



holmesfire

2 October 2014

Community Standards  
Liverpool Council  
Level 2, 33 Moore Street, Liverpool, NSW

5 RYNAN AVENUE, EDMONDSON PARK, NSW – DEVELOPMENT APPLICATION

To whom it may concern,

This letter is to advise that Holmes Fire has been engaged by KMT Constructions Pty Ltd to provide fire engineering services for the proposed residential development to be located at 5 Rynan Avenue, Edmondson Park, NSW.

## INTRODUCTION

The proposed development consists of three residential blocks over two basement car parks. Building A is a standalone five storey building and Building B and C are a combined five storey building.

A Building Code of Australia, 2014 (BCA)<sup>1</sup> assessment has been undertaken by Steve Watson & Partners, dated 1 October 2014. This report identified a number of non-compliances with the Deemed-to-Satisfy Provisions of the BCA that will be addressed by Holmes Fire.

## PROPOSED ALTERNATIVE SOLUTIONS

Holmes Fire will address the identified non-compliances using performance based fire engineering solutions. The performance based solutions will comply with the relevant Performance Requirements of the BCA. The design approach will be in line with the International Fire Engineering Guidelines<sup>2</sup> and other acceptable guideline documents.

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<sup>1</sup> Australian Building Codes Board, *National Construction Code Series 2014, Volume 1, Building Code of Australia, Class 2 to Class 9 Buildings*. Australian Building Codes Board, CAN, Australia, 2014.

<sup>2</sup> National Research Council of Canada; International Code Council, United States of America; Department of Building and Housing, New Zealand; and Australian Building



The Alternative Solution designs will be developed in line with BCA Clause A0.5, as applicable; i.e. complying with the relevant Performance Requirements or by equivalence comparison with the Deemed-to-Satisfy Provisions.

The identified non-compliances and proposed approach of the Alternative Solution for each issue is listed below. Holmes Fire understands that all other aspects of the building will comply with the Deemed-to-Satisfy Provisions of the BCA.

- BCA Clause 2.14 requires that if public corridors are more than 40 m in length they must be divided by smoke proof walls. An Alternative Solution using a comparative approach will be provided to address Performance Requirement EP2.2 to allow for corridors that are up to 77 m in length in Building A.
- BCA Clause C3.11 does not permit unprotected openings into public corridors. An Alternative Solution using a comparative approach will be provided to address Performance Requirement CP2 to allow for proposed windows from kitchen open into public corridor in Building A.
- BCA Clause D1.3 requires a stairway serving as a required exit and connecting more than three floors in a Class 2 building to be fire-isolated. Clause D2.2 also requires a fire-isolated stair to be in a fire resisting shaft. An Alternative Solution using a comparative approach will be provided to address Performance Requirements DP4, DP5, and EP2.2 to allow for the proposed non-fire-isolated stairs connecting five residential floors in Building A.
- BCA Clause D1.4 requires the entrance door from any SOU to be within 6 m of an exit, or a point choice of exits. An Alternative Solution using a comparative approach will be provided to address Performance Requirements DP4 and EP2.2 to allow for the extended travel distances to an exit of up to 10.5 m in Buildings B and C.
- BCA Clause D1.5 requires alternative exits in a Class 7a carpark to be no more than 60 m apart. An Alternative Solution using a comparative approach will be provided to address Performance Requirements DP4 and EP2.2 to allow for the extended travel distance between alternative exits within the carpark in Building A of approximately 62.5 m.



## SUMMARY

Based on Holmes Fire's review of the project documentation, it is considered that performance based fire engineering can be utilised to demonstrate compliance with the Performance Requirements of the BCA without major changes to the current design. Additional non-compliances may be identified as the design is further developed, however it is considered that there are no significant issues that would affect the building layout.

The information contained within this letter is based on the architectural drawings prepared by Joshua Farkash & Associates Pty Ltd, as listed below.

Dwg no.	Title	Date	Issue
A-2101	Basement Floor Plan	26/09/14	F
A-2102	Ground Floor Plan	26/09/14	F
A-2103	Level 1 Floor Plan	26/09/14	F
A-2104	Level 2 Floor Plan	26/09/14	F
A-2105	Level 3 Floor Plan	26/09/14	F
A-2106	Level 4 Floor Plan	26/09/14	F

Please do not hesitate to contact Holmes Fire, should there be any queries about the above.

Regards,

Sarnia Rusbridge  
SENIOR FIRE ENGINEER

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