

NEW AIR HANDLING UNITS					
UNIT SHALL BE OF THE COOLING ONLY CHILLED WATER TYPE					
UNIT No.	COOLING CAPACITY	HEATING CAPACITY	WATER FLOW	AIR QUANTITY	POWER SUPPLY
AC-08	21.03 kW	-	1.76 l/s	2860 l/s	380-415V / 3 Ph / 6 A POWER TRANSFORMER IS INSTALLED AT UNIT BY ELEC CONTRACTOR, CONNECTION TO UNIT BY MECH CONTRACTOR

AHU	Area Served:	Cooling [kW]	Heating [kW]	Air flow [m <sup>3</sup> /s]	Humidifier [kg/h]
AC-01	Auditorium Below	75.35	72.7	14.45	85
AC-02	Auditorium Top	51.5	41.9	7.73	40
AC-03	Entrance Foyer Internal	82.0	Reheater 56.2	6.3	20
AC-04	Entrance Foyer External	139.5	67.0	11.36	20
AC-05	Main Foyer Internal	156.4	Reheater 120.8	10.69	40
AC-06	Main Foyer External	372.45	195.9	32.15	20
AC-07	Side Foyers	280.1	157.5	21.71	25
AC-08	Light and Sound	21.1	None	2.86	15

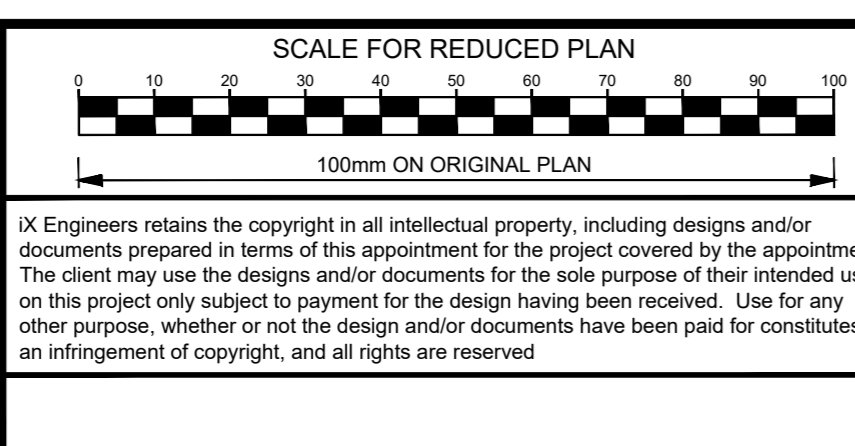
Legends - Water Systems	
	THERMOMETER
	PRESSURE GAUGE
	FLANGE BELOW
	STRAINER
	PUMP
	NON RETURN VALVE
	MOTORIZED THREE WAY VALVE
	MOTORIZED THREE WAY VALVE
	MOTORIZED CONTROL VALVE
	ISOLATING VALVE
	TWO WAY FLOW CONTROL VALVE
	AUTO AIR RELIEF VALVE
	PRESSURE SENSOR
	FLOW SWITCH
	TEMPERATURE SENSOR
	HOT WATER SUPPLY
	HOT WATER RETURN
	CHILLED WATER SUPPLY
	CHILLED WATER RETURN

Legends - Refrigerant Systems	
	SUPPLY AIR DUCTING
	REFRIGERANT PIPING ROUTE
	UPVC DRAIN PIPING ROUTE
	CONTROL WIRING
	WIRED REMOTE
	IPH ISOLATOR BY ELECTRICAL CONTRACTOR
	IPH ISOLATOR BY MECHANICAL CONTRACTOR

- Notes**
- Do not scale the drawings.
  - All dimensions to be verified on site, prior to manufacturing or ordering of equipment.
  - The installation shall comply with the requirements of the Occupational Health and Safety Act of 1993.
  - Any in-clarities shall be brought to the attention of the consulting engineer.
  - This drawing, or part thereof, shall not be used for any installation/project other than this one.
  - All drawings shall be read in conjunction with the specification, bill of quantities and standard drawings.
  - The positions and size of equipment is shown schematically on the drawing. The exact positions will be determined on site.

FLOOR PLAN - LEVEL - 2.500  
SCALE 1:200

AMENDMENT				
NO	DATE	CHECKED BY	DONE BY	DESCRIPTION
A	20/09/2022	MCH	MCH	FOR INFORMATION
TD	30/09/2022	MCH	MCH	FOR TENDER PURPOSES



**IXengineers**  
Infrastructure Excellence  
P.O. BOX 38157  
LANGENHOVEN PARK  
BLOEMFONTEIN 9300  
TEL: (051) 411 8040  
E-mail: mc.h@ixengineers.co.za

DESIGNED	MCH	CONSULTING ENGINEER
DRAWN	MCH	DATE
		CLIENT

**CLIENT**  
12 FIRST AVENUE  
BLOEMFONTEIN CENTRAL  
BLOEMFONTEIN, 9301  
TEL: (051) 447 7771  
E-mail: paul@pacofs.co.za

**PROJECT**  
BID/HVAC/CAPEX/2/2022  
PACOF'S HEATING, VENTILATION  
AND AIR CONDITIONING (HVAC)  
PROJECT

**DRAWING DESCRIPTION**  
SAND DU PLESSIS THEATER  
HVAC SYSTEM LAYOUT  
K- FLOOR (LEVEL -2.500)

SCALE	1:100
ORIGINAL DWG SIZE A0	
DATE	30/09/2022
DRAWING NUMBER	301769-HVAC-05
REV NO	TD

**PRELIMINARY FOR INFORMATION ONLY FOR APPROVAL FOR TENDER PURPOSES FOR CONSTRUCTION**

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