

5D BIM QTO REQUIREMENT					
BIM Model LOD/Provision (General BQ/SOR in compliance with HKSM4)					
Item	System	Sub-system	Component	Required Info	Unit
1	HVAC	Chilled Water	Pipework	Material, class, system type, size or diameter, location.	Run
2	HVAC	Chilled Water	Valves	Material, type, size, functionality.	No.
3	HVAC	Chilled Water	Instrumentation	Type, functionality, fixing location, for which type of equipment and tag ID.	No.
4	HVAC	Chilled Water Pipe	Thermal insulation	Material, insulation type, surface area, thickness.	Run
5	HVAC	Chilled Water Pipe	Cladding	Material, cladding type, overall diameter, thickness.	Run
6	HVAC	Condensate Drainage	Pipework	Material, class, system type, size or diameter, location, primer and painting if necessary, insulation and cladding (type and thickness)	Run
7	HVAC	Condensate Drainage	Insulation	Material, insulation type, overall size, thickness.	Run
8	HVAC	Condensate Drainage	Cladding	Material, cladding type, overall diameter, thickness.	Run
9	HVAC	Air-Conditioning	AHU	Equipment ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location, platform if any	No.
10	HVAC	Air-Conditioning	PAU	Equipment ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location, platform if any	No.
11	HVAC	Air-Conditioning	FCU	Equipment ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location, platform if any	No.
12	HVAC	Air-Conditioning	VAV	Equipment ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location, platform if any	No.
13	HVAC	Air-Conditioning	CAV	Equipment ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location , platform if any	No.
14	HVAC	Air-Conditioning	Split type AC units	Equipment ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location, platform if any	No.
15	HVAC	Air-Conditioning	Window AC units	ID Tag, capacity, electrical circuits, labels, ancillary equipment, accessories, location, platform if any	No.
16	HVAC	Air-Conditioning	Rectangular air ductwork	Type, system name, overall size, FR, thickness, insulation, finishes, painting	m2
17	HVAC	Air-Conditioning	Circular air ductwork	Type, system name, diameter, FR, thickness, insulation, finishes, painting	Run
18	HVAC	Air-Conditioning	Oval air ductwork	Type, system name, size and diameter, FR, thickness, insulation, finishes, painting	Run
19	HVAC	Air-Conditioning	Dampers	Type, material, FR, overall size, motorized, CCMS point	No.
20	HVAC	Air-Conditioning	Grilles	Type, Material, Configure (i.e. blade), VCD (if any), overall size	No.
21	HVAC	Air-Conditioning	Diffusers	Type, Material, Configure (i.e. blade), VCD (if any), overall size	No.
22	HVAC	Air-Conditioning	Lourves	Type, Material, Configure (i.e. blade), VCD (if any), overall size	No.
23	HVAC	Air-Conditioning	Thermal insulation - rectangular ductwork	Material, insulation type, surface area, thickness.	m2
24	HVAC	Air-Conditioning	Thermal insulation - circular ductwork	Material, insulation type, ductwork surface area, thickness.	Run
25	HVAC	Air-Conditioning	Thermal insulation - oval air ductwork	Material, insulation type, ductwork surface area, thickness.	Run
26	HVAC	Air-Conditioning	Cladding - rectangular ductwork	Material, insulation type, ductwork surface area, thickness.	m2
27	HVAC	Air-Conditioning	Cladding - circular ductwork	Material, insulation type, overall diameter, thickness.	Run
28	HVAC	Air-Conditioning	Cladding - oval air ductwork	Material, insulation type, overall oval diameter, thickness.	Run
29	HVAC	Mechanical Ventilation	Exhaust fans	Equipment ID Tag, flow rate (capacity), electrical circuits, labels, ancillary equipment, fixing accessories, fixing location.	No.
30	HVAC	Mechanical Ventilation	Fresh air fans	Equipment ID Tag, flow rate (capacity), electrical circuits, labels, ancillary equipment, fixing accessories, fixing location.	No.
31	HVAC	Mechanical Ventilation	Rectangular air ductwork	Type, system name, overall size, FR, thickness, insulation, finishes, painting	m2
32	HVAC	Mechanical Ventilation	Circular air ductwork	Type, system name, diameter, FR, thickness, insulation, finishes, painting	Run
33	HVAC	Mechanical Ventilation	Oval air ductwork	Type, system name, size and diameter, FR, thickness, insulation, finishes, painting	Run
34	HVAC	Mechanical Ventilation	Dampers	Type, material, FR, overall size, motorized, CCMS point	No.

35	HVAC	Mechanical Ventilation	Grilles	Type, Material, Configure (i.e. blade), VCD, overall size	No.
36	HVAC	Mechanical Ventilation	Diffusers	Type, Material, Configure (i.e. blade), VCD, overall size	No.
37	HVAC	Mechanical Ventilation	Lourves	Type, Material, Configure (i.e. blade), VCD, overall size	No.
38	HVAC	Mechanical Ventilation	Thermal insulation - rectangular ductwork	Material, insulation type, ductwork surface area, thickness.	m2
39	HVAC	Mechanical Ventilation	Thermal insulation - circular ductwork	Material, insulation type, overall diameter, thickness.	Run
40	HVAC	Mechanical Ventilation	Thermal insulation - oval air ductwork	Material, insulation type, overall oval diameter, thickness.	Run
41	HVAC	Mechanical Ventilation	Cladding - rectangular ductwork	Material, cladding type, surface area, thickness.	m2
42	HVAC	Mechanical Ventilation	Cladding - circular ductwork	Material, cladding type, overall diameter, thickness.	Run
43	HVAC	Mechanical Ventilation	Cladding - oval air ductwork	Material, cladding type, overall oval diameter, thickness.	Run
44	HVAC	Smoke Extraction	Smoke extraction fans	Type, Equipment ID Tag, flow rate (capacity), static pressure, electrical circuits, labels, ancillary equipment, fixing accessories, fixing location.	No.
45	HVAC	Smoke Extraction	Make air fans	Type, Equipment ID Tag, flow rate (capacity), static pressure, electrical circuits, labels, ancillary equipment, fixing accessories, fixing location.	No.
46	HVAC	Smoke Extraction	Dampers	Type, material, FR, overall size, motorized, CCMS point, fused link if any	No.
47	HVAC	Smoke Extraction	Rectangular FRR air ductwork	Type, system name, overall size, FR, thickness, insulation, finishes, painting if any	m2
48	HVAC	Smoke Extraction	Thermal insulation - rectangular ductwork	Material, insulation type, ductwork surface area, thickness.	m2
49	HVAC	Smoke Extraction	Cladding - rectangular ductwork	Material, cladding type, surface area, thickness.	m2
50	HVAC	Electrical Power Supply	Motor Control Centre	Equipment ID Tag, Location	No.
51	HVAC	Electrical Power Supply	Local motor control panels	Panel ID and no. , Location	No.
52	HVAC	Electrical Power Supply	Direct digital control (DDC)	Type, System name, Network ID, functionality, location	No.
53	HVAC	Electrical Power Supply	Monitor Modules	Type, System name, Network ID, functionality, location	No.
54	HVAC	Electrical Power Supply	Control Modules	Type, System name, Network ID, functionality, location	No.
55	HVAC	Electrical Power Supply	Final circuit (power supply) to individual MCC, LMCP, valves, dampers, equipment	size of cable and wiring, from point to point, location, electrical provision	No.
56	HVAC	Building Management System	Same as Electrical Power Supply -		
57	HVAC	General Works	Sign board or E&M Signage	Refer to the Specification.	No.