space loads

Central Cooling Coil Sizing Data
Total coil load 4.0 kW
Sensible coil load 3.3 kW
Coil L/s at Aug 1600 259 L/s
Max block L/s 259 L/s
Sum of peak zone L/s 259 L/s
Sensible heat ratio 0.838
L/s (kW) 64.9
m³/kW 6.3
W/m² 158.3
Water flow @ 5.6 K rise N/A
Load occurs at Aug 1600
OA DB / WB 27.2 / 18.9 °C
Entering DB / WB 24.9 / 18.0 °C
Leaving DB / WB 14.1 / 13.4 °C
Coil ADP 12.7 °C
Bypass Factor 0.120
Resulting RH 52 %
Design supply temp. 12.8 °C
Zone T-stat Check 1 of 1 OK
Max zone temperature deviation 0.0 K

Central Heating Coil Sizing Data
Max coil load 2.1 kW
Coil L/s at Des Htg 259 L/s
Max coil L/s 259 L/s
Water flow @ 11.1 K drop N/A
Load occurs at Des Htg
W/m² 85.0
Ent. DB / Lvg DB 17.9 / 24.8 °C

Supply Fan Sizing Data
Actual max L/s 259 L/s
Standard L/s 259 L/s
Actual max L/(s·m²) 10.27 L/(s·m²)
Fan motor BHP 0.00 BHP
Fan motor kW 0.00 kW
Fan static 0 Pa

Outdoor Ventilation Air Data
Design airflow L/s 33 L/s
L/(s·m²) 1.29 L/(s·m²)
L/s/person 3.26 L/s/person

Air System Sizing Summary for HVAC 12P BOARDROOM

Air System Name HVAC 12P BOARDROOM
Equipment Class CASSETTE UNIT
Air System Type SZCAV
Number of zones 1
Floor Area 24.2 m²
Location London - Bunhill Row, United Kingdom

Sizing Calculation Information
Calculation Months Jan to Dec
Sizing Data Calculated
Zone L/s Sizing Sum of space airflow rates
Space L/s Sizing Individual peak space loads

Central Cooling Coil Sizing Data
Total coil load 4.5 kW
Sensible coil load 3.8 kW
Coil L/s at Aug 1600 285 L/s
Max block L/s 285 L/s
Sum of peak zone L/s 285 L/s
Sensible heat ratio 0.830
L/s (kW) 62.7
m³/kW 5.3
W/m² 187.9
Water flow @ 5.6 K rise N/A
Load occurs at Aug 1600
OA DB / WB 27.2 / 18.9 °C
Entering DB / WB 25.0 / 18.1 °C
Leaving DB / WB 14.0 / 13.3 °C
Coil ADP 12.5 °C
Bypass Factor 0.120
Resulting RH 52 %
Design supply temp. 12.8 °C
Zone T-stat Check 1 of 1 OK
Max zone temperature deviation 0.0 K

Central Heating Coil Sizing Data
Max coil load 2.4 kW
Coil L/s at Des Htg 285 L/s
Max coil L/s 285 L/s
Water flow @ 11.1 K drop N/A
Load occurs at Des Htg
W/m² 99.4
Ent. DB / Lvg DB 17.8 / 24.8 °C

Supply Fan Sizing Data
Actual max L/s 285 L/s
Standard L/s 284 L/s
Actual max L/(s·m²) 11.77 L/(s·m²)
Fan motor BHP 0.00 BHP
Fan motor kW 0.00 kW
Fan static 0 Pa

Outdoor Ventilation Air Data
Design airflow L/s 37 L/s
L/(s·m²) 1.54 L/(s·m²)
L/s/person 3.11 L/s/person

Air System Sizing Summary for HVAC 4P MEETING ROOM 01

Project Name: F_100 Bunhill Row
Prepared by: Engineer's Team LTD
05/17/2026 11:01PM
Air System Name HVAC 4P MEETING ROOM 01
Equipment Class CASSETTE UNIT
Air System Type SZCAV
Number of zones 1
Floor Area 8.2 m²
Location London - Bunhill Row, United Kingdom

Sizing Calculation Information
Calculation Months Jan to Dec
Sizing Data Calculated
Zone L/s Sizing Sum of space airflow rates
Space L/s Sizing Individual peak space loads

Central Cooling Coil Sizing Data
Total coil load 2.5 kW
Sensible coil load 2.2 kW
Coil L/s at Aug 1600 170 L/s
Max block L/s 170 L/s
Sum of peak zone L/s 170 L/s
Sensible heat ratio 0.889
L/s (kW) 69.1
m³/kW 3.3
W/m² 300.1
Water flow @ 5.6 K rise N/A
Load occurs at Jul 1600
OA DB / WB 27.2 / 18.9 °C
Entering DB / WB 24.8 / 17.7 °C
Leaving DB / WB 14.1 / 13.3 °C
Coil ADP 12.6 °C
Bypass Factor 0.120
Resulting RH 50 %
Design supply temp. 12.8 °C
Zone T-stat Check 1 of 1 OK
Max zone temperature deviation 0.0 K

Central Heating Coil Sizing Data
Max coil load 1.2 kW
Coil L/s at Des Htg 170 L/s
Max coil L/s 170 L/s
Water flow @ 11.1 K drop N/A
Load occurs at Des Htg
W/m² 143.5
Ent. DB / Lvg DB 18.9 / 24.6 °C

Supply Fan Sizing Data
Actual max L/s 170 L/s
Standard L/s 170 L/s
Actual max L/(s·m²) 20.75 L/(s·m²)
Fan motor BHP 0.00 BHP
Fan motor kW 0.00 kW
Fan static 0 Pa

Outdoor Ventilation Air Data
Design airflow L/s 12 L/s
L/(s·m²) 1.52 L/(s·m²)
L/s/person 3.12 L/s/person

Air System Sizing Summary for HVAC 4P MEETING ROOM 02

Project Name: F_100 Bunhill Row
Prepared by: Engineer's Team LTD
05/17/2026 11:02PM
Air System Name HVAC 4P MEETING ROOM 02
Equipment Class CASSETTE UNIT
Air System Type SZCAV
Number of zones 1
Floor Area 6.6 m²
Location London - Bunhill Row, United Kingdom

Sizing Calculation Information
Calculation Months Jan to Dec
Sizing Data Calculated
Zone L/s Sizing Sum of space airflow rates
Space L/s Sizing Individual peak space loads

Central Cooling Coil Sizing Data
Total coil load 3.0 kW
Sensible coil load 2.7 kW
Coil L/s at Aug 1500 211 L/s
Max block L/s 211 L/s
Sum of peak zone L/s 211 L/s
Sensible heat ratio 0.907
L/s (kW) 69.9
m³/kW 2.2
W/m² 458.1
Water flow @ 5.6 K rise N/A
Load occurs at Aug 1500
OA DB / WB 26.9 / 18.8 °C
Entering DB / WB 24.6 / 17.4 °C
Leaving DB / WB 13.8 / 13.0 °C
Coil ADP 12.3 °C
Bypass Factor 0.120
Resulting RH 49 %
Design supply temp. 12.8 °C
Zone T-stat Check 1 of 1 OK
Max zone temperature deviation 0.0 K

Central Heating Coil Sizing Data
Max coil load 1.4 kW
Coil L/s at Des Htg 211 L/s
Max coil L/s 211 L/s
Water flow @ 11.1 K drop N/A
Load occurs at Des Htg
W/m² 210.6
Ent. DB / Lvg DB 19.4 / 24.9 °C

Supply Fan Sizing Data
Actual max L/s 211 L/s
Standard L/s 211 L/s
Actual max L/(s·m²) 32.03 L/(s·m²)
Fan motor BHP 0.00 BHP
Fan motor kW 0.00 kW
Fan static 0 Pa

Outdoor Ventilation Air Data
Design airflow L/s 12 L/s
L/(s·m²) 1.82 L/(s·m²)
L/s/person 3.00 L/s/person

Air System Sizing Summary for HVAC 5P MEETING ROOM 03

Project Name: F_100 Bunhill Row
Prepared by: Engineer's Team LTD
05/17/2026 11:02PM
Air System Name HVAC 5P MEETING ROOM 03
Equipment Class CASSETTE UNIT
Air System Type SZCAV
Number of zones 1
Floor Area 12.9 m²
Location London - Bunhill Row, United Kingdom

Sizing Calculation Information
Calculation Months Jan to Dec
Sizing Data Calculated
Zone L/s Sizing Sum of space airflow rates
Space L/s Sizing Individual peak space loads

Central Cooling Coil Sizing Data
Total coil load 3.3 kW
Sensible coil load 2.9 kW
Coil L/s at Sep 1600 220 L/s
Max block L/s 220 L/s
Sum of peak zone L/s 220 L/s
Sensible heat ratio 0.893
L/s (kW) 67.1
m³/kW 3.9
W/m² 253.6
Water flow @ 5.6 K rise N/A
Load occurs at Sep 1600
OA DB / WB 26.1 / 18.3 °C
Entering DB / WB 24.6 / 17.3 °C
Leaving DB / WB 13.5 / 12.7 °C
Coil ADP 12.0 °C
Bypass Factor 0.120
Resulting RH 49 %
Design supply temp. 12.8 °C
Zone T-stat Check 1 of 1 OK
Max zone temperature deviation 0.0 K

Central Heating Coil Sizing Data
Max coil load 1.5 kW
Coil L/s at Des Htg 220 L/s
Max coil L/s 220 L/s
Water flow @ 11.1 K drop N/A
Load occurs at Des Htg
W/m² 117.1
Ent. DB / Lvg DB 19.3 / 25.0 °C

Supply Fan Sizing Data
Actual max L/s 220 L/s
Standard L/s 219 L/s
Actual max L/(s·m²) 17.02 L/(s·m²)
Fan motor BHP 0.00 BHP
Fan motor kW 0.00 kW
Fan static 0 Pa

Outdoor Ventilation Air Data
Design airflow L/s 16 L/s
L/(s·m²) 1.27 L/(s·m²)
L/s/person 3.27 L/s/person

Zone Sizing Summary for Existing HVAC

Project Name: 100 Bunhill Row
Prepared by: Engineer's Team LTD
05/14/2026 08:18PM
Air System Name EXISTING HVAC
Equipment Class CASSETTE UNIT
Air System Type VAV / VRF
Number of zones 2
Floor Area 493.9 m²
Location London - Bunhill Row, United Kingdom

Sizing Calculation Information
Calculation Months Jan to Dec
Sizing Data Calculated
Zone L/s Sizing Sum of space airflow rates
Space L/s Sizing Individual peak space loads

Space Loads and Airflows

Zone Name / Space Name	Mult.	Cooling Sensible (kW)	Time of Peak Sensible Load	Air Flow (L/s)	Heating Load (kW)	Floor Area (m²)	Space L/(s·m²)
Zone 1							
2ND 10P BOARDROOM	1	3.5	Jun 1600	259	1.2	25.2	10.27
2ND 1P QUIET ROOM 01	1	0.7	Jun 1600	52	0.6	5.1	10.11
2ND 1P QUIET ROOM 02	1	0.6	Jun 1600	44	0.3	2.6	16.79
2ND 30 DESKS 01	1	18.7	Sep 1500	1402	5.9	135.0	10.38
2ND 4P MEETING ROOM 01	1	2.3	Jun 1600	170	0.9	8.2	20.75
2ND 4P MEETING ROOM 02	1	2.8	Aug 1600	211	1.1	6.6	32.03
2ND ARRIVAL LOUNGE 01	1	1.2	Jul 1600	90	1.0	22.5	4.00
2ND BREAKOUT AREA 01	1	1.6	Jul 1600	123	1.0	30.6	4.02
2ND COLLABORATION AREA	1	2.4	Sep 1500	182	1.0	12.5	14.53
2ND PRINT AREA 01	1	1.7	Jul 1600	130	0.3	6.4	20.24
2ND COMMS ROOM 01	1	0.5	Jul 1600	35	0.4	5.0	6.93
Zone 2							
3RD 12P BOARDROOM	1	3.8	Sep 1600	285	1.2	24.2	11.77
3RD 1P QUIET ROOM 03	1	0.4	Jul 1600	31	0.2	2.7	11.62
3RD 2P QUIET ROOM 04	1	0.6	Jun 1600	46	0.3	3.1	14.89
3RD 30 DESKS 02	1	19.3	Sep 1500	1443	6.0	128.0	11.28
3RD 5P MEETING ROOM	1	2.9	Sep 1500	220	1.0	12.9	17.02
3RD ARRIVAL LOUNGE 02	1	1.8	Jul 1600	138	1.3	28.3	4.88
3RD BREAKOUT AREA 02	1	3.8	Jun 1600	285	1.6	28.5	10.01
3RD COMMS ROOM 02	1	0.5	Jul 1600	35	0.4	5.0	6.93
3RD PRINT AREA 02	1	1.7	Jul 1600	130	0.3	6.5	19.95

PROJECT: OFFICE ELECTRICAL DESIGN

TITLE: HVAC CALCULATION

PROJ. NO. PROJ. ENGR. AA SCALE @ 24X36: N/A

DATE: May 11, 2026

DRAWING NO. REV.

M-13



Designed By Engr. Al Amin (MEP Engineer | Director - Engineer's Team LTD)

 support@engrteam.com

 <https://engrteam.com>

OUR SERVICES:

- MEP Plan Services
- HVAC Layout Plan
- Electrical Engineering Services
- Plumbing Engineering Services
- Fire protection & Security systems
- Specialized services

INFORMATION:

- Studio
- Contact Us
- Gift cards
- Privacy Policy
- Refund Policy
- Delivery Policy