

Societal Impact of Building Fires

RP Outcome Statement: *the reduction of the social, economic and environmental impact of fire in buildings in New Zealand*

RESEARCH PORTFOLIO

Research Theme RT1 Resilience of Buildings in Fire

RT Objective Statement OS1: *to provide knowledge that forms the basis for delivery of buildings with more dependable behaviour in the event of fire*

Sub-Theme ST1.1 • **Structural Performance in Fire**

Sub-Theme ST1.2 • **Materials Performance at Elevated Temperatures**

Sub-Theme ST1.3 • **Post-Earthquake Fires**

Sub-Theme ST1.4 • **Existing Building Stock**

Research Theme RT2 Performance-Based Fire Safety Engineering

RT Objective Statement OS2: *to support the development of the infrastructure required for the effective delivery of fire safety engineering in a p-b regulatory environment*

Sub-Theme ST2.1 • **Risk-Informed Fire Safety**

Sub-Theme ST2.2 • **Calculation Methods**

Sub-Theme ST2.3 • **Technical Provisions in Supporting Documents**

Sub-Theme ST2.4 • **Quantification of Building Code Performance Criteria**

Research Theme RT3 Sustainability and Fire

RT Objective Statement OS3: *to provide performance metrics on the interaction of sustainable practice in the built environment with fire safety engineering*

Sub-Theme ST3.1 • **Impact of Sustainability on Fire Safety in Buildings**

Sub-Theme ST3.2 • **Environmental Impact of Fire Safety Engineering**

Research Theme RT4 New Technologies

RT Objective Statement OS4: *to utilise and develop new technologies that enhance fire safety in buildings*

Sub-Theme ST4.1 • **Internet-Based Technologies**

Research Theme RT5 Sector Performance

RT Objective Statement OS5: *to quantify effectiveness of implementation so as to inform strategies to enhance fire safety in buildings*

Sub-Theme ST5.1 • **Quality of Delivery of Fire Protection in Buildings**

Research Theme RT6 Fire Science

RT Objective Statement OS6: *to conduct fundamental research that adds to the base scientific knowledge of fire phenomena*

Sub-Theme ST6.1 • **Fire Dynamics**