



Linear Accelerator Control Room

Room Code	LINAC-CR
Briefed Area	21.00 m ²
Ceiling Height	2.7 m
Occupancy	up to 5 staff
Hours of Operation	8am to 6pm, Mon - Fri (dependent on unit operating hours)

Description | The Linear Accelerator Control room is located adjacent to the Treatment Room for remote control of equipment with audio and visual contact with the patient via cameras, speakers and microphones. Each Treatment Room requires a Control Room.

Electrical | PROTECTION: body protected ☒
PROTECTION: cardiac protected ☐

Lighting | LIGHTING: general ☒
LIGHTING: colour corrected ☐
LIGHTING: dimmable ☒
LIGHTING: indirect ☐

Nurse Call and Duress | NURSE CALL SYSTEM: buttons / handset ☒

HVAC | AIRCONDITIONING: general ☒
AIRCONDITIONING: HEPA filtered ☐
AIRCONDITIONING: positive pressure ☐
AIRCONDITIONING: negative pressure ☐
VENTILATION: exhaust ☐
VENTILATION: natural ☐

Additional Considerations

- Cable pathways for services between the Control room to the Treatment Room must be established and coordinated prior to construction. Radiation shielding is to be as advised by a Radiation Consultant.
- Air conditioning to provide comfort conditions; high equipment loads shall be accounted for.
- The need for and extent of emergency power and UPS must be reviewed to suit site specific requirements. Small UPS units are normally required as a minimum to support control and operating equipment. In some cases, these are supplied with the medical equipment. Other emergency power and UPS requirements to be confirmed based on risk assessment considering the impact of a power outage on patient care/safety.
- Cable management and the potential for computers to be consolidated into a rack (either within the room or in a dedicated, collocated air conditioned room/cupboard) to be determined at project level.
- Provision of a height adjustable workstation may be considered depending on local policies and staff accessibility requirements.



Doors and Windows

CODE	DESCRIPTION	COMMENT
DOHI-003.01	DOOR: hinged, 1 leaf, 900 clear opening, solid	[DWSC-003] optional
AFDPR-001.01	DOOR PROTECTION: kickplate, to 300H	[DWPR-001] to room side
AFDPR-006.01	DOOR PROTECTION: plate, to 900H	[DWPR-005] to corridor side, extent dependent on movement of beds and mobile equipment in adjacent area; to be coordinated with corridor wall protection



Finishes

CODE	DESCRIPTION	COMMENT
FLVY-101	FLOOR FINISH: vinyl, seamless, standard slip resistance	[FLVY-007]
FLSK-021	SKIRTING: vinyl, integral with floor vinyl, coved	[FLSK-010]

CODE	DESCRIPTION	COMMENT
WLFI-001	WALL FINISH: paint	[WLWA-004]
CLTI-022.02	CEILING: drop-in tiles, acoustic, prefinished, 600 x 1200	[CLTI-002]
CLCN-041	CORNICE: wall trim fixing, prefinished	[CLCN-009]



Joinery

CODE	DESCRIPTION	GROUP	QTY	COMMENT
JOBE-061	BENCH: 750D, laminate	①	2	[FIJO-031]
JOBE-211	BENCH SUPPORT: bracket	①	5	[FIHR-080] legs are also acceptable, quantity to be confirmed to achieve required support, ensure location does not impact leg clearance at workstations
JOBE-221	BENCH SUPPORT: end panel	①	2	[FIJO-213]
JOBE-251	CAP: cable access	①	8	[FIJO-099]
JOCU-121	CUPBOARD: wall mounted, double door	①	5	[FIJO-145]
JOGE-001	BULKHEAD: joinery	①	1	[FIJO-212] plasterboard bulkhead is also acceptable



Fittings, Furniture and Equipment (FF&E)

CODE	DESCRIPTION	GROUP	QTY	COMMENT
FIBM-019	WHITEBOARD: fixed, magnetic	②	1	[FIBM-019]
FIHR-411	BRACKET: patient monitor, articulated, wall mounted	②	2	[FIHR-067] to patient observation monitors
FQBS-171	CHAIR: office, ergonomic	③	5	[FQBS-018]
FQGE-121	CLOCK: analogue display, battery operated	③	1	[FQGE-005]
ITAV-146	MICROPHONE: AV system, surface mounted, gooseneck	③	1	[ITAV-014]
ITAV-152	SPEAKER: AV system, ceiling recessed	①	1	[ITAV-057] may be bench mounted, or integrated with microphone
ITCL-381	DISPLAY SCREEN: patient observation	①	2	[ITNE-074]
ITNE-071	TELEPHONE: handset, desktop	③	1	[ITNE-049]
ITNE-102	COMPUTER: dual display screens, central processing unit (CPU), keyboard and mouse, desktop	③	2	[ITNE-071] for access to local network including patient records and images for planning and reporting
ITNE-201	INPUT DEVICE: keyboard and mouse	③	1	[ITNE-067] for patient observation cameras to control pan, tilt and zoom; may be custom control depending on camera system
MMRA-191	ACCESS PANEL: penetration, medical physics port	①	1	[MMRA-006]



Major Medical Equipment (MME)

CODE	DESCRIPTION	GROUP	QTY	COMMENT
MMRA-011	CONTROL CONSOLE: linear accelerator, dual display screens, keyboard and mouse, control unit, microphone and speaker, desktop	②	1	[MMRA-010]
MMRA-016	COMPUTER: linear accelerator, central processing unit (CPU)	②	6	[MMRA-009] quantity to be confirmed based on vendor and equipment requirements; current provision allows for 1 x linear accelerator control system, 1 x record and verify system, and 2-4 x imaging and patient set up systems (e.g. gating and patient positioning).

CODE	DESCRIPTION	GROUP	QTY	COMMENT
MMRA-021	SYSTEM CABINET: linear accelerator	2	1	[MMRA-007] size, configuration and location to be confirmed by vendor



Engineering Services

CODE	DESCRIPTION	GROUP	QTY	COMMENT
ELGP-191	GPO: single, special, for equipment, wall mounted	1	1	[ELGP-106] to linear accelerator computer cabinet
ELGP-201	GPO: double, wall mounted	1	10	[ELGP-208]
ELGP-231	GPO: double, emergency power, wall mounted	1	14	[ELGP-223] quantity to suit computer and display screen requirements
ELPR-071	RCD: residual current device, wall mounted	1	3	[ELPR-006]
ELSW-021	SWITCH: light, dimmer	1	1	[ELBO-012]
ELSW-121	BUTTON: emergency stop, wall mounted	1	1	[ELBO-001] may be integral to linear accelerator control console
ITCL-181	BUTTON: nurse call, staff assist, with cancel, wall mounted	1	1	[ITCL-008]
ITCL-191	BUTTON: nurse call, emergency, with cancel, wall mounted	1	1	[ITCL-004]
ITIN-026	OUTLET: data, double RJ45, wall mounted	1	3	[ITIN-026]
ITIN-036	OUTLET: data, triple RJ45, wall mounted	1	8	[ITIN-036] quantity to suit computer and display screen requirements
ITIN-056	OUTLET: data, USB, wall mounted	1	1	[ITIN-055] connection for music to bunker
ITSE-061	BUTTON: security, duress, fixed, wall mounted	1	1	[ITSE-006]

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