

Submission of BCTRAG Agenda Items

Submitted by:	Bruce Curtain/ Michael James	Submitted on:	02/08/19
On behalf of:	NZIA / SFPE		
Risk Title: What is the risk	Passive Fire Protection Considerable physical evidence of non-compliance for passive fire protection indicates system failure and H&S risk to the general public.	Confidential data: Check if communication is to be limited to permanent BCTRAG members	<input type="checkbox"/>
Building Code Clause impacted: If known	C3.5, C3.7, C4.3		
Potential impact or Harm arising from this Risk Consider the impact this risk may cause if it occurred e.g: - Financial, - Innovation stifled, - Loss of life, - Building damage, - Environmental - Productivity loss - Others....	Non-compliance of passive fire protection in buildings can facilitate rapid spread of fire and smoke between fire cells endangering occupants and escape. Passive fire protection requires coordination of multiple trades with services penetrations and seismic joints driving both complexity and poor compliance.		
How prevalent is this risk now and in the future Consider: - impacted population - will the risk grow over time with or without intervention	Anecdotal evidence (I.e. Waikato DHB, Etc) indicates widespread issues across a range of building typologies and around NZ. Practical experience in Auckland suggests that most if not all buildings suffer from passive fire defects. Testimony to this is that in all recent weathertightness litigation cases passive fire defects have been included.		
Factors influencing magnitude of risk Consider: - How urgent is addressing the risk to country or sector. - what is the opportunity cost of the risk materialising	Inspection and proof of compliance can be difficult as fire separation is often hidden in service risers, floor and ceiling voids. This makes identification and quantification of the scale of the problem difficult to assess. Current standards cited in the Acceptable Solutions do not cover all passive fire systems that need to be tested. There are inconsistencies between the standards and acceptable solutions leading to loopholes that are being exploited. The Acceptable Solutions show some passive fire rating details that are not supported by test evidence.		
What caused the risk to come to your attention?	Previous project experience through a BWOFF and subsequent notice to fix + RNZ investigation and media on Waikato DHB issues.		
Cost Benefit Analysis	TBC		
Supporting files attached - Journal papers - Research	N/A		