Room reference 8 BED 1

Data

Zone	Floor	Mult.
1	2	1

Dimensions

Floor area	Height	Weight
17.33 m²	2.400	Light

Occupancy

In	Out
9	18

Occupants

No.	Activity
2	Seated at rest
Furniture	Average, Medium

Gains

	Lights	% conv
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	Sensible	Latent	% conv
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	temp	18.0 °C	
	%sat	40 %	1.0 a/c
Summer	temp	23.0 °C	
	%sat	50 %	0.5 a/c

Lighting

Illum level	Glare index	W/plane height	Susp dist	Reflectance C	W	F
500	19	0.85	0.00	70	50	20

Lighting control: No control

Daylight factors: -

Surface	Dimensions	Type	Surface data
Exposed wall 1	6.01 x 2.4 m	23	Orientation = 320.0°
Window in wall 1	.9 x 2.4 m	3	2 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Exposed wall 2	2.7 x 2.4 m	23	Orientation = 220.0°
Exposed wall 3	2 x 2.4 m	23	Orientation = 90.0°
Internal partition 1	2.2 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 2	1.6 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 3	1 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 4	5.5 x 2.4 m	3	Adj Favourites room : Bedroom

Room reference 8 BED 2

Data

Zone	*Floor*	*Mult.*
1	2	1

Dimensions

Length x Width	*Height*
2.700 x 5.400 m	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
2	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Exposed wall 1	2.7 x 2.4 m	23	Orientation = 0.0°
Window in wall 1	2.5 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Internal partition 1	2.7 x 2.4 m	6	No heat flow
Internal partition 2	5.4 x 2.4 m	3	No heat flow
Internal partition 3	5.4 x 2.4 m	6	No heat flow

Room reference 8 LIV

Data

Zone	*Floor*	*Mult.*
1	2	1

Dimensions

Floor area	*Height*
24.85 m²	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
4	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	21.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Exposed wall 1	2.2 x 2.4 m	23	Orientation = 90.0°
Window in wall 1	2.2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Exposed wall 2	4.2 x 2.4 m	23	Orientation = 320.0°
Window in wall 2	2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Internal partition 1	5.4 x 2.4 m	6	Adj Favourites room : Lounge
Internal partition 2	3.8 x 2.4 m	6	Adj Favourites room : Lounge
Internal partition 3	5.6 x 2.4 m	3	Adj Favourites room : Lounge

Room reference 8 TOILET

Data

Zone	Floor	Mult.
1	2	1

Dimensions

Floor area	Height	Weight
3.17 m²	2.400	Light

Occupancy

In	Out
9	18

Occupants

No.	Activity
1	Seated at rest
Furniture	Average, Medium

Gains

	Lights	% conv
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	Sensible	Latent	% conv
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	temp	18.0 °C	
	%sat	40 %	1.0 a/c
Summer	temp	23.0 °C	
	%sat	50 %	0.5 a/c

Lighting

Illum level	Glare index	W/plane height	Susp dist	Reflectance C	W	F
500	19	0.85	0.00	70	50	20

Lighting control: No control

Daylight factors: -

Surface	Dimensions	Type	Surface data
Exposed wall 1	2.3 x 2.4 m	23	Orientation = 220.0°
Internal partition 1	.6 x 2.4 m	3	Adj Favourites room : Toilet
Internal partition 2	2 x 2.4 m	3	Adj Favourites room : Toilet
Internal partition 3	2.2 x 2.4 m	3	Adj Favourites room : Toilet

Room reference 9 BATH RM

Data

Zone	*Floor*	*Mult.*
1	3	1

Dimensions

Length x Width	*Height*
2.000 x 1.700 m	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
1	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance* *C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Internal partition 1	2 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 2	1.7 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 3	2 x 2.4 m	6	No heat flow
Internal partition 4	1.7 x 2.4 m	6	No heat flow

Room reference 9 BED 1

Data

Zone	Floor	Mult.
1	3	1

Dimensions

Length x Width	Height
3.400 x 4.500 m	2.400

Weight	Occupancy In	Occupancy Out
Light	9	18

Occupants

No.	Activity
1	Seated at rest
Furniture	Average, Medium

Gains

	Lights	% conv
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	Sensible	Latent	% conv
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	temp	18.0 °C	
	%sat	40 %	1.0 a/c
Summer	temp	23.0 °C	
	%sat	50 %	0.5 a/c

Lighting

Illum level	Glare index	W/plane height	Susp dist	Reflectance C	W	F
500	19	0.85	0.00	70	50	20

Lighting control: No control

Daylight factors: -

Surface	Dimensions	Type	Surface data
Exposed wall 1	3.4 x 2.4 m	23	Orientation = 0.0°
Window in wall 1	3.2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Internal partition 1	3.4 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 2	4.5 x 2.4 m	6	Adj Favourites room : Lounge
Internal partition 3	4.5 x 2.4 m	3	Adj Favourites room : Bedroom

Room reference 9 BED 2

Data

Zone	*Floor*	*Mult.*
1	3	1

Dimensions

Floor area	*Height*
19.00 m²	2.400

Weight
Light

Occupancy

In	*Out*
9	18

Occupants

No.	*Activity*
1	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Exposed wall 1	4.3 x 2.4 m	23	Orientation = 0.0°
Window in wall 1	2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Exposed wall 2	2.4 x 2.4 m	23	Orientation = 90.0°
Window in wall 2	2.2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Internal partition 1	2 x 2.4 m	6	Adj Favourites room : Lounge
Internal partition 2	.6 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 3	2.5 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 4	1.8 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 5	1.6 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 6	2.5 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 7	3.7 x 2.4 m	3	Adj Favourites room : Bedroom

Room reference 9 BED 3

Data

Zone	*Floor*	*Mult.*
1	3	1

Dimensions

Floor area	*Height*
12.57 m²	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
1	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Exposed wall 1	2.7 x 2.4 m	23	Orientation = 0.0°
Window in wall 1	2.5 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Internal partition 1	4.3 x 2.4 m	3	Adj Favourites room : Bedroom
Internal partition 2	3.3 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 3	2.4 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 4	2.1 x 2.4 m	6	Adj Favourites room : Bedroom
Internal partition 5	.5 x 2.4 m	6	Adj Favourites room : Bedroom

Room reference 9 LIV

Data

Zone	*Floor*	*Mult.*
1	3	1

Dimensions

Floor area	*Height*
29.71 m²	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
1	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	21.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Exposed wall 1	4.5 x 2.4 m	23	Orientation = 320.0°
Window in wall 1	2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Exposed wall 2	2 x 2.4 m	23	Orientation = 90.0°
Window in wall 2	2 x 2.4 m	3	1 off, O/hang=0.00 Dist=0.00, Recess=0.00 m
Internal partition 1	7 x 2.4 m	6	Adj Favourites room : Lounge
Internal partition 2	7.4 x 2.4 m	3	Adj Favourites room : Lounge
Internal partition 3	4.1 x 2.4 m	3	Adj Favourites room : Lounge

Room reference COM HALL 1

Data

Zone	*Floor*	*Mult.*
1	1	1

Dimensions

Floor area	*Height*
19.45 m²	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
4	Walking
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Internal partition 1	11 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 2	7.1 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 3	.5 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 4	4.6 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 5	1.4 x 2.4 m	3	Adj Favourites room : Lounge
Internal partition 6	1.4 x 2.4 m	3	Adj Favourites room : Circulation area

Room reference COM HALL 2

Data

Zone	*Floor*	*Mult.*
1	1	1

Dimensions

Floor area	*Height*
19.45 m²	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
4	Walking
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Internal partition 1	11 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 2	7.1 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 3	.5 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 4	4.6 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 5	1.4 x 2.4 m	3	Adj Favourites room : Lounge
Internal partition 6	1.4 x 2.4 m	3	Adj Favourites room : Circulation area

Room reference COM HALL 3

Data

Zone	*Floor*	*Mult.*
1	1	1

Dimensions

Floor area	*Height*
19.45 m²	2.400

Weight	**Occupancy** *In*	*Out*
Light	9	18

Occupants

No.	*Activity*
4	Walking
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	18.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance* *C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Internal partition 1	11 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 2	7.1 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 3	.5 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 4	4.6 x 2.4 m	3	Adj Favourites room : Circulation area
Internal partition 5	1.4 x 2.4 m	3	Adj Favourites room : Lounge
Internal partition 6	1.4 x 2.4 m	3	Adj Favourites room : Circulation area

A & G Partnership
95 Buckingham Palace Road
London, SW1W 0RP
0207 828 8200

Date 21st Sep 2007

Project Sap Calcs
Engineer RG *Checked by*
File S:\Filenet\4144 - Delancey Street\Sap Calcs\

Project no. -
Date checked

Project : Sap Calcs

Project name	Sap Calcs
Project number	-
Client	-
Architect	-
Quantity surveyor	-

Project does not use Full Building CAD model

Location	LONDON	(Use daylight saving)
Heating season length	39 weeks	
Occupancy	5 days/week	
Cooling plant time ON	1 hrs	
Cooling plant time OFF	24 hrs	
Glass fraction for windows	0.85	
Surroundings angle	0 °	
Atmospheric clarity for site	Urban atmosphere	
Direct solar rad. correction factor	0.85	
Diffuse solar rad. correction factor	1.2	
Wind speed for site	Summer 3.5 Winter 4 m/s	
Terrain category for site	Urban (buildings> 15m)	
Building height	15 m	(Low rise)
Topography coefficient	1	
Wind shielding	Urban	
Building length:width	1	
Azimuth of longest wall	0 °S	
Roof pitch	Flat	

Room reference UNIT 4

Unit 4 - office block

Data

Zone	*Floor*	*Mult.*
1	1	1

Dimensions

Floor area	*Height*
21.00 m²	7.000

Weight	**Occupancy** *In*	*Out*
Light	6	6

Occupants

No.	*Activity*
11	Seated at rest
Furniture	Average, Medium

Gains

	Lights	*% conv*
Lights	20.0	70
Casual	0.0	75

Additional gains

Gain	*Sensible*	*Latent*	*% conv*
1	0.0	0.0	75
	ON at 1.00 OFF at 24.00		
2	0.0	0.0	75
	ON at 1.00 OFF at 24.00		

Thermal design

Winter	*temp*	20.0 °C	
	%sat	40 %	1.0 *a/c*
Summer	*temp*	23.0 °C	
	%sat	50 %	0.5 *a/c*

Lighting

Illum level	*Glare index*	*W/plane height*	*Susp dist*	*Reflectance C*	*W*	*F*
500	19	0.85	0.00	70	50	20

Lighting control No control

Daylight factors -

Surface	Dimensions	Type	Surface data
Exposed wall 1	13 x 2.5 m	1	Orientation = 110.0°
Exposed wall 2	6 x 2.5 m	1	Orientation = 225.0°
Exposed wall 3	15 x 2.5 m	1	Orientation = 225.0°
Exposed wall 4	9.1 x 2.5 m	1	Orientation = 315.0°
Exposed wall 5	15 x 2.5 m	1	Orientation = 45.0°
Exposed wall 6	15 x .72 m	1	Orientation = 45.0°
Exposed wall 7	13 x .72 m	1	Orientation = 110.0°
Exposed wall 8	15 x .72 m	1	Orientation = 225.0°
Exposed wall 9	.6 x 7 m	1	Orientation = 225.0°
Exposed wall 10	9.1 x 7 m	1	Orientation = 315.0°
Exposed roof 1	20.98 m²	1	Orientation = 0.0 Pitch = 15.0°
Internal floor 1	20.98 m²	1	No heat flow