

GENERAL NOTES

THE CONTRACTOR OF THE PROPOSED BUILDING WORKS AT BAITUL SUKON HOSPITAL SHALL OBSERVE ADHERENCE TO THE GENERAL PROVISION OF THE BUILDING REGULATION AND COMPLIANCE WITH THE FOLLOWING NOTES :

- 1- THE CONTRACTOR SHALL COMPLY WITH THE CURRENT ASTM, ASHRAE AND SMACNA STANDARDS (*OR RELEVANT B.S) WITH RESPECT TO ANY MATERIALS OR WORK NOT SPECIFIED IN DETAIL IN THE CONSULTANT'S SPECIFICATIONS OR DRAWINGS.
- 2- THE HVAC SYSTEM DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CORRESPONDING ARCHITECTURAL, FIRE PROTECTION, ELECTRICAL, SANITARY AND STRUCTURAL DRAWINGS. ANY DISCREPANCY SHALL BE BROUGHT TO THE CONSULTANT / ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION.
- 3- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE LOCATION OF ALL AIR DEVICES, DUCTING AND PIPING etc. FORMING PART OF THIS CONTRACT IS COORDINATED WITH:

a) ALL ARCHITECTURAL & REFLECTED CEILING PLANS.
b) ALL OTHER MEP SERVICES.
c) STRUCTURAL MEMBERS.
- 4- DO NOT SCALE THE DRAWINGS. ALL DIMENSIONS SHALL BE READ FROM THE DRAWINGS OR COMPUTED.
- 5- ALL EQUIPMENT AND DEVICES SHALL BE UL APPROVED.
- 6- ALL DIMENSIONS SHOWN ARE FOR GUIDANCE & FROM FINISHED FLOOR/WALL. MAKE NECESSARY DIMENSIONAL ALLOWANCES.
- 7- ALL WORK SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND HEALTH CODES.
- 8- ALL DIMENSIONS ARE IN SI. UNITS UNLESS OTHERWISE INDICATED.
- 9- A MINIMUM OF 500mm IS REQUIRED BETWEEN ANY TWO ITEMS PENETRATING RETAINING WALLS/SLABS.
- 10- FOR DETAILS REFER TO DRG. # M02.01 & M02.02
- 11- ANY VARIATIONS ON SITE AND/OR DUE TO SITE CONDITIONS MUST BE BROUGHT TO THE NOTICE OF P.M. PERSONNEL/CONSULTANTS BEFORE PROCEEDING WITH WORK.
- 12- CERTAIN WALLS HAVE BRACING BEAMS--WHEREVER IT IS REQUIRED TO RUN/EMBED CONDUITS/PIPES IN WALLS M.C SHALL BE RESPONSIBLE FOR COORDINATING WITH G.C/P.C/E.C TO ENSURE THAT ADEQUATE NOS. & SIZES OF COORDINATED SLEEVES ARE LEFT IN BRACING & OTHER BEAMS.
- 13- NO WORK SHOULD BE DONE AT SITE WITHOUT APPROVED "SHOP DRAWING" ANY SUCH WORK IS AT THE CONTRACTOR'S RISK & COST.
- 14- "SHOP DRAWINGS" TO INCLUDE AT LEAST B.O.D. LEVELS, PIPE INVERTS, DOUBLE LINE PIPING, TIE DIMENSIONS, VALVES/FITTINGS ETC. TO SCALE, SECTIONS, INSTALLATION DETAILS ETC. & TO BE COORDINATED WITH ALL TRADES.
- 15- FOR SUPPORT AND CONNECTIONS OF SHEET METAL DUCTS REFER TO DRG. # M02.01 & M02.02
- 16- MECHANICAL CONTRACTOR TO COORDINATE WITH OTHER TRADES TO ENSURE SUFFICIENT SPACE AVAILABLE FOR ACCESS TO UNITS.
- 17- ALL FITTINGS AS PER ASHRAE/SMACNA STANDARD SHAPES & ASPECTS.
- 18- ALL EQUIPMENT TO BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.
- 19- M.C TO SUPPLY & INSTALL ALL WIRING & CONTROLS FROM HVAC EQUIPMENT TO RESPECTIVE HVAC DB'S.
- 20- ALL TIE-DIMENSIONS AND ALL PIPE SIZES ARE IN mm & LEVELS IN METERS UNLESS OTHERWISE NOTED.
- 21- M.C TO ALSO TAKE INTO CONSIDERATION NOTES ON INDIVIDUAL DRAWINGS AND SEEK CLARIFICATION FROM P.M / CONSULTANT IN CASE OF ANY AMBIGUITY.
- 22- VOLUME CONTROL DAMPERS TO BE PROVIDED AS REQUIRED FOR PROPER AIR BALANCING AND AT EVERY FRESH AIR OUTLET & EXHAUST INLET AND ON SUPPLY AND RETURN AIR DEVICES AS NECESSARY.
- 23- ALL FRESH AIR INTAKES TO HAVE FRESH AIR INTAKE LOUVER + SAND LOUVER.
- 24- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PIPING, VALVES, FITTINGS, ACCESSORIES / APPURTENANCES REQUIRED ARE SUPPLIED AS PART OF THIS CONTRACT AND COORDINATED WITH.

a) ALL ARCHITECTURAL & REFLECTED CEILING PLANS.
b) ALL OTHER MEP SERVICES.
c) STRUCTURAL MEMBERS.
d) FINAL LOCATION OF EQUIPMENTS.
- 25- VALVES TO BE INSTALLED SUCH THAT THEY ARE EASILY OPERABLE AND SERVICEABLE AND SUCH THAT ACCESS PANELS ARE MINIMIZED.
- 26- ALL EQUIPMENTS MUST BE AS PER SPECIFICATIONS AND CONFORM TO RELEVANT CODES AND STANDARDS.
- 27- CONTRACTOR MUST ESTABLISH THAT ALL EQUIPMENTS OFFERED/SUPPLIED ARE ABLE TO FIT INTO SPACES INTENDED.
- 28- THE FINAL HVAC COORDINATED DRAWING SHALL BE ISSUED WHEN FINAL LIGHTING RCP CONFIRMED.

HVAC LIST OF DRAWINGS

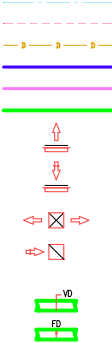
SHEET NO DESCRIPTION		SCALE
M01. LIST OF DRAWINGS & GENERAL NOTES		
M01.01	HVAC LIST OF DRAWINGS GENERAL NOTES, LEGEND	N.T.S
M02. STANDARD DETAILS		
M02.01	HVAC STANDARD DETAILS	N.T.S
M03. SITE PLAN		
M04. GENERAL LAYOUTS		
M04.01	HVAC LAYOUT FOR UPPER GROUND FLOOR	1/8" = 1'-0"
M04.02	HVAC LAYOUT FOR FIRST FLOOR	1/8" = 1'-0"
M04.03	HVAC LAYOUT FOR SECOND FLOOR	1/8" = 1'-0"

TREATMENT OF PIPES & DUCTS OPENINGS

- 1- (UNLESS OTHERWISE DETAILED) THE CONTRACTOR SHALL SUBMIT BEFORE CONSTRUCTION, COMPLETE BUILDER'S WORK SHOP DRAWINGS (PLANS & SECTIONS etc.) DULY COORDINATED SHOWING ALL NECESSARY OPENINGS IN CONCRETE STRUCTURE (TO ACCOMMODATE THE HVAC DUCTING AND PIPING) FOR THE ENGINEER'S APPROVAL.
- 2- SLEEVES AND OPENINGS TO BE PLACED BEFORE CASTING CONCRETE. THESE SLEEVES AND OPENINGS TO FIT THE PIPES / DUCTS SIZES WITH SUITABLE TOLERANCE.
- 3- AFTER FIXING PIPES AND FITTINGS SPECIAL GROUTING TO BE USED TO WATER PROOF THE OPENINGS.
- 4- ALL PIPING & DUCTING SHALL BE SEISMIC ALLY RESTRAINED AS PER SPECIFIED.

LEGEND

SYMBOL



DESCRIPTION

REFRIGERANT PIPING
CONDENSATE DRAIN
SUPPLY AIR DUCT
RETURN / EXCESS AIR DUCT
FRESH / VENTILATION AIR DUCT
SUPPLY AIR LINEAR BAR GRILLE
RETURN AIR LINEAR BAR GRILLE
SUPPLY AIR DIFFUSER
RETURN AIR DIFFUSER
VOLUME CONTROL DAMPER
FIRE DAMPER



FCU FAN COIL UNIT
N INDICATING ITS NUMBER



AHU AIRHANDLING UNIT
N INDICATING ITS NUMBER



CHP CHILLED WATER PUMPS
N INDICATING ITS NUMBER



CH CHILLER
N INDICATING ITS NUMBER



SF SUPPLY FAN
N INDICATING ITS NUMBER



VF VENTILATION FAN
N INDICATING ITS NUMBER



EF EXHAUST FAN
N INDICATING ITS NUMBER



VAV VARIABLE AIR VOLUME BOX
N INDICATING ITS NUMBER

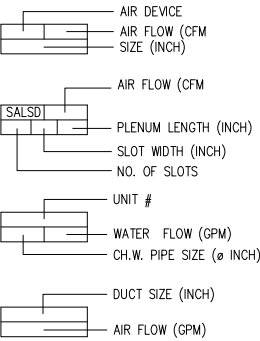


ET EXPANSION TANK
N INDICATING ITS NUMBER




RS INDICATE SHAFT TYPE
N INDICATING ITS NUMBER

S.A DUCT	SUPPLY AIR DUCT
R.A DUCT	RETURN AIR DUCT
EX.A DUCT	EXCESS AIR DUCT
F.A DUCT	FRESH AIR DUCT
V.A DUCT	VENTILATION AIR DUCT
S.V DUCT	SMOKE VENTILATION DUCT
K.V DUCT	KITCHEN VENTILATION DUCT
E.A DUCT	EXHAUST AIR DUCT
T.E DUCT	TOILET EXHAUST DUCT
K.E DUCT	KITCHEN EXHAUST DUCT
S.E DUCT	SMOKE EXHAUST DUCT
SP	SPLIT TYPE AC UNIT
CSP	CASSETTE TYPE SPLIT AC UNIT
CU	CONDENSER UNIT
ERV	ENERGY RECOVERY VENTILATOR
F/A	FROM ABOVE
T/B	TO BELOW
F/B	FROM BELOW
H/L	HIGH LEVEL
L/L	LOW LEVEL
L/S	LITERS PER SECOND
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
P.C	PLUMBING SUB CONTRACTOR
M.C	MECHANICAL SUB CONTRACTOR
E.C	ELECTRICAL SUB CONTRACTOR
P.M	PROJECT MANAGER



Note:

DATE	DESCRIPTION	MARK
PROJECT		
BAIT-UL-SUKOON KARACHI		
CLIENT		
MR. JAMEEL YOUSUF		
MEP CONSULTANT		
 S. MEHBOOB & COMPANY <small>Suite # 4, 4th Floor, Dean Arcade, Clifton Block 5, Karachi - 75600 Pakistan ☎ (021) 35875016, 35874371, 35873880 🌐 www.smeheboob.com smc.int@smeheboob.com</small>		
TITLE		
HVAC LIST OF DRAWINGS GENERAL NOTES, LEGEND		
STATUS		
TENDER DRAWINGS		
SCALE N.T.S	DATE APR. 2021	DRAWING NO.
DRAWN MOHSIN	CHECKED HARIS	M01.01
DESIGNED HARIS	APPROVED FAM	
JOB NO.	ISSUED DATE	REV.NO. 0