Stage II – Construction of essential MEFPS and other Supporting Civil Works Plans/ Drawings

GENERAL NOTES:

MECHANICAL PLANS

- ALL EQUIPMENT SHALL BE INSTALLED IN APPROXIMATE LOCATION AS SHOWN ON THE DRAWINGS.
- 2. CONTRACTOR MUST SUBMIT SHOP DRAWINGS INDICATING ACTUAL EQUIPMENT DIMENSIONS AND OPERATING WEIGHTS, SUFFICIENT CLEARANCES TO FACILITATE NORMAL SERVICE AND MAINTENANCE WORK ARE PROVIDED IN THESE DESIGN PLANS, HOWEVER, SHOULD ACTUAL EQUIPMENT PHYSICAL SIZES DIFFER CONSIDERABLY FROM THOSE SHOWN IN THE PLANS. THE CONTRACTOR SHOULD NOTIFY THE ARCHITECT OR DESIGN ENGINEER IMMEDIATELY IN WRITING.
- 3. ALL EQUIPMENT SHALL BE SET ON 150MM, THICK, LEVEL REINFORCED CONCRETE BASE, UNLESS OTHERWISE SPECIFIED.
- 4. ALL EQUIPMENT SHALL BE MOUNTED ON OR SUPPORTED BY VIBRATION ISOLATORS.
- 5. THIS CONTRACTOR SHOULD COORDINATE HIS WORK CLOSELY WITH THE WORK OF OTHER TRADES. PROVISIONS FOR THE PIPE PASSAGES THRU WALLS, FLOORS, AND SLABS SHALL BE COORDINATED IN ADVANCE WITH THE GENERAL CONTRACTOR, FAILURE ON THE PART OF THIS CONTRACTOR TO MAKE SUCH PROVISIONS IN ADVANCE SHALL MEAN PROVIDING THEM LATER AT HIS OWN EXPENSE.
- PIPES SHALL BE ANCHORED, PLUMB & PARALLEL TO BUILDING LINES. PIPE HANGERS & SUPPORTS SHALL BE INSTALLED AT 1.2 METERS ON CENTER, ALL PENETRATIONS THRU WALLS, FLOORS AND ROOF SHALL BE PROVIDED WITH PIPE SLEEVES, INSTALL 3MM, THICK RUBBER BETWEEN PIPES AND SUPPORT TO ELIMINATE METAL TO METAL CONTACT.
- 7. ALL PIPING SHALL BE LEAK TESTED WITH A PRESSURE OF AT LEAST 1% TIMES THE DESIGN WORKING PRESSURE.
- 8. AIR CONDITIONING AND VENTILATION DUCTWORKS SHALL BE FABRICATED AS PER SMACNA STANDARDS. OUTDOOR INSTALLATIONS SHALL BE PROVIDED WITH ALUMINUM SHEET CLADDING.
- 9. ALL MATERIALS TO BE USED SHALL BE NEW AND CLEAN.
- 10. ALL WEATHER EXPOSED PIPES SHALL BE INSULATED AND PROVIDED WITH ALUMINUM SHEET CLADDING.
- 11. ANY DEVIATIONS AND REVISIONS FROM THE PLANS SHALL BE REFERRED TO THE ARCHITECT OR ENGINEER IN CHARGE FOR REVIEW AND APPROVAL
- 12. ALL NECESSARY GOVERNMENT PERMITS AND OTHER LOCAL AUTHORITIES SHALL BE SECURED AND BORNE BY THE CONTRACTOR.
- 13. ALL WORKS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE.

NOTES ON PIPING INSTALLATION:

- 1. REFRIGERANT PIPES SHALL BE INTERNALLY CLEANED BY SWABBING WITH CLEAN COTTON CLOTH TO REMOVE ALL DUST, BURRS, AND OTHER MISCELLANEOUS DIRT.
- 2. WHILE SOLDERING JOINTS, A SWEEP OF INERT NITROGEN GAS SHOULD BE PASSED THROUGH PIPES TO PREVENT OXIDATION DEPOSITS INSIDE.
- - A. USE STANDARD LONG RADIUS COPPER ELBOWS, REDUCERS. ETC. DO NOT USE FIELD-FORMED ELBOWS, REDUCERS ETC.
 - B. JOINTS BETWEEN PIPES SHOULD BE THROUGH STANDARD COPPER COUPLING FORMED FITTING MADE BY SWAGING OR ENLARGING ONE PIPE END TO BE ABLE TO RECEIVE THE OTHER PIPE SECTION WOULD NOT BE ALLOWED.
 - C. JOINTS TO SCREWED ACCESSORIES SUCH AS EXPANSION VALVES, FILTER DRIER, ETC. SHALL BE MADE WITH STANDARD FLARED FITTINGS.
- 4. THE COMPLETED PIPING INSTALLATION SHOULD BE LEAK TESTED BY SUBJECTING THE SAME (BOTH LIQUID AND SUCTION LINE) TO A PRESSURE OF 3100 Pa USING DRY NITROGEN GAS. THIS PRESSURE SHOULD BE LEFT FOR 24 HOURS AND IF THERE IS NO NOTICEABLE REDUCTION IN PRESSURE WITHIN THE PERIOD. THE NITROGEN CHARGE SHALL BE RELIEVED DOWN TO 140 KPs. TO SERVE AS HOLDING CHARGE WHILE WAITING FOR THE EQUIPMENT CONNECTION. IF THERE IS NOTICEABLE REDUCTION IN THE TEST PRESSURE, LEAK SHOULD BE LOCATED AND REPAIRED.
- 5. PROPERLY TESTED PIPING SHOULD BE SECURELY CAPPED AT BOTH ENDS AND WITH HOLDING CHARGED AS STATED IN ITEM 4 ABOVE WHILE WAITING FOR FINAL CONNECTION TO EQUIPMENT. INSULATE SUCTION PIPING ONLY AFTER PROPER LEAK TESTING.
- 6. ALL REFRIGERANT PIPES SHALL BE TYPE L.

LEGENDS & SYMBOLS: DEGREE CELCIUS

EAT ENTERING AIR TEMP LAT LEAVING AIR TEMP VOLTS/PHASE/HERTZ V/PH/HZ PF TEF PRESSURIZATION FAN TOILET EXHAUST FAN FINS PER INCH OPPOSED BLADE VOLUME DAMPER LD QTY GPM LOUVER DOOR OPENING QUANTITY GALLONS PER MINUTE LPM KPa HP MM LITERS PER MINUTE KILOPASCAL MILLIMETER METER PER SECOND MPS FINS PER SECOND DRY BUILDE TEMPERATURE WET BULB TEMPERATURE KILOGRAM KW KILOWATT RPM REVOLUTION PER MINUTE FAF FRESH AIR FAN EF ACCU AIR COOLED CONDENSING UNIT TONS OF REFRIGERATION KILOCALORIE PER HOUR LITERS PER MINUTE CMH CUBIC METER PER HOUR GPM GALLON PER MINUTE ESP EXTERNAL STATIC PRESSURE ĒĀG EXHAUST AIR GRILLE EAL EAD FAG EXHAUST AIR LOUVER EXHAUST AIR DUCT

FAL FAD FRESH AIR DUCT TEAD TEAG TOILET EXHAUST AIR DUCT TOILET EXHAUST AIR GRILLE THERMOSTAT SENSOR SMOKE EVACUATION EXHAUST FAN

ERESH AIR LOUVER

MECHANICAL GENERAL NOTES AND LEGEND

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR SEVENTH FLOOR)

SYSTEM E					INDOOR UNIT											оитроо	R UNIT				\neg
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	ENT.AIR TEMP.	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	V CHAI	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	COC	CTED DLING ACITY TR	REFRIGERANT		ECTRIC ACTER	
FCU-18	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-19	1	7TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-5	1	7F	24.64	7	R410A	380	m	60

SYSTEM F					INDOOR UNI	Г										OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP		NDITION	ELECTRICA	L CHAP	RACTE	RISTIC	UNIT				ECTED		ELE	ECTRIC	AL
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	V	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT	CHAR		RISTIC
FCU-1	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-2	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-3	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	1								
FCU-4	1	7TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	1								
FCU-5	1	THILLOOK	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-6	1	7F	98.56	28	R410A	380	3	60
FCU-22	1		CEILING SUSPENDED	3 (10.6)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60	1								
FCU-24	1]	CEILING SUSPENDED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60]								
FCU-20	1		4-WAY CEILING CASSETTE	3 (10.6)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR ELEVENTH FLOOR)

SYSTEM A					INDOOR UNIT	г										ООТДОО	RUNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY	AIRFLOW RATE (CMM)	ESP (Pa)	ENT.AIR TEMP.	NDITION LVG.AIR TEMP.	ELECTRICA MOTOR INPUT	L CHAI	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	CAP	ACILI	REFRIGERANT	CHAR		RISTIC
				TR (KW)	(CMM)		(DB*C/WB*C)	(DB*C/WB*C)	(W)							kW	TR		V	Ph	Hz
FCU-6	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-7	1	11TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-1		11F						_
FCU-8	1	IIIAFLOOK	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCO-1	1	1115	44	12.5	R410A	380	3	60
FCU-24	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR ELEVENTH FLOOR)

SYSTEM B					INDOOR UNIT											OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP		NDITION	ELECTRICAL	L CHA	RACTE	RISTIC	UNIT			ı	CTED		FLE	CTRIC	CAL
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	٧	Ph	Hz	DESIGNATION	QTY.	LOCATION		OLING ACITY TR	REFRIGERANT			RISTIC
FCU-9	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-10	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-11	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-5	1	11F	72.16	20.5	R410A	380	3	60
FCU-12	1	11TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-13	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60]								
FCU-25	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

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MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR ELEVENTH FLOOR)

SYSTEM C					INDOOR UNIT	г										OUTDOO	R UNIT				\Box
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	ENT.AIR TEMP.	NDITION LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	V CHAI	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	COO	CTED DLING ACITY TR	REFRIGERANT	CHAR	ECTRIC ACTER Ph	
FCU-14	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-15	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-16	1	11TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-6	1	11F	59.84	17	R410A	380	3	60
FCU-17	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-22	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									ı

SYSTEM D					INDOOR UNIT	г										ООТДОО	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP		NDITION	ELECTRICA	L CHAI	RACTE	RISTIC	UNIT				CTED		ELE	CTRIC	CAL
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP.	LVG.AIR TEMP.	MOTOR	v	Ph	Hz	DESIGNATION	QTY.	LOCATION	CAP	ACITY	REFRIGERANT			
				TR (KW)	(Circles)		(DB*C/WB*C)	(DB*C/WB*C)	(W)							kW	TR		V	Ph	Hz
FCU-18	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-19	1	11TH FLOOR	4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-8	1	11F	21.12	6	R410A	380	3	60
FCU-20	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR ELEVENTH FLOOR)

SYSTEM E					INDOOR UNIT	г										оитроо	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP	AIR CO		ELECTRICAL	L CHA	RACTE	RISTIC	UNIT				CTED			CTRIC	
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	TEMP.	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	٧	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT	CHAR	ACTER Ph	
FCU-3	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-4	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60]								
FCU-5	1	11TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-11	1	11F	59.84	17	R410A	380	3	60
FCU-21	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-23	1		CEILING SUSPENDED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

SYSTEM F					INDOOR UNIT	г										ООТДОО	R UNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CO ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP.	MOTOR INPUT (W)	V CHAI	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	COC	CTED DLING ACITY TR	REFRIGERANT	CHAR		
FCU-1	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-12		11F		_		380		60
FCU-2	1	11TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	A000-12	1	111	28.16	8	R410A	300	3	60

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR SIXTHTEEN FLOOR)

SYSTEM A					INDOOR UNIT	г										ООТДОО	R UNIT				
				NOMINAL	AIRFLOW	ESP	AIR CO	NDITION	ELECTRICAL	L CHAF	RACTE	RISTIC	UNIT				CTED		FLE	CTRIC	CAL
DESIGNATION	QTY.	LOCATION	TYPE	COOLING CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	V	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT	CHAR		RISTIC
FCU-6	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									П
FCU-7	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-8	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-9	1	16TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-1	1	16F	72.16	20.5	R410A	380	3	60
FCU-10	1]	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-11	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-29	1]	CEILING SUSPENDED	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-30	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

SYSTEM B					INDOOR UNIT											OUTDOO	R UNIT				\Box
				NOMINAL	AIRFLOW	ESP	AIR CO	NDITION	ELECTRICAL	CHAP	RACTE	RISTIC	UNIT				CTED		FLE	CTRIC	AI
DESIGNATION	QTY. LOCATION TYPE CAPAC		CAPACITY	RATE	(Pa)	ENT.AIR TEMP.	LVG.AIR TEMP.	MOTOR INPUT	v	Ph	Hz	DESIGNATION	QTY.	LOCATION	CAP	ACITY	REFRIGERANT				
				TR (KW)	(CMM)		(DB*C/WB*C)	(DB*C/WB*C)	(W)							kW	TR		٧	Ph	Hz
FCU-12	1	16TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-4		16F	21.12	_	R410A	380	,	60
FCU-13	1	IBIH PLOOK	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-4	'		21.12	۰	KATUK	300	,	00

SYSTEM C					INDOOR UNIT	г										ООТДОО	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP		NDITION	ELECTRICA	L CHA	RACTE	RISTIC	UNIT				ECTED OLING			ECTRI	
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	v	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT		ACTE!	HZ
FCU-14	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-15	1		WALL-MOUNTED	3 (10.6)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60]								
FCU-16	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-17	1	16TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-6	1	16F	79.2	22.5	R410A	380	3	60
FCU-18	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-19	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-31	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM A					INDOOR UNIT	1										OUTDOO	RUNIT				\neg
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING	AIRFLOW	ESP	AIR CO ENT.AIR	INDITION LVG.AIR	ELECTRICAL MOTOR				UNIT	QTY.	LOCATION		CTED DLING	DEEDIGEDANT		ECTRIC	
DESIGNATION	QIT.	LOCATION	ITPE	TR (KW)	RATE (CMM)	(Pa)	TEMP.	TEMP. (DB*C/WB*C)	INPUT	٧	Ph	Hz	DESIGNATION	wiii.	LOCATION	CAP.	ACITY TR	REFRIGERANT	V	Ph	Hz
FCU-8	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-9	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-2		9F						
FCU-10	1	8TH FLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	7000-2	1	31	33.44	9.5	R410A	380	3	60
FCU-29	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM B					INDOOR UNI	Г										OUTDOOR	RUNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CO ENT.AIR TEMP.	NDITION LVG.AIR TEMP.	ELECTRICA MOTOR INPUT	L CHAI	RACTE Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	CAP	ECTED DLING ACITY	REFRIGERANT			RISTIC
				TR (KW)	(CMM)		(DB*C/WB*C)	(DB*C/WB*C)	(W)							kW	TR		٧	Ph	Hz
FCU-11	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-12	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-13	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-14	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	ACCU-4	١.							
FCU-15	1	8TH FLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	X0004	1	9F	65.12	18.5	R410A	380	3	60
FCU-16	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-17	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60]								
FCU-30	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM C					INDOOR UNIT	T										OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP	AIR CO	NDITION LVG.AIR	ELECTRICA MOTOR	L CHAI	RACTE	RISTIC	UNIT				CTED DLING			CTRIC	
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	TEMP.	TEMP. (DB*G/WB*C)	INPUT (W)	V	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT		ACTER Ph	
FCU-18	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-19	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-20	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	ACCU-6	ļ,	9F	45.76	13	R410A	380	3	60
FCU-22	1	8TH FLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	70000	'	31	45.70	13	1/4180	300	ľ	
FCU-23	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-25	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM D					INDOOR UNIT	Г										OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP	AIR CO	NDITION LVG.AIR	ELECTRICA MOTOR	L CHAF	RACTE	RISTIC	UNIT				CTED LING			CTRIC	
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	TEMP. (DB*C/WB*C)	TEMP.	INPUT (W)	٧	Ph	Hz	DESIGNATION	QTY.	LOCATION	CAP	ACITY TR	REFRIGERANT	CHAR	ACTER Ph	ISTIC Hz
					. ,		(DB CIWB C)	(DB CIWB C)	(W)							kW	лі		٧	PII	П
FCU-1	1	8TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-7	1	9F	21.12		R410A	380	3	60
FCU-2	1	OINFLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	Noou-1	ľ	-	21.12	Ů	I I I I I I I I I I I I I I I I I I I	300	Ť	

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM E					INDOOR UNIT											OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP		NDITION	ELECTRICA	L CHAF	RACTE	RISTIC	UNIT				CTED		ELE	CTRIC	AL
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	٧	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT	CHAR V	ACTER Ph	HZ
FCU-3	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-4	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-5	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-6	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-7	1	8TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-8	5	9F	90.04	27	R410A	380	3	60
FCU-24	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-26	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-27	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	1								
FCU-28	1		CEILING SUSPENDED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

SYSTEM A					INDOOR UNIT	•										OUTDOO	RUNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	ENT.AIR TEMP.	NDITION LVG.AIR TEMP. (DB*C/WB*C)	ELECTRICA MOTOR INPUT (W)	V CHAI	Ph	RISTIC Hz	- UNIT DESIGNATION	QTY.	LOCATION	COC	ECTED DLING ACITY TR	REFRIGERANT	CHAR	ECTRIC ACTER	
FCU-8	1	12TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-2		14F	21.12	,	R410A	380	,	60
FCU-9	1	121H PLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	A0002		Ē	21.12	0	Natur	360	,	00

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR TWELFTH FLOOR)

SYSTEM B					INDOOR UNIT											OUTDOO	R UNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY	AIRFLOW RATE	ESP (Pa)	AIR CO ENT.AIR TEMP.	LVG.AIR TEMP.	ELECTRICA MOTOR INPUT	L CHAF	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	000	CTED OLING ACITY	REFRIGERANT		CTRIC ACTER	
				TR (KW)	(CMM)			(DB'C/WB'C)	(W)							kW	TR		٧	Ph	Hz
FCU-6	1	12TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-7	1	12TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-3	1	14F	33.44	9.5	R410A	380	3	60
FCU-24	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

SYSTEM C					INDOOR UNIT	ī										OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP	AIR CO	ONDITION LVG.AIR	ELECTRICA MOTOR	L CHA	RACTE	RISTIC	UNIT				CTED DLING			CTRIC	
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	TEMP. (DB*C/WB*C)	TEMP.	INPUT (W)	٧	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT		ACTEF Ph	Hz
FCU-9	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-10	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60]								
FCU-11	1	12TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-4	1	14F	61.6	17.5	R410A	380	3	60
FCU-12	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-13	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	1								
FCU-25	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR TWELFTH FLOOR)

SYSTEM D					INDOOR UNIT											OUTDOO	R UNIT				
				NOMINAL COOLING	AIRFLOW	ESP		NDITION	ELECTRICA	L CHA	RACTE	RISTIC	UNIT				CTED		ELE	ECTRIC	AL
DESIGNATION	QTY.	LOCATION	TYPE	CAPACITY TR (KW)	RATE (CMM)	(Pa)	ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB'C/WB'C)	MOTOR INPUT (W)	٧	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT	CHAR		RISTIC
FCU-14	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-15	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-16	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-17	1		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-18	1	12TH FLOOR	4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-7	1	14F	80.96	23	R410A	380	3	60
FCU-19	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-20	1		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-22	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

SYSTEM E					INDOOR UNIT	ī										OUTDOO	R UNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY	AIRFLOW RATE	ESP (Pa)	AIR CO ENT.AIR TEMP.	NDITION LVG.AIR TEMP.	ELECTRICAL MOTOR INPUT	L CHAF	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	COC	CTED LING ACITY	REFRIGERANT		CTRIC	
				TR (KW)	(CMM)		(DB*C/WB*C)		(W)							kW	TR		٧	Ph	Hz
FCU-1	1	12TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-9								
FCU-2	1	121H FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	AUCU-9		12F	28.16	8	R410A	380	3	60

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM C					INDOOR UNIT	Т										OUTDOO	R UNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	ENT.AIR TEMP.	LVG.AIR TEMP.	ELECTRICA MOTOR INPUT (W)	V CHAI	RACTE! Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	COC	ECTED DLING ACITY TR	REFRIGERANT	CHAR	ECTRIC ACTER	RISTIC
FCU-18	1		WALL-MOUNTED	2 (7.0)	11	NIL	(DB*C/WB*C) 23.6/17.2	(DB*C/WB*C) 13.3/12.7	43	220	1	60				AFF	II.		٧	PII	Hz
FCU-19	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-20	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-22	1	8TH FLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	ACCU-6	1	9F	45.76	13	R410A	380	3	60
FCU-23	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									
FCU-25	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM D					INDOOR UNIT											OUTDOO	R UNIT				
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CO ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP.	MOTOR INPUT (W)	L CHAI	RACTE! Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	COC	CTED LING ACITY TR	REFRIGERANT		ECTRIC ACTER Ph	ISTIC
FCU-1	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	400117	,	9F	21.12		R410A	380	,	60
FCU-2	1	8TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-7	'	30	21.12	6	1/410/1	300	Ů	00

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM A					INDOOR UNI	ī										OUTDOO	R UNIT				_
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	ENT.AIR TEMP.	NDITION LVG.AIR TEMP. (DB*C/WB*C)	ELECTRICA MOTOR INPUT (W)	V CHAI	Ph	RISTIC Hz	UNIT DESIGNATION	QTY.	LOCATION	CO	ECTED DLING ACITY TR	REFRIGERANT			RISTIC
FCU-8	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60							·		
FCU-9	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-2		9F						
FCU-10	1	8TH FLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	N000-2	1	31	33.44	9.5	R410A	380	3	60
FCU-29	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MULTI-SPLIT AIR CONDITIONER (VRF SYSTEM FOR EIGHTH FLOOR)

SYSTEM B	SYSTEM B INDOOR UNIT														OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION ELECTRICAL CHARACTERISTIC					UNIT			SELECTED COOLING			ELECTRICAL					
							ENT.AIR TEMP. (DB*C/WB*C)	LVG.AIR TEMP. (DB*C/WB*C)	MOTOR INPUT (W)	V	Ph	Hz	DESIGNATION	QTY.	LOCATION		ACITY TR	REFRIGERANT	CHARACTERISTIC V Ph Hz				
FCU-11	1	STHFLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	- ACCU-4	1	9F	65.12	18.5	R410A	380	3	60		
FCU-12	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											
FCU-13	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											
FCU-14	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											
FCU-15	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											
FCU-16	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											
FCU-17	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											
FCU-30	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60											