

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

MECHANICAL PLANS

GENERAL NOTES:

1. 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.
6. 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 1½ 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.
3. FITTINGS:
 - 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 KPa. 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:

C	DEGREE CELSIUS
EAT	ENTERING AIR TEMP
LAT	LEAVING AIR TEMP
V/PHHZ	VOLTS/PHASE/HERTZ
PF	PRESSURIZATION FAN
TEF	TOILET EXHAUST FAN
CFM	CUBIC EXHAUST FAN
FPI	FINS PER INCH
VD	OPPOSED BLADE VOLUME DAMPER
LD	LOUVER DOOR OPENING
QTY	QUANTITY
GPM	GALLONS PER MINUTE
LPM	LITERS PER MINUTE
KPa	KILOPASCAL
HP	HORSE POWER
MM	MILLIMETER
MPS	METER PER SECOND
FPS	FINS PER SECOND
DB	DRY BULB TEMPERATURE
WB	WET BULB TEMPERATURE
KG	KILOGRAM
KW	KILOWATT
RPM	REVOLUTION PER MINUTE
FAF	FRESH AIR FAN
EF	EXHAUST FAN
ACCU	AIR COOLED CONDENSING UNIT
TR	TONS OF REFRIGERATION
KCAL/HR	KILOCALORIE PER HOUR
LPM	LITERS PER MINUTE
CMH	CUBIC METER PER HOUR
GPM	GALLON PER MINUTE
ESP	EXTERNAL STATIC PRESSURE
EAG	EXHAUST AIR GRILLE
EAL	EXHAUST AIR LOUVER
EAD	EXHAUST AIR DUCT
FAG	FRESH AIR GRILLE
FAL	FRESH AIR LOUVER
FAD	FRESH AIR DUCT
TEAD	TOILET EXHAUST AIR DUCT
TEAG	TOILET EXHAUST AIR GRILLE
TS	THERMOSTAT SENSOR
SE	SMOKE EVACUATION
EF	EXHAUST FAN

MECHANICAL PLANS

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

SYSTEM E			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT. AIR TEMP. (DB°C/WB°C)	LVG. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-18	1	7TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60	ACCU-5	1	7F	24.64	7	R410A	380	3	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									

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

SYSTEM F			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT. AIR TEMP. (DB°C/WB°C)	LVG. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-1	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-6	1	7F	96.56	28	R410A	380	3	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									
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		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
FCU-22	1		CEILING SUSPENDED	3 (10.6)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60									
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									

MECHANICAL PLANS

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

SYSTEM A							INDOOR UNIT						OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-6	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	1	11F	44	12.5	R410A	380	3	60
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-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						OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-9	1	11TH FLOOR	4-WAY CEILING CASSETTE	3 (10.6)	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-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									
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									
FCU-25	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MECHANICAL PLANS

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

SYSTEM C			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-14	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-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-22	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 ELEVENTH FLOOR)

SYSTEM D			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-18	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-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									

MECHANICAL PLANS

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

SYSTEM E			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT. AIR TEMP. (DB°C/WB°C)	LVG. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
FCU-3	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-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		4-WAY CEILING CASSETTE	4 (14.1)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	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									

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

SYSTEM F			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT. AIR TEMP. (DB°C/WB°C)	LVG. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
FCU-1	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-12	1	11F	28.16	8	R410A	380	3	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									

MECHANICAL PLANS

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

SYSTEM A			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
FCU-6	1	16TH FLOOR	4-WAY CEILING CASSETTE	4 (14.1)	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-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		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	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									

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

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 DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	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	1	16F	21.12	6	R410A	380	3	60
FCU-13	1		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

MECHANICAL PLANS

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

SYSTEM C		INDOOR UNIT											OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT. AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				kW	TR		V	Ph	Hz
FCU-14	1	16TH FLOOR	4-WAY CEILING CASSETTE	2 (7.0)	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-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		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	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									

MECHANICAL PLANS

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

SYSTEM A		INDOOR UNIT										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
FCU-8	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-2	1	9F	33.44	9.5	R410A	380	3	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									
FCU-10	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	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 UNIT										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
FCU-11	1	8TH FLOOR	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									

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

MECHANICAL PLANS

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

SYSTEM C																					
INDOOR UNIT													OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
FCU-18	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-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		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	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													OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC				UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC		
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph	Hz				KW	TR		V	Ph	Hz
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	6	R410A	380	3	60
FCU-2	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)

MECHANICAL PLANS

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

SYSTEM E			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-3	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-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		4-WAY CEILING CASSETTE	3 (10.6)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	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									
FCU-28	1		CEILING SUSPENDED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	135	220	1	60									

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

SYSTEM A			INDOOR UNIT										OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
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	1	14F	21.12	6	R410A	380	3	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									

MECHANICAL PLANS

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

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 DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	NW		TR	V	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	ACCU-3	1	14F	33.44	9.5	R410A	380	3	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									
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 TWELFTH FLOOR)

SYSTEM C		INDOOR UNIT										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT.AIR TEMP. (DB°C/WB°C)	LVG.AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	NW		TR	V	Ph	Hz
FCU-9	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-4	1	14F	61.6	17.5	R410A	380	3	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									
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									
FCU-25	1		WALL-MOUNTED	1.5 (5.3)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60									

MECHANICAL PLANS

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

SYSTEM D		INDOOR UNIT										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT. AIR TEMP. (DB°C/WB°C)	LVS. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-14	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-7	1	14F	80.96	23	R410A	380	3	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		4-WAY CEILING CASSETTE	2 (7.0)	44	NIL	23.6/17.2	13.3/12.7	135	220	1	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									

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

SYSTEM E		INDOOR UNIT										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT. AIR TEMP. (DB°C/WB°C)	LVS. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	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	1	12F	26.16	8	R410A	380	3	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									

MECHANICAL PLANS

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

SYSTEM C		INDOOR UNIT										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT. AIR TEMP. (DB°C/WB°C)	LVG. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-18	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-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		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	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										OUTDOOR UNIT									
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT. AIR TEMP. (DB°C/WB°C)	LVG. AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
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	6	R410A	380	3	60
FCU-2	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)

MECHANICAL PLANS

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

SYSTEM A				INDOOR UNIT									OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-8	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-2	1	9F	33.44	9.5	R410A	380	3	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									
FCU-10	1		WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	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 UNIT									OUTDOOR UNIT								
DESIGNATION	QTY.	LOCATION	TYPE	NOMINAL COOLING CAPACITY TR (KW)	AIRFLOW RATE (CMM)	ESP (Pa)	AIR CONDITION		ELECTRICAL CHARACTERISTIC			UNIT DESIGNATION	QTY.	LOCATION	SELECTED COOLING CAPACITY		REFRIGERANT	ELECTRICAL CHARACTERISTIC			
							ENT AIR TEMP. (DB°C/WB°C)	LVG AIR TEMP. (DB°C/WB°C)	MOTOR INPUT (W)	V	Ph				Hz	KW		TR	V	Ph	Hz
FCU-11	1	8TH FLOOR	WALL-MOUNTED	2 (7.0)	11	NIL	23.6/17.2	13.3/12.7	43	220	1	60	ACCU-4	1	9F	66.12	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									

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