



MASSEY UNIVERSITY
COLLEGE OF SCIENCES
TE WĀHANGA PŪTAIAO

21st August 2017

TO WHOM IT MAY CONCERN

C- BOX Design Assessment

My name is Professor Robyn Phipps and I am Head of the Construction Department at Massey University's Albany Campus.

I have been asked by Steve Cook if I will give an opinion on a design he has come up with to assist in the coordination and compliance of Passive Fire installations within the Construction Industry.

I was invited to sit in on a meeting with Steve and his partners along with Michael Dixon from Crossfire Consultants to view a modular frame design and discuss its possibilities. I was immediately impressed with the design of the C-FRAME and its possibilities both in the NZ market and overseas.

The design focuses on what I believe is a much-needed approach to coordinating penetrations through fire walls, in particular, over fire doors in the ceiling space. It is modular, simplistic in what it will achieve with benefits far outstripping anything on the market today.

There appears to have been significant development put into the initial design, development that will greatly assist with all facets of this area of the process from Installation through inspection and compliance sign off. On top of this there are the obvious cost and time savings across the board when it comes to the Client, the Architect, Consultants through to Main contractor and their subcontractors. My understanding is, from recent conversations with Steve, that they are looking at the introduction of "hot spot" identification technology to assist Emergency services in the event of a building fire.

It gives all service providers a clear pathway through any given building, be that refurbishment or new build allowing for more efficient material and resource costing on any given project with the C-FRAME being manufactured to suit the required application.

The design itself has unique fixing points on opposing sides of itself allowing for an ease of installation to both new and existing wall frames. It incorporates extra stiffeners through the central body for rigidity with a lipped section top and bottom to accommodate the first layer of fire rated plasterboard ensuring the required 26mm of coverage at each penetration.

In my capacity as Head of Construction at Massey University and in conjunction with Associate Professor Johan Potgieter at Massey's School of Advanced Engineering and Technology we will be putting together a small team to do a Case Study on the C-FRAME design.

Yours sincerely,

**Professor Robyn Phipps,
Professor in Construction,
Program Director Construction and Leader of the Built Environment Cluster**

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