

Checklist of Documents of Healthcare Engineering Systems required to be submitted with the “Letter of Intent for Variation of Service”

與「更改醫院服務的意向通知書」一併提交有關醫療工程系統的文件清單

<p>Information of Healthcare Engineering Systems required 所須提交與醫療工程系統有關的資料</p>	<p>Suggested Format 建議格式</p>	<p>Please enclose the following submission item(s) and tick <input checked="" type="checkbox"/> where applicable 請附上以下呈交項目並在下列適用空格內加上 <input checked="" type="checkbox"/></p>
<p>(I) *For variation of service involving the change in electrical installation for <u>critical care area</u> # 所更改之服務涉及供應予<u>關鍵醫護區</u>#電力裝置的變更</p> <p>(i) Summary of the healthcare electrical standard(s) / code(s)^Δ by critical care areas where the key design parameters are to be complied for intended use. 按不同的關鍵醫護區所參照的醫療電力供應標準/守則^Δ摘要並舉列相關的主要設計參數以滿足使用需要</p> <p>(ii) Schematic diagram(s) of the electrical installations 配電系統示意圖</p> <p>(iii) Layout plan(s) of the electrical installations 配電平面圖</p>	<p>Tabular form showing the areas served, proposed locations, standards/codes complied, source(s) of back-up power, etc. [See Table 1 as example] 以表格形式舉列出配備電力供應的區域、建議位置、所符合的標準/守則、後備電源種類等。[見表 1作為例子]</p> <p>Line and block diagram showing the source(s) of power supply, circuitry, changeover mode, rating of cables, switchgears and circuit board, and the served locations served, and including designation codes/numbers of major installations; legends and abbreviations, drawing title and number. 以線條和方塊形式顯示電力供應電源、線路、電源供應切換模式、電線等級、配電裝置和配電箱的規格、及供電區域，並在圖則內包含各主要裝置的指定編號、圖例和縮寫解釋、圖則名稱及圖則編號。</p> <p>Drawing in pan view with background building plan showing the power points (e.g. socket outlet), circuit boards associated with their types, ratings, designation numbers and locations (corresponded to the schematic diagram), and including drawing legends and abbreviations, title, number and appropriate scale clearly showing the above items (e.g. drawing scale is not larger than 1:100). 以平面佈置形式並包含建築平面底圖以顯示電源接點（例如插座）、配電箱及相關款式、規格、等級、裝置編號和位置（須與系統示意圖一致），並在圖則內包含圖例和縮寫解釋、圖則名稱、圖則編號和合適的比例以清晰顯示上述事項（例如，圖則比例不超於 1:100）。</p>	<p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p>

Information of Healthcare Engineering Systems required 所須提交與醫療工程系統有關的資料	Suggested Format 建議格式	Please enclose the following submission item(s) and tick <input checked="" type="checkbox"/> where applicable 請附上以下呈交項目並在下 列適用空格內加上 <input checked="" type="checkbox"/>
<p>(II) *For variation of service involving the change in specialized ventilation systems for <u>specialized ventilation area</u>^s 所更改之服務涉及供應予<u>特殊通風區</u>^s特殊通風系統的變更</p> <p>(i) Summary of the healthcare ventilation and air-conditioning standard(s) / code(s) [^] by specialized ventilation areas, where the key parameters are to be complied for intended use 按不同的特殊通風區所參照的醫療空調通風標準/守則[^]摘要並舉列相關的主要設計參數以滿足使用需要</p> <p>(ii) Air-side schematic diagram(s) of the specialized ventilation systems 特殊通風系統示意圖</p>	<p>Tabular form showing the room names, area served with specialized ventilation, proposed locations, standards/codes complied and key parameters (e.g. air change rate, pressure gradient), major air-conditioning and ventilation equipment designed to serve the areas with specialized ventilation. [See Table 2 as example] 以表格形式舉列出配備特殊通風的區域、建議位置、所符合的標準/守則及主要參數(例如換氣量、壓差)、供應特殊通風予該類房間的主要空調及通風設備。[見表 2作為例子]</p> <p>Line and block diagram showing the major air-conditioning & ventilation equipment with their capacity and designation number, filter, control device (e.g. room type thermostat), pressure gradient, air flow directions, air ducts, their type and level of supply/exhaust, locations of outdoor air intake and air exhaust to outdoor, and the served rooms with specialized ventilation, and including drawing legends and abbreviations, title and number. 以線條和方塊形式顯示主要空調通風設備及其送風量和設備編號、過濾網、控制元件(例如室內感溫器)、壓差、送/排風流向、風管及其類別和送/排風高低示意位置、室外鮮風引入的示意位置和排風至室外的示意位置, 及提供特殊通風的房間, 並在圖則內包含圖例和縮寫解釋、圖則名稱及圖則編號。</p>	<p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p>

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<p>(iii) Layout plan(s) of the specialized ventilation systems 特殊通風平面圖</p> <p>(III) * For variation of service involving the change in <u>medical gas pipeline systems</u> 所更改之服務涉及醫療氣體管道系統的變更</p> <p>(i) Summary of the type(s) of medical gases to be provided and the relevant healthcare engineering standard(s)/code(s)^Δ where the key design parameters are to be complied for intended use 所提供的醫療氣體種類、參照的醫療氣體標準／守則^Δ 摘要及相關的主要設計參數以滿足使用需要</p> <p>(ii) Schematic diagram(s) of the medical gas pipeline systems 醫療氣體管道系統示意圖</p>	<p>Drawing in pan view with background building plan showing the major air-conditioning & ventilation equipment with their designation number (e.g. AHU-1), filters, supply/exhaust air locations (e.g. air diffuser), air ducts associated with their types, dimensions, routing (corresponded to the schematic diagram), and including drawing legends and abbreviations, title, number and appropriate scale clearly showing the above items (e.g. drawing scale is not larger than 1:100).</p> <p>以平面佈置形式並包含建築平面底圖以顯示主要空調通風設備及設備編號(例如 AHU-1)、過濾網、送/排風位置(例如散流器)、風管及其類別、尺寸和路徑(須與系統原理圖一致), 並在圖則內包含圖例和縮寫解釋、圖則名稱、圖則編號和合適的比例以清晰顯示上述事項(例如, 圖則比例不超於 1:100)。</p> <p>Tabular form showing the areas served, locations, standards/codes complied, gas flow rate and working pressure, etc. [See Table 3 as example] 以表格形式舉列出配備醫療氣體供應的區域、建議位置、所符合的標準/守則、氣體流量和工作壓力等。[見表 3 作為例子]</p> <p>Line and block diagram showing the major medical gas manifolds and cylinders/containers/equipment with their capacity and quantity, highlight of the multiple sources of gas supplies, valve sets and alarm units, gas flow directions, pipelines and their types and routings, gas terminal units, served rooms, and including drawing legends and abbreviations, title and number. 以線條和方塊形式顯示主要醫療氣體匯流排和醫療氣體瓶/容器/設備及其容積和數量、標示氣體的多方供應來源、閥門組件和警報元件、氣體供應流向、管道及其類別和路徑、終端裝置、供應氣體的房間, 並在圖則內包含圖例和縮寫解釋、圖則名稱及圖則編號。</p>	<p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p>

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(iii) Layout plan(s) of the medical gas pipeline systems 醫療氣體管道平面圖	Drawing in pan view with background building plan showing the major medical gas manifolds and cylinders/containers/equipment with their locations and quantity, pipelines and their types, pipe dimension and routings, gas terminal units (corresponded to the schematic diagram), and including drawing legends and abbreviations, title, number and appropriate scale clearly showing the above items (e.g. drawing scale is not larger than 1:100). 以平面佈置形式並包含建築平面底圖以顯示主要醫療氣體滙流排和醫療氣體瓶/容器/設備及其位置和數量、管道及其類別、管徑和路徑、終端裝置(須與系統原理圖一致)，並在圖則內包含圖例和縮寫解釋、圖則名稱、圖則編號和合適的比例以清晰顯示上述事項(例如，圖則比例不超於 1:100)。	<input type="checkbox"/>

Remarks:

註釋：

* delete where appropriate

請刪去不適用事項

#According to the Interpretation of Terms under the *Code of Practice for Private Hospitals*, “**critical care areas**” means an area in a hospital that provide life support or complex surgery, or where failure of equipment or a system is likely to jeopardize the immediate safety or even cause major injury or death of patients or caregivers. Examples are operating theatre / room, cardiac catheterisation service, interventional angiography room, intensive care unit, high dependency unit, special care unit, cardiac care unit, labour room, and accident & emergency resuscitation bay / room, etc.

根據《私家醫院實務守則》列出的詞語釋義，「**關鍵醫護區**」指醫院內為病人提供生命支援或進行複雜的手術，或任何因設備或系統故障而可能危及病人或照顧者的即時安全或甚至導致他們嚴重受傷或死亡的區域。例如手術間／房、心導管插入術服務、介入性血管造影室、深切治療部、加護病室、特別護理病房、心臟科護理病房、分娩室、以及急症室進行急救的病室／病房等。

Remarks :

註釋 :

△ Examples of reference healthcare engineering standards / codes for the following systems are:-

- *Electricity Supply: HTM 06-01;*
- *Ventilation and Air-conditioning System: HTM 03-01 or ASHRAE Standard 170, and Section 3 of “Infection Control Guidelines” published by the Infection Control Branch, Centre for Health Protection (CHP);*
- *Medical Gas Pipeline System: HTM 02-01.*

有關醫療工程標準/守則的例子可參考如下:-

- *電力供應: HTM 06-01;*
- *通風空調系統: HTM 03-01 或 ASHRAE Standard 170, 及衛生防護中心感染控制處所頒布之《診所感染控制指引》第3章;*
- *醫療氣體管道系統: HTM 02-01.*

δ According to the Interpretation of Terms under the *Code of Practice for Private Hospitals*, “**specialized ventilation area**” means an area in a hospital with special ventilation design for infection control and / or occupational safety. Examples are operating theatre / room, isolation room, bronchoscopy room, laboratory with biosafety risk, burns unit, labour room, aseptic preparation facilities, etc.

根據《私家醫院實務守則》列出的詞語釋義，「**特殊通風區**」指醫院內為感染控制及／或職業安全具有特殊通風設計的區域。例如手術間／手術室、隔離病房、支氣管內窺鏡室、具生物安全風險的實驗室、燒傷護理部、分娩室、無菌配製設施等。

**Summary of the healthcare electrical standard(s) / code(s) by
 critical care areas**

Table 1

關鍵醫護區的醫療電力供應標準/守則摘要

表 1

Example 例子

<i>Critical Care Area</i> 關鍵醫護區	<i>Proposed Location(s)</i> 建議的位置	<i>Healthcare electrical Standard(s)/code(s) to be complied</i> 所符合的醫療電力供應標準/守則	<i>Major medical equipment/device to be installed with back-up power supplies*</i> 供應後備電源的主要醫療設備/儀器	<i>Remark</i> 備註
Operating Theatre No. 1 (ref.: OT1)	OT1: 2/F	HTM06-01	Anaesthesia Units, Radiologic Imaging System (C-arm), Cardiac Stimulator, Patient Monitor	Individual built-in battery system will also be provided for each listed major equipment
Operating Theatre No. 2 (ref.: OT2)	OT2: 3/F	HTM06-01	Anaesthesia Units, Radiologic Imaging System (C-arm), Cardiac Stimulator, Patient Monitor	Uninterruptible Power Supply (UPS) System will be provided for each listed major equipment
Cardiac Catheterization Lab (ref.: CCIC01)	CCIC01: 5/F	HTM06-01	Bi-plane Catheterization Unit, Defibrillator, Cardiac Stimulator	Uninterruptible Power Supply (UPS) System will be provided for each listed major equipment

* Back-up power supplies must be provided by emergency generators, uninterruptible power supplies (UPS) and/or internal batteries of critical equipment, etc. The type, rating and back-up time of the back-up power supply must be selected to meet the back-up power requirements in accordance with the contingency plan for electricity suspension of the hospital. The design and installation of the electrical installations must also be of internationally acceptable healthcare standards, as required in the Code of Practice for Private Hospitals, or equivalent.
 後備電源須由應急發電機、不間斷電源(UPS)及/或關鍵設備的內部電池等提供。後備電源類型、額定值及備用時間必須按醫院停電應變計劃而進行選型。電力裝置的設計及安裝也須符合《私家醫院實務守則》所訂定的國際認可醫護標準或其同等標準。

**Summary of the healthcare ventilation and air-conditioning
 standard(s) / code(s) by specialized ventilation areas**
 特殊通風區的醫療通風及空調標準/守則摘要

Table 2
表 2

Example 例子

<i>Specialized Ventilation Area</i> 特殊通風區	<i>Proposed Location(s)</i> 建議的位置	<i>Healthcare ventilation & air-conditioning standard(s) to be complied</i> 所符合的醫療通風及空調標準/守則	<i>Major parameters applied *</i> 所應用的主要參數	<i>Remark</i> 備註
Operating Theatre No.1 (ref.: OT1)	OT1: 2/F	HTM03-01	Air change rate: 25 ACH (Total F.A.) Nominal pressure: +25 Pa	Primary Air Unit (PAU) with dual motor will be provided. Standard Layout 2 of Appendix 7 in HTM03-01 referred.
Operating Theatre No.2 (ref.: OT2)	OT2: 3/F	HTM03-01	Air change rate: 25 ACH (Total F.A.) Nominal pressure: +25 Pa	Primary Air Unit (PAU) with dual motor will be provided. Standard Layout 2 of Appendix 7 in HTM03-01 referred.
Airborne Infection Isolation Room No.1 (ref.: IS01)	IR01: 6/F	ASHRAE Standard 170-2017; Chapter 3 of Section 3.1, ICB IC Guideline, CHP	ASHRAE Standard 170-2017: Room condition: 21-24 deg.C, max RH60 Section 3, ICB Infection Control Guidelines:- Pressure differential:>- 2.5Pa; ACH: ≥12(Total F.A.); Filter efficiency: 90% for supply, 99.97% for return	Anteroom will be provided.

* Major parameters include pressure gradient, air change per hour (total and outdoor air), filtration efficiency, design indoor temperature, design relative humidity, etc. of the specialized ventilation area.

主要參數包括特殊通風區的壓力差、每小時換氣量(總換氣量及室外空氣換氣量)、過濾網效能、設計室內溫度、設計相對濕度等。

**Summary of the medical gas pipeline system standard(s) /
 code(s) by service areas**
 各服務區域的醫療氣體標準/守則摘要

Table 3
表 3

Example 例子

<i>Service Area</i> 供應氣體區域	<i>Proposed Location(s)</i> 建議的位置	<i>Healthcare engineering standard(s) to be complied</i> 所符合的醫療工程標準/守則	<i>Types of medical gases and key design parameters *</i> 醫療氣體種類及主要參數	<i>Remark</i> 備註
Cubicle No.1, High dependency unit	7/F	HTM02-01	<p><u>Oxygen (O₂): 4 numbers</u> Nominal pressure: 400kPa Diversified flow: 110L/min</p> <p><u>Medical air (MA4): 4 numbers</u> Nominal pressure: 400kPa Diversified flow: 80L/min</p> <p><u>Vacuum: 2 numbers</u> Nominal pressure: 40kPa Diversified flow: 80L/min</p>	Connected to existing central medical gas pipeline system

* Key design parameters include number of terminal units, nominal pressure (in kPa), diversified flow (in L/min), etc., for each piped medical gas supplied to the service area.
 主要參數包括以每種醫療氣體管道系統所供應予服務區域的醫療氣體終端裝置數量、公稱壓力(以千帕斯卡為單位)、設計供氣流量(以升每分鐘為單位)等。