

13/08/2022

To Whom It May Concern

Dear Sir/Madam:

Subject: Structural Adequate Certificate of two steel beams 250UB37 to replace part of the brick walls between kitchen, balcony and living/dining area at Unit 2, 7-11 Ashburner St, Manly, NSW, 2095



This is to confirm that the designed two steel beams 250UB37 to replace part of the brick walls between kitchen, balcony and living/dining area to replace the brick walls between kitchen and family area, between family and dining room, between dining room and living area at the above address have been designed in accordance with AS1170.1-2002 “Permanent, imposed and other actions”, AS3700-2011 “Masonry Structures”, AS4100-2020 “Steel Structures”, AS3600-2018 “Concrete Structures”, Building Code Australia (NCC 2019) and related Australian Standards.

The new 250UB37 steel beam B1 spans at approximately 3.75m. One end of the steel beam will be supported by the existing brick wall with 12mm thick by 200mm wide spreader plate and the other end is sitting on top of external brick wall with min 250mm bearing length. Steel beam 250UB37 B2 has span 2.7m. One end of beam is supported by the external brick wall with min 250mm bearing length and the other end connects to B1 through the web side plate connection with utilization of 10PL and two M20 8.8/S bolts. **Temporary prop needs to be installed before knocking down the brick walls.** All welds to be 5mm CFW, U.N.O.

I have no hesitation in certifying that the current property will be structurally sound with above modifications.

Soar Engineers Pty Ltd ABN: **40 622 618 606**
Tel: **0414 521 755** info@soarengineering.com.au
www.soarengineering.com.au

SOAR Soar Engineering

Mr Lei Zhang		 ENGINEERS AUSTRALIA	National Engineering Register
MIEAust, CPEng, NER			
Signature		Date 13 / 08 / 22	
Registered on the NER in the area of practice of Structural Engineering			

Yours Faithfully

Lei Zhang



ENGINEERS
AUSTRALIA
Chartered Professional Engineer
MEMBER



National
Engineering
Registration
Board
National Professional Engineers Register (NPER)

BEng, MEng, PhDEng, CPEng: 3130003 RPEQ: 11507, NPER

L.Zhang@soarengineering.com.au