



**BLACKETT
MAGUIRE+
GOLDSMITH**

BCA Compliance Statement

Moore College Resource & Research Centre

1 King Street Newtown

Moore Theological College

27 August 2010



PROPOSED MOORE COLLEGE RESOURCE & RESEARCH CENTRE

BCA STATEMENT OF COMPLIANCE

This compliance statement is to verify that Blackett Maguire + Goldsmith Pty Ltd have undertaken an assessment of the DA design documentation for the proposed new Moore Theological College located at 1 King Street Newtown, against the requirements of the Building Code of Australia 2010 (BCA).

The objective of this compliance statement is to:

1. Accompany submission of a Part 3A Application to enable the consent authority to be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not give rise to design changes to the building which may necessitate the submission of an amended application; and
2. Enable the certifying authority to satisfy its statutory obligations under Clause 145 of the Environmental Planning and Assessment Regulation, 2000 and Clause 18 of the Building Professionals Regulation 2007.

The review is not intended to identify all issues of compliance or non-compliance with the BCA with such other issues to be appropriately addressed at the Construction Certificate stage.

For the purpose of this submission the assessment of the design documentation has been undertaken against the deemed-to-satisfy (DTS) provisions of the BCA. In our assessment we have used the following plan reference:

Architectural floor plans of the building prepared by Allen Jack + Cottier Architects:

PA0000	C	28 July 2010	PA2104	F	21 July 2010
PA1000	D	28 July 2010	PA2105	F	21 July 2010
PA1001	E	28 July 2010	PA2106	F	21 July 2010
PA1100	D	28 July 2010	PA2107	E	16 July 2010
PA2001	E	28 July 2010	PA2108	B	23 July 2010
PA2002	E	28 July 2010	PA2120	D	29 July 2010
PA2003	D	28 July 2010	PA3100	E	21 July 2010
PA2101	F	21 July 2010	PA3101	E	29 July 2010
PA2102	G	21 July 2010	PA3200	E	29 July 2010
PA2103	F	21 July 2010	PA3201	E	16 July 2010
PA2103	F	21 July 2010	PA3202	B	5 November 2009

Proposal

We understand that it is proposed to demolish the existing Moore College building located at 1 King Street Newtown and construct a six (6) storey building with 3 basement levels which comprises of basement carparking (site B), automatic document retrieval stacker & storage (site A), office / administration area, library and seminar rooms.



Building Classification

The proposed building is classified as follows:

▪ BCA Classification:	Class 5 (Office & Administration areas) Class 7a (Carparking) Class 7b (Storage & ASRS) Class 9b (Library, Research & Seminar Rooms)
▪ Rise in Storeys:	Six (6)
▪ Effective Height:	19.4m metres (RL 62.30 – RL 42.90)
▪ Floor Area (GFA):	Approximately 7,433m ²
▪ Type of Construction:	Type A
▪ Climate Zone:	5

Section C – Fire Resistance and Compartmentation:

The proposal demonstrates that compliance with the DTS provisions of Section C of the BCA is readily achievable subject to the following:

- The various building elements of the proposed new six storey building part will need to comply with the following FRL's:
- Fire hazard properties for all floor, wall and ceiling linings are to comply with BCA Specification C1.10a, and other materials (such as sarking or insulation) to comply with BCA Specification C1.10.
- All loadbearing walls will need to be masonry or concrete.
- The floor area and volume compartment limitations must not exceed 8,000m² and 48,000m³
- All walls which are required to achieve a Fire Resistance Level must achieve the relevant FRL in both directions (i.e. internal and external).
- As the building is of type A construction adequate spandrel separation is to be provided between openings in the external walls located in different storeys.

Section D – Access and Egress:

The proposal demonstrates that compliance with the DTS provisions of Section D of the BCA is readily achievable subject to the following:

- Where stairways connect, pass by or pass through more than two storeys, the stairway must be separated by a shaft which achieves an FRL in accordance with Specification C1.1 as identified above or alternatively addressed via Performance Requirement CP1 & CP2



- Distances to exits; distance between alternative exits; and distances to a point of choice between alternative exits will either need to comply with the DTS provisions of the BCA or alternatively Performance Requirements DP4 and EP2.2.
- Appropriate paths of travel, including gradients and handrails are to be provided from the building's exit to the public road to the degree necessary to satisfy Performance Requirement DP2 and also DP5 in relation to fire isolated exits.
- The discharge point of the fire isolated stairways must provide a safe passage of evacuation to ensure that occupants are not subjected to undue exposure.
- Separating construction between the ascending and descending parts of the fire isolated exits must be non-combustible and smoke proof in accordance with Clause 2 of Specification C2.5.
- Balustrades to balconies and barriers to windows will need to satisfy Performance Requirement DP3, particularly where located in excess of 4m from the surface level beneath.
- Required exit doors must be designed so that they swing in the direction of egress (i.e. doors leading into a fire isolated exit, final exit door of a fire isolated stair or passageway which discharges to open space or a door which opens directly to open space).

Section E – Essential Fire Safety Measures

The proposal demonstrates that compliance with the DTS provisions of Section E of the BCA is readily achievable subject to the following:

- A fire hydrant system is to be provided to the degree necessary to address Performance Requirement EP1.3.
- The building is to be provided with sufficient room, which will accommodate a Hydrant Booster Assembly in accordance with AS 2419.1 – 2005
- Fire Hose Reels is to be provided to the degree necessary to address Performance Requirement EP1.1
- In terms of Smoke Hazard Management, the building is required to be provided with the following:
 - An Automatic Smoke Detection and Alarm System (throughout); and
 - Automatic Shutdown of any air handling system upon activation of the Automatic Smoke Detection System and or Sprinkler System, and
- At least one of the passenger lifts in the building is to accommodate a stretcher facility, i.e. a raised stretcher with a patient lying on it horizontally by providing a clear space of not less than 600mm x 2000mm long x 1400mm high above the floor.
- The following essential fire safety measures will be required to be installed within the building (as a minimum) in accordance with the DTS provisions of the BCA.

Statutory Fire Safety Measure	Design/Installation Standard
Access Panels, Doors & Hoppers	BCA Clause C3.13 & AS 1530.4 - 2005
Alarm Signalling Equipment	AS1670.3 – 2004



Automatic Fail Safe Devices	BCA Clause D2.21
Automatic Fire Detection & Alarm System	BCA Spec. E2.2a & AS 1670.1 - 2004.
Building Occupant Warning System activated by the Sprinkler System / Automatic Fire Detection & Alarm System	BCA Spec E1.5 Clause 8 and/ or Clause 3.22 of AS 1670.1 - 2004
Emergency Lighting	BCA Clause E4.4 & AS 2293.1 - 2005
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 and AS 2293.1 - 2005
Fire Blankets (kitchens)	AS 3504 - 1995 & AS 2444 - 1995
Fire Dampers	BCA Clause C3.15, AS 1668.1 - 1998 & AS 1682.1 & 2 - 1990
Fire Doors	BCA Clause C3.2, C3.4, C3.5, C3.6 & C3.7, C3.8, C3.11 and AS 1905.1 - 1997
Fire Hose Reels	BCA Clause E1.4 & AS 2441 - 2005
Fire Hydrant Systems	Clause E1.3 & AS 2419.1 - 2005
Fire Seals	BCA Clause C3.15 & AS 1530.4 - 1997
Lightweight Construction	BCA Clause C1.8 & AS 1530.3 - 1989
Mechanical Air Handling Systems (Shutdown) + Manual override systems to carpark	BCA Clause E2.2, AS/NZS 1668.1 - 1998 & AS 1668.2 - 1991
Paths of Travel	EP & A Regulation Clause 186
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 - 2001
Warning & Operational Signs	Section 183 of the EP & A Regulations 2000, AS 1905.1 - 2005, BCA Clause C3.6, D2.23 & E3.3

Section F- Health and Amenity

The proposal demonstrates that compliance with the DTS provisions of Section F of the BCA is readily achievable subject to the following:

- Facilities are to be constructed so as to satisfy Performance Requirement FP2.5 to ensure it has sufficient means to permit an unconscious patient to be removed from the compartment.

Section G- Ancillary Provisions

The proposal demonstrates that compliance with the DTS provisions of Section G of the BCA is readily achievable subject to the following:

- A building must provide a safe manner of cleaning windows located 3 or more storeys above ground level. In this regard, the windows must be able to be cleaned from within



the building, or provisions made for cleaning of windows by a method complying with the OH&S Act 2000 and regulations made under the Act.

- BCA Part G3 does not apply to an atrium which connects only 2 storeys.

Section J- Energy Efficiency

We note that the requirements of BCA Section J will apply to the building of which the applicant will engage the services of an energy efficiency consultant to demonstrate that the requirements for Climate Zone 5 have been addressed:

- Building Fabric – the external fabric to be designed and constructed to reduce heat flow;
- Glazing – thermal performances; solar orientation; shading;
- Building sealing – doors, windows, roof lights, eg to avoid leakage;
- Air conditioning and ventilation – operation, eg. time switches; exhaust
- Artificial lighting and power – type and operation of lighting and power systems;
- Hot water systems – avoiding heat loss;
- Access for maintenance – access to time switches, shading devices, etc.

Conclusion

In view of the above assessment we can confirm that subject to the above measures being undertaken that compliance with the Performance Requirements of the BCA is readily achievable. In addition, it is considered that matters identified can adequately be addressed in the preparation of the Construction Certificate design documentation without giving rise to any inconsistencies with the project approval.

We trust that the above submission is of assistance to the Consent Authority and we are confident that any design modifications required to the building in order to satisfy the fire and life safety and health and amenity requirements of the BCA will not necessitate the need for submission of an amended application.

Should you wish to discuss please do not hesitate to contact me on (02) 9211 7777.

Yours sincerely,

Matt Morrissey

Accredited Certifier (BPB Accreditation No.0824)

Blackett Maguire + Goldsmith Pty Ltd