



## Operating Room - General

Room Code	OR-GEN
Briefed Area	60.00 m <sup>2</sup>
Ceiling Height	3.0 m
Occupancy	1 patient; 5-12 staff
Hours of Operation	Up to 24 hours

**Description** | An Operating Room provides an aseptic environment in which to carry out surgical procedures on a patient under local, regional or general anaesthetic. The Operating Room - General is flexibly used for various surgical procedures that require complex and large equipment. This Standard Component may be adapted for Operating Rooms dedicated to different specialties, for example neurosurgery, orthopaedics, cardiac surgery, obstetrics and trauma.

<b>Electrical</b>	PROTECTION: body protected	<input checked="" type="checkbox"/>	<b>HVAC</b>	AIRCONDITIONING: general	<input type="checkbox"/>
	PROTECTION: cardiac protected	<input type="checkbox"/>		AIRCONDITIONING: HEPA filtered	<input checked="" type="checkbox"/>
<b>Lighting</b>	LIGHTING: general	<input type="checkbox"/>		AIRCONDITIONING: positive pressure	<input checked="" type="checkbox"/>
	LIGHTING: colour corrected	<input checked="" type="checkbox"/>		AIRCONDITIONING: negative pressure	<input type="checkbox"/>
	LIGHTING: dimmable	<input checked="" type="checkbox"/>		VENTILATION: exhaust	<input checked="" type="checkbox"/>
	LIGHTING: indirect	<input type="checkbox"/>		VENTILATION: supply	<input type="checkbox"/>
<b>Nurse Call and Duress</b>	NURSE CALL SYSTEM: buttons / handset	<input checked="" type="checkbox"/>	<b>Medical Gas</b>	VENTILATION: natural	<input type="checkbox"/>
	NURSE CALL SYSTEM: annunciator	<input type="checkbox"/>		MEDICAL GAS: general anaesthesia	<input checked="" type="checkbox"/>
	DURESS: fixed	<input type="checkbox"/>		MEDICAL GAS: special care	<input type="checkbox"/>
	DURESS: wireless coverage	<input type="checkbox"/>		MEDICAL GAS: special care, neonatal ventilation	<input type="checkbox"/>
<b>Security</b>	ACCESS CONTROL: to door	<input type="checkbox"/>	<b>Hydraulic</b>	MEDICAL GAS: birthing	<input type="checkbox"/>
	ACCESS CONTROL: to item / joinery	<input checked="" type="checkbox"/>		WATER: drinking	<input type="checkbox"/>
	INTERCOM: service communications	<input type="checkbox"/>		WATER: specialty	<input type="checkbox"/>
	INTERCOM: security and access control	<input type="checkbox"/>		DRAINAGE: sanitary	<input type="checkbox"/>
	CCTV: camera coverage within room	<input type="checkbox"/>	<b>Fire</b>	DRAINAGE: specialty	<input type="checkbox"/>
	INTRUSION DETECTION: door monitoring	<input type="checkbox"/>		DETECTION: smoke	<input checked="" type="checkbox"/>
<b>ICT and Audio Visual</b>	INTRUSION DETECTION: spatial monitoring	<input type="checkbox"/>	<b>Shielding</b>	DETECTION: heat	<input type="checkbox"/>
	AUDIO VISUAL: patient entertainment system	<input type="checkbox"/>		SHIELDING: ionising radiation	<input checked="" type="checkbox"/>
	AUDIO VISUAL: visitor experience system	<input type="checkbox"/>	<b>Acoustics</b>	SHIELDING: magnetic and radio frequency	<input type="checkbox"/>
	AUDIO VISUAL: virtual collaboration system	<input type="checkbox"/>		SPEECH PRIVACY:	
	AUDIO VISUAL: clinical support system	<input checked="" type="checkbox"/>		not private ..... moderate ..... private ..... confidential	
<b>Accessibility</b>	AUDIO VISUAL: digital operating room system	<input checked="" type="checkbox"/>		NOISE SENSITIVITY:	
	AUDIO: hearing augmentation	<input type="checkbox"/>		not sensitive ..... medium sensitive ..... sensitive	
	VISUAL: luminance contrast	<input checked="" type="checkbox"/>		NOISE GENERATION:	
	SIGNAGE: accessible, statutory	<input type="checkbox"/>		low ..... moderate ..... high ..... very high	

### Additional Considerations

- The minimum critical dimension centred on the sterile zone is 7400mm clear to ensure adequate space within the sterile zone (min 3400mm wide), circulation zone (min 1000mm wide) and equipment zone (min 1000mm wide).
- Where the Operating Room is intended to be used for cardiothoracic procedures and for some forms of hybrid operating theatres, cardiac electrical protection is required.
- Isolated power supply is required individually to each medical services pendant, together with its associated line isolation and overload monitors.
- Location and quantity of RCD outlets to suit overall electrical service provision and is to be confirmed by the project to suit local engineering services guidelines/policies.

- A wall mounted medical services panel has been indicated as optional and may be provided for theatres where, for example, obstetric procedures are intended to be undertaken and the additional panel provides access to services for an infant away from the operating table if required.
- Provision of reticulated nitrous oxide is optional and must be confirmed to suit local jurisdictional policies and operational service requirements. The use of nitrous oxide in operating theatres and procedural suites and emergency departments is declining due to a range of clinical and environmental concerns. Reticulated systems have been found to increase leakage of nitrous oxide (a potent greenhouse gas) to atmosphere, can increase facility operating costs and potentially expose staff to nitrous oxide. Reticulated nitrous oxide and associated scavenge outlets are not mandatory for any healthcare service and point of care cylinders can meet clinical requirements for the majority of healthcare facilities. Due consideration must be given to a range of operational considerations including monitoring and measurement of usage, management of leakage, WHS requirements relating to the use of cylinders, approach to the provision of scavenge where cylinders are used, appropriate storage for cylinders, and security of gas sources given it is used as a recreational drug.
- If laser equipment is to be used, 'laser in use' warning lights are required outside all entry doors to the room.
- If x-ray equipment is to be used, 'x-ray in use' warning lights are required outside all entry doors to the room. Radiation shielding will also be required and is to be assessed by a Radiation Consultant.
- Automated doors with motion or elbow activation are provided to the Operating Room from the Anaesthetic Preparation Room and Exit Bay. Buttons/sensors should be appropriately located in relation to the door, including consideration for approach and movement of patients on beds and mobile equipment. 2-gang buttons that support the opening of either one or both leaves of the door as required are desirable.
- Height of doors to be confirmed to suit the movement of mobile equipment such as mobile imaging devices.
- If external windows are provided, they are to be double glazed with integral venetian blinds (with either manual or automated controls).
- Room lights to be dimmable. Lighting control to room rights, warning signs, and operating lights to be coordinated within the room and an appropriate lighting control panel to be provided to functional requirements.
- Configuration of services pendant (horizontal or vertical) to suit services requirements. Accessories (e.g. shelves, drawers, rails, etc.) are optional and can be selected to suit service and equipment requirements. Services allocations are indicative - type and number of services on the pendant to suit service requirements
- Services pendant arms to have an adequate reach to be moved out of the way to allow for adequate room for movement of a patient trolley and mobile equipment.
- If not dedicated for use in a particular Operating Room, microscope(s) should be located in a nearby equipment bay in close proximity for flexible use between Operating Rooms.



## Doors and Windows

CODE	DESCRIPTION	COMMENT
DOHI-212.03	DOOR: hinged, 2 leaves, 1600 clear opening, solid, standard vision panel, with cover	to anaesthetic preparation room (see ANAES), cover required to vision panel if laser is to be used
AFDPR-006.05	DOOR PROTECTION: plate, full height	to both sides
AHDEC-036	SWITCH: door release, double gang, automatic door, wall mounted	to allow for opening either one or both leaves of the door
AHDMO-001	DOOR MOTORISATION: swing	delayed action closing
DOHI-213.03	DOOR: hinged, 2 leaves, 1700 clear opening, solid, standard vision panel, with cover	to exit bay (see EXIT), cover required to vision panel if laser is to be used
AFDPR-006.05	DOOR PROTECTION: plate, full height	to both sides
AHDEC-036	SWITCH: door release, double gang, automatic door, wall mounted	to allow for opening either one or both leaves of the door
AHDMO-001	DOOR MOTORISATION: swing	delayed action closing
DOHI-014.03	DOOR: hinged, 1 leaf, 950 clear opening, solid, standard vision panel, with cover	to store - sterile stock, access provided for stock delivery where sterile stock is not directly adjacent to operating room
AFDPR-006.05	DOOR PROTECTION: plate, full height	to both sides
AHDEC-031	SWITCH: door release, single gang, automatic door, wall mounted	
AHDMO-001	DOOR MOTORISATION: swing	
WIFX-058.04	WINDOW: fixed, internal, double glazed, sill at 1050H, with integral blind	optional, to store - sterile stock



## Finishes

CODE	DESCRIPTION	COMMENT
FLVY-101	FLOOR FINISH: vinyl, seamless, standard slip resistance	
FLVY-101	FLOOR FINISH: vinyl, seamless, standard slip resistance	inset section of contrasting colour to sterile zone
FLSK-021	SKIRTING: vinyl, integral with floor vinyl, coved	
WLFI-011.07	WALL FINISH: vinyl, full height	alternative impermeable seamless materials may also be acceptable, confirm material selection to suit infection prevention and control requirements
CLFS-011	CEILING: flush set, suspended	
CLFI-003	CEILING FINISH: paint, sterile areas	



## Joinery

CODE	DESCRIPTION	GROUP	QTY	COMMENT
JOBE-002	BENCH: 450D, stainless steel	①	1	
JOBE-231	BENCH SUPPORT: legs and frame, stainless steel	①	1	



## Fittings, Furniture and Equipment (FF&E)

CODE	DESCRIPTION	GROUP	QTY	COMMENT
FIBM-019	WHITEBOARD: fixed, magnetic	②	2	
FIDI-106	DISPENSER: PPE, disposable gloves, wall mounted	②	2	
FIDI-181	DISPENSER: cleaning wipes, wall mounted	②	1	
FIDI-241	DISPENSER: alcohol-based hand rub, wall mounted	②	2	
FIHR-101	BRACKET: suction bottle, wall mounted	②	2	optional - to medical services panel if provided
FIHR-212	BRACKET: computer display screen, single, articulated, wall mounted	②	1	to workstation for digital operating room (DOR) computer
FIHR-327	BRACKET: keyboard and mouse, articulated, wall mounted	②	1	to workstation for digital operating room (DOR) computer
FIHR-331	BRACKET: television/AV system display screen, single, fixed, wall mounted	②	1	to digital operating room (DOR) display screen
FQCL-211	LINEN CARRIER: dirty, single skip	③	1	
FQWS-005	BIN: sharps, clinical, extra large	③	1	on cart
FQWS-032	CART: sharps bin, clinical, foot pedal bin operation	③	1	
FQWS-396	TROLLEY: waste bag	③	1	
ITCL-069	CLOCK: electric, master clock system, slave, digital, dual time/ elapsed time	①	1	
ITNE-076	TELEPHONE: handset, wall mounted	②	2	
ITNE-101	COMPUTER: single display screen, central processing unit (CPU), keyboard and mouse, desktop	③	1	workstation on wheels (WOW) may be provided depending on workflows
ITNE-111	COMPUTER: workstation on wheels (WOW), medical grade, all-in-one computer, keyboard and mouse, on cart	③	2	
ITNE-122	COMPUTER: single display screen, all-in-one, medical grade	③	1	workstation for digital operating room (DOR) computer

CODE	DESCRIPTION	GROUP	QTY	COMMENT
ITNE-204	INPUT DEVICE: keyboard and mouse, wireless, medical grade, washable	③	1	workstation for digital operating room (DOR) computer
ITNE-224	INPUT DEVICE: bar code scanner, wireless, with charging dock, medical grade, washable	③	1	
MMGE-045	POLE: IV, mobile	③	2	
MMGE-191	CANNISTER: suction bottle	③	2	optional - to medical services panel if provided
MMGE-291	DEVICE: pump, infusion, single	③	1	
MMGE-367	DEVICE: patient warming, air blanket	③	1	
MMOP-121	STOOL: mobile, operating	③	1	
MMOP-122	STOOL: mobile, anaesthetic	③	2	
MMOP-123	STOOL: mobile, surgeon	③	1	
MMOP-162	MACHINE: anaesthetic, with patient monitor, high acuity	③	1	
MMOP-166	TROLLEY: anaesthetic	③	1	
MMOP-171	MACHINE: electrosurgical, diathermy	③	1	
MMOP-173	MACHINE: smoke plume evacuation system	③	1	
MMOP-201	STAND: bowl, double	③	1	
MMOP-202	STAND: bowl, single	③	1	
MMOP-211	KICKBUCKET: with stand	③	1	
MMPH-002	SAFE: dangerous drugs, wall mounted, medium	①	1	optional - drug safe may alternatively be located in the anaesthetic preparation room; with card reader, safe location and type of medication stored is dependent on the operational policies and medication management regulations in different jurisdictions
MMTR-003.02	TROLLEY: stainless steel, 750W x 490D x 900H nom, 2 tier	③	1	
MMTR-004.02	TROLLEY: stainless steel, 900W x 490D x 900H nom, 2 tier	③	1	
MMTR-108	TROLLEY: set-up, table 1250W x 800D x 900H nom	③	1	
MMTR-123	TROLLEY: gowns/scrubs, 1220W x 610D x 1830H nominal	③	1	
MMTR-171	TROLLEY: mayo table	③	1	



## Major Medical Equipment (MME)

CODE	DESCRIPTION	GROUP	QTY	COMMENT
MMOP-106	TABLE: operating, mobile, electric	②	1	type of operating table to suit service requirements
MMOP-302	DISPLAY SCREEN: digital operating room (DOR) integration, wall mounted	②	1	
MMOP-311	CAMERA: patient observation, digital operating room (DOR) integration, ceiling mounted	②	1	
MMOP-331	SPEAKER: digital operating room (DOR) integration, ceiling recessed	②	2	
MMOP-341	CONTROL PANEL: digital operating room (DOR) integration, wall mounted	②	1	
MMOP-351	PATCH PANEL: digital room operating (DOR) integration, wall mounted	②	1	
MMOP-371	SYSTEM CABINET: digital integration in operating rooms (DOR)	②	1	located in ICT/AV cupboard (see EXIT)



## Engineering Services

CODE	DESCRIPTION	GROUP	QTY	COMMENT
ELGP-105	GPO: single, wall mounted, cleaner	①	1	
ELGP-131	GPO: single, emergency power, wall mounted	①	1	for recharging equipment
ELGP-161	GPO: single, UPS, wall mounted	①	1	
ELGP-231	GPO: double, emergency power, wall mounted	①	3	
ELPR-011	MONITOR: line isolation, wall mounted	①	1	to UPS power outlets on medical services pendants
ELSW-042	SWITCH: light, laser in use	①	1	optional - to be provided if laser to be used, may be integrated on lighting control panel
ELSW-043	SWITCH: light, x-ray in use	①	1	optional - to be provided if x-ray to be used, may be integrated on lighting control panel
ELSW-051	CONTROL PANEL: lighting	①	2	
ITCL-081	CONTROL PANEL: master clock system	①	1	
ITCL-181	BUTTON: staff assist, with cancel, wall mounted	①	1	
ITCL-191	BUTTON: emergency, with cancel, wall mounted	①	1	
ITCL-211	BUTTON: orderly / porter, with cancel, wall mounted	①	1	
ITIN-016	OUTLET: data, single RJ45, wall mounted	①	1	to wall mounted telephone
ITIN-026	OUTLET: data, double RJ45, wall mounted	①	3	
ITIN-036	OUTLET: data, triple RJ45, wall mounted	①	1	
ITSE-261	READER: security, access control, proximity card, wall mounted	①	1	optional - to drug safe if provided
LIFX-212	LIGHT: illuminated sign, laser in use	①	3	located outside doors, optional - to be provided if laser to be used
LIFX-213	LIGHT: illuminated sign, x-ray in use	①	3	located outside doors, optional - to be provided if x-ray to be used
MEEX-041	GRILLE: exhaust, wall mounted, low level	①	4	for removal of anaesthetic gases, rectilinear or triangular ducts are also acceptable
MGFP-001	ALARM: medical gases, panel, wall mounted	①	1	
MMOP-346	CONTROL PANEL: operating lights, wall mounted	②	1	
MMOP-362	OUTLET: digital operating room (DOR) integration, wall mounted	①	1	to wall mounted display screen



## Medical Services Panels and Pendants

CODE	DESCRIPTION	GROUP	QTY	COMMENT
<b>Panel 1</b>				
MMSP-051	MEDICAL SERVICES PANEL: wall mounted	①	1	optional - provided for theatres where obstetric procedures are undertaken or services are otherwise required separately to those in the medical services pendants
ELGP-146	GPO: single, emergency power, on service panel	①	2	optional
ELPR-073	RCD: residual current device, on services panel	①	1	optional
ITIN-025	OUTLET: data, double RJ45, on services panel	①	1	optional
MGAS-022	OUTLET: medical air, on services panel	①	2	optional
MGAS-042	OUTLET: oxygen (O2), on services panel	①	2	optional
MGAS-062	OUTLET: suction, on services panel	①	2	optional

CODE	DESCRIPTION	GROUP	QTY	COMMENT
MGFP-021	FLOWMETER: medical air	③	2	optional
MGFP-041	FLOWMETER: oxygen	③	2	optional
MGFP-061	ADAPTER: suction	③	2	optional
<b>Panel 2</b>				
MMSP-051	MEDICAL SERVICES PANEL: wall mounted	①	1	
ELGP-146	GPO: single, emergency power, on service panel	①	4	quantity and type of power outlets to suit service requirements
ELGP-176	GPO: single, UPS, on service panel	①	4	quantity and type of power outlets to suit service requirements
ELPR-033	PANEL: UPS status indicator, on services panel	①	1	
ELPR-073	RCD: residual current device, on services panel	①	2	
ITIN-025	OUTLET: data, double RJ45, on services panel	①	3	
<b>Pendant 1</b>				
MMSP-101	MEDICAL SERVICES PENDANT: single arm, horizontal services head	②	1	ergonomic control handles required; configuration (horizontal or vertical) to suit services requirements; services allocations are indicative - type and number of services on the pendant to suit service requirements
ELGP-151	GPO: single, emergency power, on services pendant	①	12	quantity and type of power outlets to suit service requirements
ELGP-181	GPO: single, UPS, on services pendant	①	4	quantity and type of power outlets to suit service requirements
ELPR-034	PANEL: UPS status indicator, on services pendant	①	1	
ITCL-185	BUTTON: staff assist, with cancel, on services pendant	①	1	
ITCL-195	BUTTON: emergency, with cancel, on services pendant	①	1	
ITCL-213	BUTTON: orderly / porter, with cancel, on services pendant	①	1	
ITIN-014	OUTLET: data, single RJ45, on services pendant	①	4	
MGAS-001	OUTLET: carbon dioxide (CO2), on services pendant	①	1	
MGAS-021	OUTLET: medical air, on services pendant	①	1	
MGAS-031	OUTLET: nitrous oxide (N2O), on services pendant	①	1	optional; provision of reticulated nitrous oxide to be confirmed to suit project and service requirements
MGAS-041	OUTLET: oxygen (O2), on services pendant	①	2	
MGAS-051	OUTLET: scavenge, on services pendant	①	1	optional; provided if reticulated nitrous oxide provided - provision of reticulated nitrous oxide to be confirmed to suit project and service requirements
MGAS-061	OUTLET: suction, on services pendant	①	3	
MGAS-071	OUTLET: tool air, integral control panel, on services pendant	①	1	optional - depending on medical equipment to be used, may also be wall mounted
MGFP-021	FLOWMETER: medical air	③	1	
MGFP-041	FLOWMETER: oxygen	③	2	
MGFP-061	ADAPTER: suction	③	3	
MMOP-352	PATCH PANEL: digital room operating (DOR) integration, on services pendant	②	1	
MMOP-363	OUTLET: digital operating room (DOR) integration, on services pendant	①	1	optional - for connection of image capture device to digital operating room (DOR) system
<b>Pendant 2</b>				

CODE	DESCRIPTION	GROUP	QTY	COMMENT
MMSP-101	MEDICAL SERVICES PENDANT: single arm, horizontal services head	②	1	ergonomic control handles required; configuration (horizontal or vertical) to suit services requirements; services allocations are indicative - type and number of services on the pendant to suit service requirements
ELGP-151	GPO: single, emergency power, on services pendant	①	12	quantity and type of power outlets to suit service requirements
ELGP-181	GPO: single, UPS, on services pendant	①	4	quantity and type of power outlets to suit service requirements
ELGP-318	ISOLATOR: three phase, with socket outlet, on services pendant	①	1	optional - depending on equipment requirements, may be wall mounted
ITCL-185	BUTTON: staff assist, with cancel, on services pendant	①	1	
ITCL-195	BUTTON: emergency, with cancel, on services pendant	①	1	
ITCL-213	BUTTON: orderly / porter, with cancel, on services pendant	①	1	
ITIN-014	OUTLET: data, single RJ45, on services pendant	①	4	
MGAS-001	OUTLET: carbon dioxide (CO2), on services pendant	①	1	
MGAS-021	OUTLET: medical air, on services pendant	①	1	
MGAS-031	OUTLET: nitrous oxide (N2O), on services pendant	①	1	optional; provision of reticulated nitrous oxide to be confirmed to suit project and service requirements
MGAS-041	OUTLET: oxygen (O2), on services pendant	①	2	
MGAS-051	OUTLET: scavenge, on services pendant	①	1	optional; provided if reticulated nitrous oxide provided - provision of reticulated nitrous oxide to be confirmed to suit project and service requirements
MGAS-061	OUTLET: suction, on services pendant	①	3	
MGAS-071	OUTLET: tool air, integral control panel, on services pendant	①	1	optional - depending on medical equipment to be used, may also be wall mounted
MGFP-021	FLOWMETER: medical air	③	1	
MGFP-041	FLOWMETER: oxygen	③	2	
MGFP-061	ADAPTER: suction	③	3	
MMOP-363	OUTLET: digital operating room (DOR) integration, on services pendant	①	1	optional - for connection of image capture device to digital operating room (DOR) system
<b>Pendant 3</b>				
MMSP-224	MEDICAL SERVICES PENDANT: double arm, 1 light head, operating / display screen	②	1	
<b>Pendant 3 - Arm 1</b>				
MMSP-091	LIGHT HEAD: operating, articulated arm, pendant mounted	②	1	
MMOP-316	CAMERA: surgical field, digital operating room (DOR) integration, integral to operating light	②	1	
<b>Pendant 3 - Arm 2</b>				
MMOP-303	DISPLAY SCREEN: digital operating room (DOR) integration, pendant mounted	②	1	
<b>Pendant 4</b>				
MMSP-224	MEDICAL SERVICES PENDANT: double arm, 1 light head, operating / display screen	②	1	
<b>Pendant 4 - Arm 1</b>				
MMSP-091	LIGHT HEAD: operating, articulated arm, pendant mounted	②	1	
<b>Pendant 4 - Arm 2</b>				
MMOP-303	DISPLAY SCREEN: digital operating room (DOR) integration, pendant mounted	②	1	

For guidance on how to use the Room Data Sheet, please visit the ["Room Data Sheet Guidance" page on the AusHFG website](#).