

STANDARD FOR OPERATION THEATRE

Name of Facility:

Address:

If comply tick (√) Yes, if not tick (√) No. Please add comment for any explanation.

PROVISION	ITEM	YES	NO	COMMENT
	INFRASTRUCTURE & EQUIPMENT			
	Location			
R.187(3),(7)	Free from traffic flow			
R.187(5)	Avoid direct traffic between OT and LR			
R.187(6)	Limited access by an outpatient			
R.52(2)(a)	Lift available for vertical transfer to OT			
R.52(3)(a)	Clear opening ≥ 1.2m			
R.52(3)(a)	Size ≥ 1.5m x 2.1m			
R.52(3)(a)	Capacity ≥ 1,500 kg			
R.52(4), 122(2)	Kept in good repair & operating condition & comply with DOSH certification (CF)			
R.187(2)	Ancillary facility outside OT			
R.187(7)	Direct connection to CSSU serving for OT only			
	Signs and labels			
R.60	Proper signage and labelling system			
R.187, 193	Availability of proper internal room zoning			
	<u>Treatment Zone</u>			
	- Reception			
	- Induction/Preparation area			
	- Operation room			
	- Recovery area			
	<u>Non-treatment Zone</u>			
	- Washing room			
	- Sterile store			
	- Staff room & changing room			

PROVISION	ITEM	YES	NO	COMMENT
	<i>Appropriate Staff Flow</i>			
	<i>Appropriate Patient Flow</i>			
	<i>Appropriate Equipment Flow</i>			
R.193(1)(a)	Transfer area			
	<i>Able to fit 2 transfer trolleys / bed</i>			
	<i>Transfer line (Red Line)</i>			
	<i>Airlock</i>			
R.193(g) & 204	Staff facilities			
R.204(f)	Changing room			
	<i>Change footwear</i>			
R.204(a),(b)	Locker room (for male & female)			
R.204(c),(d)	Toilet and bath room			
R.204(e)	Storage for scrub clothing			
R.207	Administrative facilities			
R.207(1)(a)	Control station with telephone and permit visual surveillance of all traffic which enters the suite			
R.207(1)(b)	Supervisor office (may be combined with (a))			
R.36	Available and displayed in a conspicuous area			
R.36	Duty roster			
R.229(1)	Emergency call information (with contact number)			
R.193(1)(i)	Preparation area			
	Operation rooms (OR)			
R.189(2)	Design, equipment and functional layout commensurate to the surgical procedures performed.			
R.190(2)	Major OR			
R.189(1)	Number of OR (<i>State actual numbers & comment accordingly</i>)			
R.54(1)	Doors ≥ 1.2m clear opening			

PROVISION	ITEM	YES	NO	COMMENT
R.190(2)	Area $\geq 38.0\text{m}^2$			
R.190(2)	Clear area $\geq 33.0\text{m}^2$			
R.58(1)(c)	Clear ceiling height $\geq 2.7\text{m}$			
R.56(1), 188	Floor – jointless, easily cleaned, non-toxic material & non-skid			
R.56(2)	Floor – no carpet			
R.58(2),(4)	Ceiling – jointless & non- toxic			
R.57, 188	Wall – smooth, jointless, washable & non-toxic material			
Amalan KKM	Temperature (18-22°C) or ASHRAE 16-26°C			
Amalan KKM	Humidity (50 - 60%) or ASHRAE 40-60%			
R.201	Positive air pressure			
R.87	Emergency supply (genset) for lighting, socket and ventilation system			
R.87(5)	Colour coding to differentiate between normal, emergency and uninterrupted power supply (UPS)			
R.84(3)	No adapters, extension cords and junction box			
R.200	Adequate exhaust with active scavenging system for anaesthetic gases			
R.191(2)(a)	Lightings – Overhead surgery light			
R.191(2)(b)	2 x-ray illuminators			
R.191(2)(c)	Electric clock with sweep second hand			
R.191(2)(f)	Oxygen port outlet			
R.192	Nitrous oxide			
R.192	Compressed air (where applicable)			
R.191(2)(e)	Suction outlet			
R.191(2)(d)	Storage for surgical supplies			
R.89(4),(5), (9), 198(1)	Ventilation : -100% fresh air - Fresh air supply intakes away from any source or contamination or odours - No recirculation (no diffuser / return air grille) - Air inlet (at or near ceiling), air outlet (below) to achieve laminar flow [uni-directional flow]			
R.198(2)	Distance between outdoor air intake (fresh air supply) and outdoor exhaust outlet $\geq 7.6\text{m}$			
R.198(2)	Minimum 20 air change per hour (ACH =CFM x 60 divided by room volume in cubic feet)			
R.198(3)	Bottom of out-door air intake $\geq 0.9\text{m}$ above ground / roof level			

PROVISION	ITEM	YES	NO	COMMENT
R.199(1)	3 filters (3 rd filter at least a HEPA system filter)			
R.199(2)	A manometer installed across the HEPA filter			
R.85	Adequate lighting in OR (≥ 500 lux – Amalan KKM)			
R.211(1)	No water sprinkler in OR (Amalan KKM)			
R.193(1)(b)	Scrub area			
R.196	Adjacent to OR			
R.193(1)	Separate from OR			
R.54, R.211(1)	Door : swing out			
R.68(3)	Sink with elbow tap			
R.68(3)	Foot controlled soap dispenser			
R.196	Adequately equipped			
R.190(3)	Minor OR			
R.189(1)	Number of OR (<i>State actual numbers & comment accordingly</i>)			
R.54(1)	Doors : ≥ 1.2 m clear opening			
R.190(3)	Dimension ≥ 4.6 m			
R.190(3)	Clear area $\geq 25\text{m}^2$			
R.58(1)(c)	Clear ceiling height ≥ 2.7 m			
R.56(1),188	Floor – jointless, easily cleaned, non-toxic material & non-skid			
R.56(2)	Floor – no carpet			
R.58(2),(4)	Ceiling – jointless, non- toxic			
R.57, 188	Wall – smooth, jointless & washable, non-toxic material			
Amalan KKM	Temperature (18-22°C) or ASHRAE 16-26°C			
Amalan KKM	Humidity (50 - 60%) or ASHRAE 40-60%			
R.201	Positive air pressure			
R.87	Emergency supply (genset) for lighting, socket and ventilation system			
R.87(5)	Colour coding to differentiate between normal, emergency and uninterrupted power supply (UPS)			
R.84(3)	No adapters, extension cords and junction box			
R.200	Adequate exhaust with active scavenging system for anaesthetic gases			

PROVISION	ITEM	YES	NO	COMMENT
R.191(2)(a)	Lightings – Overhead surgery light			
R.191(2)(b)	2 x-ray illuminators			
R.191(2)(c)	Electric clock with sweep second hand			
R.191(2)(f)	Oxygen port outlet			
R.192	Nitrous oxide			
R.192	Compressed air (where applicable)			
R.191(2)(e)	Suction outlet			
R.191(2)(d)	Storage for surgical supplies			
R.89(4),(5), (9), 198(1)	Ventilation: -100% fresh air - Fresh air supply intakes away from any source or contamination or odours - No recirculation (no diffuser / return air grille) - Air inlet (at or near ceiling), air outlet (below) to achieve laminar flow [uni-directional flow]			
R.198(2)	Distance between outdoor air intake (fresh air supply) and outdoor exhaust outlet $\geq 7.6\text{m}$			
R.198(2)	Minimum 20 air change per hour (ACH)			
R.198(3)	Bottom of out-door air intake $\geq 0.9\text{m}$ above ground / roof level			
R.199(1)	3 filters (3 rd filter at least a HEPA system filter)			
R.199(2)	A manometer installed across the HEPA filter			
R.85	Adequate lighting in OR ($\geq 500\text{lux}$ Amalan KKM)			
R.211(1)	No water sprinkler in OR (Amalan KKM)			
R.193(1)(b)	Scrub area			
R.196	Adjacent to OR			
R.193(1)	Separate from OR			
R.54, R.211(1)	Door : swing out			
R.68(3)	Sink with elbow tap			
R.68(3)	Foot controlled soap dispenser			
R.196	Adequately equipped			
R.138(2)	Labour Room cum Emergency OR			
R.189(1)	Number of OR (<i>State actual numbers & comment accordingly</i>)			
R.54(1)	Doors $\geq 1.2\text{m}$ clear opening			

PROVISION	ITEM	YES	NO	COMMENT
R.138(2)	Dimension \geq 4.9 m			
R.138(2)	Clear area \geq 28.0m ²			
R.58(1)(c)	Clear ceiling height \geq 2.7m			
R.56(1), 188	Floor – jointless, easily cleaned, non-toxic material & non-skid			
R.56(2)	Floor –no carpet			
R.58(2),(4)	Ceiling – jointless & non- toxic			
R.57, 188	Wall – smooth, jointless, washable & non-toxic material			
Amalan KKM	Temperature (18-22°C) or ASHRAE 16-26°C			
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R.201	Positive air pressure			
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R.191(2)(b)	2 x-ray illuminators			
R.191(2)(c)	Electric clock with sweep second hand			
R.191(2)(f)	Oxygen port outlet			
R.192	Nitrous oxide			
R.192	Compressed air (where applicable)			
R.191(2)(e)	Suction outlet			
R.191(2)(d)	Storage for surgical supplies			
R.89(4),(5), (9), 198(1)	Ventilation : -100% fresh air - Fresh air supply intakes away from any source or contamination or odours -no recirculation (no diffuser / return air grille) -Air inlet (at or near ceiling), air outlet (below) to achieve laminar flow [uni-directional flow]			
R.198(2)	Distance between outdoor air intake (fresh air supply) and outdoor exhaust outlet \geq 7.6m			
R.198(2)	Minimum 20 air change per hour (ACH)			
R.198(3)	Bottom of out-door air intake \geq 0.9m above ground / roof level			

PROVISION	ITEM	YES	NO	COMMENT
R.199(1)	3 filters (3 rd filter at least a HEPA system filter)			
R.199(2)	A manometer installed across the HEPA filter			
R.85	Adequate lighting in OR (≥ 500 lux Amalan KKM)			
R.211(1)	No water sprinkler in OR (Amalan KKM)			
R.193(1)(b)	Scrub area			
R.196	Adjacent to OR			
R.193(1)	Separate from OR			
R.54, R.211(1)	Door : swing out			
R.68(3)	Sink with elbow tap			
R.68(3)	Foot controlled soap dispenser			
R.196	Adequately equipped			
R.183	Recovery area			
R.183(3)	Appropriate location - to avoid traffic flow			
R.183(1)	Size (<i>commensurate with beds, caseload and number of OTs</i>) (suggested 3 bedded for 2 OT)			
R.220(1)	Single-bedded $\geq 18.6\text{m}^2$			
R.220(1)	Multi-bedded – $13.9\text{m}^2/\text{bed}$			
R.220(2)	Between bed $\geq 2.4\text{m}$			
R.220(2)	Between bed sides to wall $\geq 1.2\text{m}$			
R.220(2)	Between foot of bed to wall $\geq 1.8\text{m}$			
R.78, 193(1)(h)	Stretcher space			
R.183(4)(a)	Adjustable recovery trolley			
R.183(4)(b), R.221(a)	Oxygen supply and medical gas			
R.183(4)(c)	Suction apparatus			
R.183(4)(d)	Resuscitation equipment / drugs			
R.183(4)(e)	ECG and oximeter			
R.183(4)(f)	Specialised equipment (<i>where necessary</i>)			
	Handling of instrument / waste disposal			
R.197	Clean-up room			

PROVISION	ITEM	YES	NO	COMMENT
R.197	Clinical sink with wrist blade or foot-action tap			
Amalan KKM	Single corridor concept (double bagging)			
	Double corridor concept :			
	- Clean corridor			
	- Dirty corridor			
	Disposal room/area			
R.193(d),205	Store for instrument & supply			
R.75	Clean Utility			
R.75(1)	At least one room per nursing unit			
R.75(1)	A counter and space for the storage			
R.75(2)	No hand washing sink			
R.75(3)	Air-conditioned room			
R.76	Dirty Utility			
R.76	At least one room per nursing unit			
R.76	Work counter			
R.76	Waste receptacle			
R.76	Soiled linen receptacle			
R.76	Washing equipment			
R.76	Clinical sink			
R.89(2)&(7)	Exhaust fan			
R.77, 193(f)	Janitor's room (dedicated for OT)			
R.77(1)(a)	Sink (<i>preferably a floor receptor with mixing taps</i>)			
R.77(1)(b)	Hook strip for mop handle			
R.77(1)(c)	Shelf for cleaning material			
R.77(1)(d)	Waste receptacle with impervious liner			
R.77(1)(e)	Hand washing facility			
R.77(2)	Adequate space for mop bucket & cleaning equipment			
R.89(2)&(7)	Normal ventilation/exhaust fan			

PROVISION	ITEM	YES	NO	COMMENT
R.93,R.206	Housekeeping			
R.93	Housekeeping services properly operated & maintained to provide a pleasant, safe and sanitary environment			
R.96	Availability & properly maintained equipment for cleaning			
R.98	Cleaning compound and hazardous substance are labelled and stored in safe places			
R.100	No dry dusting and sweeping			
R.194, 195	Substerilizing facilities			
R.194(a)	Separated but adjacent to the OT			
R.194(a)	Not passing through contaminated areas			
R.194(a)	Serve OT conveniently			
R.195(1)(a)	Autoclave with recording thermometer			
R.122(2), 195(2)	Autoclave kept in good repair & operating condition & comply the DOSH			
R.89(2), 258(2)	Exhaust fan (in autoclave area)			
R.425-429, 204	Staff facilities			
R.425	Commensurate with the type, scope and capability			
R.426	Rest room or area with pantry			
	Overall findings			
S.16(1)(a)	Complies with the building layout plan, design construction and specification to which the approval to establish or maintain relates			
S.16(1)(b)	Equipment, apparatus, instrument, material, article, sample or substance or any other thing found in the premises, or any matter connected therewith			
R.122(2)	Infrastructure and all equipment are kept in good repair and operating condition			
R.122(2)	Sterilizers are kept in good repair and operating condition			
R.122(2)	Anaesthetic machines are kept in good repair and operating condition			
	STANDARD & REQUIREMENT (DOCUMENTATION)			
	Organization & Management			
R.186(2)	Head of surgical services shall be a surgeon			
R.186	Personnel			
R.186(3)	OT Supervisor: RMP/registered nurse/registered MA with training and experience in OT procedures			

PROVISION	ITEM	YES	NO	COMMENT																				
R.186(4)	Surgeon																							
R.186(1)	Anaesthetist																							
R.186	OT trained staff																							
R.203	SRN (to include for OT & recovery area)																							
R.186(5)	Sufficient healthcare professional and other staff for supporting services and maintaining aseptic environment i.e. Registered MA																							
	Policies and standard operating procedures																							
R.215(1)	OT policy																							
R.215(2)	Policies on patient admission																							
R.215(2)	Policies on healthcare professional																							
R.215(2)	Policies on visitors																							
R.210(a)	Suitable patient's identification																							
R.217(2)	Policies on responsibilities of nursing staff in the recovery room or area																							
R.217(2)	Policies on admission and stay of patients in the recovery room or area																							
R.21(1)(k), 212(2)	Policy on transportation of laboratory specimens																							
S.36&R.38 – 41	Updated policy and procedure on grievance mechanism																							
	Clinical practice guidelines																							
	In accordance to the facilities and services provided																							
	Record, Registers and rosters																							
R.31&216(1)	Operation theatre register																							
R.47,48,208	Record of consent form																							
R.181	Anaesthetic record																							
R.209(2)	Surgical report																							
R.214	Blood transfusion record																							
R.211 Amalan KKM / HTM 2025	Microbiological air count: <ul style="list-style-type: none"> • $\leq 30 \text{ cfu/m}^3$ when OR is not in use • $\leq 180 \text{ cfu/m}^3$ when OR is in use <table border="1"> <thead> <tr> <th>HTM2025</th> <th colspan="2">Not in use</th> <th colspan="2">In Use</th> </tr> <tr> <th>Test</th> <th>OT's table</th> <th>Other than OT's table</th> <th>OT's table</th> <th>Other than OT's table</th> </tr> </thead> <tbody> <tr> <td>Bacterial count</td> <td>$< 1 \text{ cfu/m}^3$</td> <td>$< 10 \text{ cfu/m}^3$</td> <td>$< 10 \text{ cfu/m}^3$</td> <td>$< 100 \text{ cfu/m}^3$</td> </tr> <tr> <td>Fungus count</td> <td>$< 1 \text{ cfu/m}^3$</td> <td>$< 10 \text{ cfu/m}^3$</td> <td>$< 10 \text{ cfu/m}^3$</td> <td>$< 100 \text{ cfu/m}^3$</td> </tr> </tbody> </table>	HTM2025	Not in use		In Use		Test	OT's table	Other than OT's table	OT's table	Other than OT's table	Bacterial count	$< 1 \text{ cfu/m}^3$	$< 10 \text{ cfu/m}^3$	$< 10 \text{ cfu/m}^3$	$< 100 \text{ cfu/m}^3$	Fungus count	$< 1 \text{ cfu/m}^3$	$< 10 \text{ cfu/m}^3$	$< 10 \text{ cfu/m}^3$	$< 100 \text{ cfu/m}^3$			
HTM2025	Not in use		In Use																					
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PROVISION	ITEM	YES	NO	COMMENT
R.89, 198	Air-conditioning and ventilation system design (<i>when necessary</i>)			
S.74	Program and activities on quality			
S.74(1),(2)	Information on quality programme and activities			
R.127(3)	Periodically evaluate of the adequacy in term of patient, nursing and personal care needs (<i>with head of nursing</i>)			
	Overall findings			
S.16(1)(c)	Complies with standards or requirements: books, records, policies, standard operating procedures, clinical practice guidelines or the management or related matters			

Comments:	
Recommendation:	
Prepared by:	Verified by:
(Name & Stamp)	(Name & Stamp)
Date :	Date: