

AIR HANDING UNIT & OUTDOOR AIR UNIT SCHEDULE

UNIT NUMBER			OAU-01	OAU-02	AHU-01,02	AHU-03	AHU-04,05	AHU-06			
AREA SERVED			PRE-COOLED OUTDOOR AIR UNIT	PRE-COOLED OUTDOOR AIR UNIT	NICU	NICU	COMMON AREA	NEGATIVE ROOM			
QUANTITY			1	1	2	1	2	1			
AHU./FCU. TYPE			HH, DOUBLE SKIN AHU	HH, DOUBLE SKIN AHU	HH, DOUBLE SKIN AHU	HH, DOUBLE SKIN AHU	HH, DOUBLE SKIN AHU	HH, DOUBLE SKIN AHU			
UNIT DATA (EACH)	TOTAL CAPACITY		BTU/HR	200,362	18,105	133,093	227,360	473,386	57,824		
	SENSIBLE CAPACITY		BTU/HR	124,903	11,287	103,178	151,613	357,262	36,474		
	SUPPLY AIR		CFM	-	-	4,000	6,000	14,050	1,500		
	OUTDOOR AIR		CFM	3,320	300	200	620	1,150	300		
	DRAIN PIPE SIZE		ø inch	ø11/2"	ø3/4"	ø11/2"	ø11/2"	ø21/2"	ø3/4"		
	COOLING COIL COND.	ENT. WATER TEMPT		°F	45	45	45	45	45		
		LEAV. WATER TEMPT		°F	55	55	55	55	55		
		ENT. AIR TEMPT		°FDB/°FWB	99.0/80.0	99.0/80.0	73.5/61.8	73.1/63.2	72.2/63.5		
		SUPPLY AIR TEMPT		°FDB/°FWB	65.0/65.0	65.0/65.0	50.0/-	50.0/-	50.0/-		
	CHILLED WATER PIPE	FLOW RATE		GPM	40.08	3.60	26.64	40.08	94.56	7.20	
		PIPE SIZE		ø inch	ø2"	ø1"	ø11/2"	ø2"	ø3"	ø1"	
		TYPE OF CONTROL VALVE			2W-P-PICV	2W-P-PICV	2W-P-PICV	2W-P-PICV	2W-P-PICV	2W-P-PICV	
		CLOSE-OFF PRESS. RATING kPa			60	60	60	60	60	60	
	BLOWER	BLOWER TYPE			FRESH AIR FAN	FRESH AIR FAN	SUPPLY FAN	SUPPLY FAN	SUPPLY FAN	SUPPLY FAN	
		EXTERNAL ST. PR.		inwg	0.60	0.60	2.0	2.0	2.50	1.5	
		APPROX.		kW	1.50	1.50	5.50	7.50	15.0	3.75	
		STARTER TYPE			VSD	VSD	VSD	VSD	VSD	VSD	
	AIR FILTER	V /ø /Hz			380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	
		TYPE			PF-2 + MF-5	PF-2 + MF-5	PF-2 + MF-5	PF-2 + MF-5	PF-2 + MF-5	PF-2 + MF-5 + UV LAMP	
		MANOMETER		SET (S)	2	2	2	2	2	2	
DIFF. PRESS. SWITCH		SET (S)	2	2	2	2	2	2			
ELECTRICAL PANEL BOARD NO.			-	-	-	-	-	-			

- NOTES :
- MAX. SUPPLY AIR TEMPERATURE SHALL BE THE CONDITION OF SUPPLY AIR WHICH IS MEASURED AT AIR TERMINAL OR AIR OUTLET. THE CONTRACTOR SHALL COMPENSATE THE HEAT GENERATED FROM FAN'S MOTOR TO ACHIEVE THAT DESIRED SUPPLY AIR TEMPERATURE.
 - COOLING COIL FACE VELOCITY SHALL NOT EXCEED 2.5 m/s FOR AHU AND 2.25 m/s FOR FCU.
 - PRESSURE DROP OF COOLING COIL SHALL NOT EXCEED 45 kPa
 - EXTERNAL STATIC PRESSURE OF BLOWER SHOWN IN SCHEDULE SHALL BE THE SUM OF ALL SYSTEM COMPONENT PRESSURE LOSSES EXCEPT COOLING COIL AND CASING OF AHU OR FCU.
 - TYPE OF AHU & FCU
 - FOR AHU :
 - V V = VERTICAL MOUNTED, VERTICAL DISCHARGE
 - V H = VERTICAL MOUNTED, HORIZONTAL DISCHARGE
 - H V = HORIZONTAL MOUNTED, VERTICAL DISCHARGE
 - H H = HORIZONTAL MOUNTED, HORIZONTAL DISCHARGE
 - FOR FCU :
 - FC = FLOOR MOUNTED, CONCEALED TYPE
 - FE = FLOOR MOUNTED, EXPOSED TYPE
 - CC = CEILING MOUNTED, CONCEALED TYPE
 - CE = CEILING MOUNTED, EXPOSED TYPE
 - CCS = CEILING MOUNTED, CASSETTE TYPE
 - TYPE OF CONTROL VALVE
 - 2W-O/F = 2-WAY MOTORIZED VALVE ; ON-OFF TYPE
 - 2W-P = 2-WAY MOTORIZED VALVE ; PROPORTIONAL TYPE
 - 2W-P-PICV = 2-WAY MOTORIZED VALVE ; PROPORTIONAL TYPE ; PRESSURE INDEPENDENT TYPE

7. TYPE OF AIR FILTERS

- TYPE "PF-1" : PANEL FILTER, POLYESTER SYNTHETIC FIBER, 9mm.
- TYPE "PF-2" : PANEL FILTER, POLYESTER SYNTHETIC FIBER, 50mm.
- TYPE "PF-3" : EXTENDED SURFACE PLEATED TYPE PANEL FILTER, GLASS FIBER, 100mm.
- TYPE "PF-4" : AUTOMATIC ROLL MEDIA PANEL FILTER, GLASS FIBER, 50mm.
- TYPE "MF-1" : EXTENDED SURFACE POCKET TYPE MEDIUM FILTER, GLASS FIBER, 550mm., 60% EFF. ASHRAE 52-99
- TYPE "MF-2" : EXTENDED SURFACE POCKET TYPE MEDIUM FILTER, GLASS FIBER, 550mm., 80% EFF. ASHRAE 52-99
- TYPE "MF-3" : EXTENDED SURFACE PLEATED TYPE MEDIUM FILTER, GLASS FIBER WITH SEPARATOR, 300mm.,

- TYPE "MF-4" : EXTENDED SURFACE PLEATED TYPE MEDIUM FILTER, GLASS FIBER WITH SEPARATOR, 300mm.,TYPE OF CONTROL VALVE 80% EFF. ASHRAE 52-99
- TYPE "MF-5" : EXTENDED SURFACE PLEATED TYPE MEDIUM FILTER, GLASS FIBER WITH SEPARATOR, 300mm., 90% EFF. ASHRAE 52-99 (MERV 13)
- TYPE "FF-1" : HEPA FILTER, FIRE RETARDANT GLASS FIBER WITH ALUMINIUM SEPARATOR, 145mm., 290mm., 99.97% DOP EFF.
- TYPE "FF-2" : HEPA FILTER, FIRE RETARDANT GLASS FIBER WITH ALUMINIUM SEPARATOR, 145mm., 290mm., 99.99% DOP EFF.
- TYPE "FF-3" : ULPA FILTER, FIRE RETARDANT GLASS FIBER WITH ALUMINIUM SEPARATOR, 145mm., 290mm., 99.999% DOP EFF.
- TYPE "X-1" : ELECTRONIC AIR CLEANER (INDUSTRIAL GRADE), 90% EFF. ASHRAE 52-99
- TYPE "X-2" : COMBINATION AIR FILTER (ELECTRONIC FILTER + MECHANICAL FILTER)

REVISION	
NO.	DESCRIPTION
1.	04/12/2563
2.	01/02/2564
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PROJECT :
โครงการพัฒนารับปรับปรุง
พื้นที่ห้องผู้ป่วย ส.9
และพื้นที่ห้องผู้ป่วย ส.9
(ชั้น 9, NICU)

LOCATION :
สถาบันสุขภาพเด็กแห่งชาติมหาราชินี
420/8 ถนนมหาราชินี แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพมหานคร 10400

CLIENT :
กองทันตกรรมเฉลิมพระเกียรติ
80 พรรษา มหาราชินี
มูลนิธิโรงพยาบาลเด็ก

ARCHITECT :
จิรายุ พรหมดี รหัส 11944

INTERIOR :
จิรายุ พรหมดี รหัส 11944

ENGINEER :
STRUCTURAL ENGINEER :
พจนนุ เสือตะกูล รหัส 54050
พิธีวัฒน์ อ้วนน้อย รหัส 12008

ELECTRICAL ENGINEER :
ปริญญ์ ปันศิริ รหัส 5836

SANITARY ENGINEER :
ณัฐพล ปะชาต รหัส 1816

MECHANICAL ENGINEER :
ณัฐพล ปะชาต รหัส 3352

DRAWN : 999
CHECK : 999
JOB No : 999

DATE : 99/99/9999

SCALE : NTS.

SHOWING :
ตารางเครื่องปรับอากาศ
และระบายอากาศ 1

AC-02

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