BUROHAPPOLD ENGINEERING

COOLING LOAD ROOM DATA SHEET

Mechanical Calculation

Revision	Description	Issued by	Date	Checked by
00	Tender	TA	Nov-15	TA
01	Tender	TA	Dec-15	TA

BUROHAPPOLD ENGINEERING

Project	Lodha Clarient		
		Revision	01
Area Of Project	Plot C - Sales Gallery	Prepared by	TA
		Date	01/12/2015
Element Description	Cooling Load Room Data Sheet	Checked by	TA
		Date	01/12/2015

INPUT | OUTPUT | CALCULATED

	Room Description	Floor Area		Slab To Roof Height	Internal Loads			Wall Gross Area (Wall +Glass)								Glass Area								Wall Partition	Exposed Roof	Floor Not Conditioned Below	Ceiling Not Conditioned Above	Cooling Load Sensible	Cooling Load Total	Dehumidified Airflow
								N	E	S	W	NE	SE	SW	NW	N	E	S	W	NE	SE	SW	NW							
		Metre²	Feet²	Metre	W/m²	Nos	Watts	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	m²	kW	kW	L/s
	Sales Gallery																													
1	Viewing deck	135	1453.1	5.75	15.6	**14**	200	24.7	31.1	35.7		13.8	59.2			21.5	27.0	31.0		12.0	51.5			**40.0**		1453.1	1453.1	43.04	49.93	3127
2	Back office	42	452.1	5.75	11.9	**17**	500								38.5								20.1	**28.0**		452.1	452.1	11.02	13.36	808
3	Meeting room	9	96.9	5.75	11.9	**5**	200																	**12.0**		96.9	96.9	0.84	1.41	53
4	Entrannce	74	796.5	5.75	15.6	**7**	300					29.7								25.9				**25.0**		796.5	796.5	10.52	14.42	685
5	Model Room	359	3864.3	5.75	15.6	**36**	1000							92.0								80.0		**60.0**		3864.3	3864.3	45.80	58.72	3198
6	Meeting room-1	18	193.8	5.75	11.9	**3**	200																	**36.0**		193.8	193.8	1.16	1.76	68
7	Meeting room-2	18	193.8	5.75	11.9	**3**	200																	**36.0**		193.8	193.8	1.16	1.76	68
8	Meeting room-3	18	193.8	5.75	11.9	**3**	200																	**36.0**		193.8	193.8	1.16	1.76	68
9	Meeting room-4	18	193.8	5.75	11.9	**3**	200																	**36.0**		193.8	193.8	1.16	1.76	68
10	Meeting room-5	18	193.8	5.75	11.9	**3**	200					15.0								10.4						193.8	193.8	3.90	4.57	283
11	Meeting room-6	18	193.8	5.75	11.9	**3**	200					15.0								10.4						193.8	193.8	3.90	4.57	283
12	Meeting room-7	13	139.9	5.75	11.9	**3**	200					14.4								10.0						139.9	139.9	3.60	4.22	261
13	Meeting room-8	13	139.9	5.75	11.9	**3**	200					14.4								10.0				**24.0**		139.9	139.9	3.65	4.22	273
14	Server room	6	64.6	5.75	10.2		2000								17.3									**12.0**		64.6	64.6	3.79	3.87	280
	Show Flat																													
15	Block	82.1	883.7	5.75	11.9	**7**	400							50.3								14.4		409.6		883.7	883.7	13.26	15.12	1101

BUROHAPPOLD ENGINEERING

Project	Lodha Clarient		
		Revision	01
Area of Project	Plot C - Sales Gallery	Prepared by	TA
		Date	01/12/2015
Element Description	Cooling Load Room Data Sheet - Database	Checked by	TA
		Date	01/12/2015

Input parameter Summary

	Value	unit	Remark
Building Envelope Setting			
Window U- Value	5.51	$W/m^2 K$	As per Client Requirement
SHGC	0.80		As per Client Requirement
Shading Coefficient	0.92		As per Client Requirement
Wall U value	3.293	$W/m^2 K$	ASHRAE 90.1 2013
Internal partition U value	3.293	$W/m^2 K$	Same as External Wall
Ground Slab U value	1.825	$W/m^2 K$	ASHRAE 90.1 2013
Roof U value	0.273	$W/m^2 K$	ASHRAE 90.1 2013
Design Criteria			
Outdoor Design conditions			
Summer -DBT	35.9	°C	ASHRAE Climate Data
Summer -WBT	22.7	°C	
Winter	16.8	°C	
Winter	11.1	°C	
Indoor Design Conditions			
Summer	24 +/- 2	°C	As per Client Requirement
	50 +/- 5	RH	
Infiltration	0.25	ACH	According to ASHRAE Fundamentals Chapter-16 Ventilation & Infiltration

Air System Sizing Summary for 01 Viewing deck

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**01 Viewing deck**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**1453.1**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**14.2**	Tons	Load occurs at	**Nov 1200**	
Total coil load	**170.7**	MBH	OA DB / WB	**89.6 / 78.1**	°F
Sensible coil load	**147.2**	MBH	Entering DB / WB	**78.4 / 65.1**	°F
Coil CFM at Nov 1200	**6624**	CFM	Leaving DB / WB	**57.8 / 56.5**	°F
Max block CFM	**6624**	CFM	Coil ADP	**55.5**	°F
Sum of peak zone CFM	**6624**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.862**		Resulting RH	**49**	%
ft²/Ton	**102.1**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**117.5**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**6624**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**6613**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**4.56**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**400**	CFM	CFM/person	**32.10**	CFM/person
CFM/ft²	**0.28**	CFM/ft²			

Air System Sizing Summary for 02 Back office

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**02 Back office**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**452.1**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**3.8**	Tons	Load occurs at	**Jun 1700**	
Total coil load	**45.9**	MBH	OA DB / WB	**97.5 / 81.7**	°F
Sensible coil load	**37.8**	MBH	Entering DB / WB	**78.8 / 65.9**	°F
Coil CFM at Jun 1700	**1712**	CFM	Leaving DB / WB	**58.3 / 57.1**	°F
Max block CFM	**1712**	CFM	Coil ADP	**56.0**	°F
Sum of peak zone CFM	**1712**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.825**		Resulting RH	**51**	%
ft²/Ton	**118.3**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**101.5**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**1712**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**1709**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**3.79**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**70**	CFM	CFM/person	**4.62**	CFM/person
CFM/ft²	**0.15**	CFM/ft²			

Air System Sizing Summary for 03 Meeting room

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**03 Meeting room**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**96.9**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**0.4**	Tons	Load occurs at	**Jul 1600**	
Total coil load	**4.8**	MBH	OA DB / WB	**99.6 / 81.9**	°F
Sensible coil load	**2.9**	MBH	Entering DB / WB	**83.6 / 71.6**	°F
Coil CFM at Jul 1600	**112**	CFM	Leaving DB / WB	**59.6 / 58.6**	°F
Max block CFM	**112**	CFM	Coil ADP	**56.9**	°F
Sum of peak zone CFM	**112**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.601**		Resulting RH	**63**	%
ft²/Ton	**240.7**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**49.9**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**112**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**112**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**1.16**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**20**	CFM	CFM/person	**4.49**	CFM/person
CFM/ft²	**0.21**	CFM/ft²			

Air System Sizing Summary for 04 Entrance

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**04 Entrance**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**796.5**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**4.1**	Tons	Load occurs at	**Jun 1300**	
Total coil load	**49.5**	MBH	OA DB / WB	**97.4 / 81.6**	°F
Sensible coil load	**36.0**	MBH	Entering DB / WB	**81.6 / 68.2**	°F
Coil CFM at Jun 1300	**1450**	CFM	Leaving DB / WB	**58.6 / 57.4**	°F
Max block CFM	**1450**	CFM	Coil ADP	**56.0**	°F
Sum of peak zone CFM	**1450**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.729**		Resulting RH	**53**	%
ft²/Ton	**193.2**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**62.1**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**1450**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**1447**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**1.82**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**200**	CFM	CFM/person	**32.10**	CFM/person
CFM/ft²	**0.25**	CFM/ft²			

Air System Sizing Summary for 05 Model room

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**05 Model room**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**3864.2**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**16.7**	Tons	Load occurs at	**Oct 1600**	
Total coil load	**200.9**	MBH	OA DB / WB	**95.6 / 79.9**	°F
Sensible coil load	**156.6**	MBH	Entering DB / WB	**80.6 / 67.4**	°F
Coil CFM at Oct 1600	**6773**	CFM	Leaving DB / WB	**59.1 / 57.9**	°F
Max block CFM	**6773**	CFM	Coil ADP	**56.7**	°F
Sum of peak zone CFM	**6773**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.780**		Resulting RH	**53**	%
ft²/Ton	**230.8**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**52.0**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**6773**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**6762**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**1.75**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**600**	CFM	CFM/person	**18.72**	CFM/person
CFM/ft²	**0.16**	CFM/ft²			

Air System Sizing Summary for 06.1 Meeting room 7

Project Name: 2015-03-11_LK sales gallery - Plot C1 — 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. — 06:40PM

Air System Information

Air System Name	**06.1 Meeting room 7**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**139.9**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**1.2**	Tons	Load occurs at	**Jun 1400**	
Total coil load	**14.1**	MBH	OA DB / WB	**98.6 / 81.9**	°F
Sensible coil load	**12.0**	MBH	Entering DB / WB	**79.1 / 66.0**	°F
Coil CFM at Jun 1400	**553**	CFM	Leaving DB / WB	**58.9 / 57.7**	°F
Max block CFM	**553**	CFM	Coil ADP	**56.7**	°F
Sum of peak zone CFM	**553**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.855**		Resulting RH	**51**	%
ft²/Ton	**119.3**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**100.6**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**553**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**552**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**3.95**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**20**	CFM	CFM/person	**7.49**	CFM/person
CFM/ft²	**0.14**	CFM/ft²			

Air System Sizing Summary for 06.2 Meeting room 8

Project Name: 2015-03-11_LK sales gallery - Plot C1 — 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. — 06:40PM

Air System Information

Air System Name	**06.2 Meeting room 8**		Number of zones	**1**
Equipment Class	**SPLT AHU**		Floor Area	**139.9** ft²
Air System Type	**SZCAV**		Location	**Mumbai, India**

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**		Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**		Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**1.2**	Tons	Load occurs at	**Jun 1100**	
Total coil load	**14.2**	MBH	OA DB / WB	**93.2 / 80.6**	°F
Sensible coil load	**12.3**	MBH	Entering DB / WB	**78.7 / 65.8**	°F
Coil CFM at Jun 1100	**578**	CFM	Leaving DB / WB	**59.0 / 57.8**	°F
Max block CFM	**578**	CFM	Coil ADP	**56.8**	°F
Sum of peak zone CFM	**578**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.865**		Resulting RH	**51**	%
ft²/Ton	**118.1**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**101.6**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**578**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**577**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**4.13**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**20**	CFM	CFM/person	**7.49**	CFM/person
CFM/ft²	**0.14**	CFM/ft²			

Air System Sizing Summary for 07 Meeting room 5,6

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**07 Meeting room 5,6**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**193.8**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**1.3**	Tons	Load occurs at	**Jun 1400**	
Total coil load	**15.5**	MBH	OA DB / WB	**98.6 / 81.9**	°F
Sensible coil load	**13.2**	MBH	Entering DB / WB	**79.2 / 65.9**	°F
Coil CFM at Jun 1400	**601**	CFM	Leaving DB / WB	**58.7 / 57.5**	°F
Max block CFM	**601**	CFM	Coil ADP	**56.5**	°F
Sum of peak zone CFM	**601**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.854**		Resulting RH	**51**	%
ft²/Ton	**150.1**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**80.0**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**601**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**600**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**3.10**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**20**	CFM	CFM/person	**7.49**	CFM/person
CFM/ft²	**0.10**	CFM/ft²			

Air System Sizing Summary for 08 Meeting room 1,2,3,4

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**08 Meeting room 1,2,3,4**	Number of zones	**1**
Equipment Class	**SPLT AHU**	Floor Area	**193.8** ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**0.5**	Tons	Load occurs at	**Jun 1500**	
Total coil load	**5.5**	MBH	OA DB / WB	**99.0 / 82.0**	°F
Sensible coil load	**3.6**	MBH	Entering DB / WB	**84.2 / 71.2**	°F
Coil CFM at Jun 1500	**143**	CFM	Leaving DB / WB	**60.6 / 59.5**	°F
Max block CFM	**143**	CFM	Coil ADP	**58.0**	°F
Sum of peak zone CFM	**143**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.657**		Resulting RH	**62**	%
ft²/Ton	**419.2**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**28.6**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**143**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**143**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**0.74**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**20**	CFM	CFM/person	**7.49**	CFM/person
CFM/ft²	**0.10**	CFM/ft²			

Air System Sizing Summary for 09 Block

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**09 Block**		Number of zones	**1**
Equipment Class	**SPLT AHU**		Floor Area	**888.0** ft²
Air System Type	**SZCAV**		Location	**Mumbai, India**

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**4.3**	Tons	Load occurs at	**Oct 1600**	
Total coil load	**51.9**	MBH	OA DB / WB	**95.6 / 79.9**	°F
Sensible coil load	**45.5**	MBH	Entering DB / WB	**78.1 / 66.0**	°F
Coil CFM at Oct 1600	**2332**	CFM	Leaving DB / WB	**60.0 / 58.9**	°F
Max block CFM	**2332**	CFM	Coil ADP	**58.0**	°F
Sum of peak zone CFM	**2332**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.877**		Resulting RH	**55**	%
ft²/Ton	**205.3**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**58.5**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**2332**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**2329**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**2.63**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**0**	CFM	CFM/person	**0.00**	CFM/person
CFM/ft²	**0.00**	CFM/ft²			

Air System Sizing Summary for 10 Server room

Project Name: 2015-03-11_LK sales gallery - Plot C1 11/12/2015
Prepared by: Buro Happold Engineers (I) Pvt. Ltd. 06:40PM

Air System Information

Air System Name	**10 Server room**	Number of zones	**1**	
Equipment Class	**SPLT AHU**	Floor Area	**64.6**	ft²
Air System Type	**SZCAV**	Location	**Mumbai, India**	

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM	**Sum of space airflow rates**	Calculation Months	**Jan to Dec**
Space CFM	**Individual peak space loads**	Sizing Data	**Calculated**

Central Cooling Coil Sizing Data

Total coil load	**1.1**	Tons	Load occurs at	**Jun 1800**	
Total coil load	**12.7**	MBH	OA DB / WB	**95.9 / 81.3**	°F
Sensible coil load	**12.5**	MBH	Entering DB / WB	**77.6 / 64.0**	°F
Coil CFM at Jun 1800	**592**	CFM	Leaving DB / WB	**58.0 / 56.8**	°F
Max block CFM	**592**	CFM	Coil ADP	**55.9**	°F
Sum of peak zone CFM	**592**	CFM	Bypass Factor	**0.100**	
Sensible heat ratio	**0.979**		Resulting RH	**48**	%
ft²/Ton	**60.8**		Design supply temp.	**55.4**	°F
BTU/(hr-ft²)	**197.2**		Zone T-stat Check	**1 of 1**	OK
Water flow @ 10.0 °F rise	**N/A**		Max zone temperature deviation	**0.0**	°F

Supply Fan Sizing Data

Actual max CFM	**592**	CFM	Fan motor BHP	**0.00**	BHP
Standard CFM	**591**	CFM	Fan motor kW	**0.00**	kW
Actual max CFM/ft²	**9.17**	CFM/ft²	Fan static	**0.00**	in wg

Outdoor Ventilation Air Data

Design airflow CFM	**0**	CFM	CFM/person	**0.00**	CFM/person
CFM/ft²	**0.00**	CFM/ft²			