



The Home Fire Sprinkler Coalition Australia acknowledges the Traditional Owners of Country throughout Australia and recognises their continuing connection to land, waters and culture. We pay our respects to elders past, present and emerging.

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### **Foreword**

Residential fires cause an average of 64 preventable deaths a year, and this number is not reducing. Cost-effective smoke alarms were the last technology innovation to have a major impact on reducing deaths and injuries from residential fires, but now something more is needed. Home fire sprinklers are the next technological advance that will help drive preventable fire deaths towards zero.

In the time it takes for a local fire brigade to arrive on scene, home fire sprinklers can already be working to prevent fire spread and reduce loss and damage. Home sprinklers increase the time occupants have to safely escape and also provide a safer environment for emergency responders.

A collaboration between AFAC and Fire Protection Association Australia, the Home Fire Sprinkler Coalition Australia provides a key safety service to industry, fire services and the wider community. This strategy will help guide its future work to increase community awareness of and demand for home fire sprinklers, and ultimately bring preventable home fire deaths to zero.

#### **Stuart Ellis**

Chief Executive Officer AFAC

Home fire sprinklers need to be cost-effective, safe, reliable and aesthetically pleasing to be adopted by developers and homeowners. To achieve this end, the Home Fire Sprinkler Coalition Australia has spent significant time and funds researching the effectiveness of affordable designs for the Australian environment. It has led to new technical specifications and training to ensure correct use of products, designs and installation.

To increase uptake of home fire sprinklers in all residential settings, the Coalition is continuing to develop specifications for additional classes of buildings. Our ultimate aim is to improve life safety outcomes for all Australians.

Fire Protection Association Australia and AFAC bring together the expertise of the fire protection industry and fire authorities to provide fire protection for all residential buildings, which previously hasn't been achieved in a cost-effective way. By the end of this strategy, we expect to see increased adoption of residential home fire sprinklers that support the sustainability of the built environment.

#### Leigh Gesthuizen

Chief Executive Officer (Acting)
Fire Protection Association Australia

## Our purpose

The Home Fire Sprinkler Coalition (HFSC) Australia will inform and advocate the benefits of home fire sprinklers to protect Australian communities from the impact of residential fires, and to support the sustainability of the built environment.

### Who we are

HFSC Australia is a partnership of AFAC, the national council for fire and emergency services, and Fire Protection Association Australia representing the fire protection industry. The Coalition is supported by industry members and partners.

## Our partners



#### **AFAC**

AFAC, as the national council for fire and emergency services, supports the sector to create safer, more resilient communities. AFAC drives national consistency through collaboration, innovation and partnerships. AFAC delivers enhanced capability by developing doctrine and supporting operations. AFAC Members are the 32 government fire, emergency service and land management organisations from each jurisdiction in Australia and New Zealand, which form the National Council.



# Fire Protection Association Australia

Fire Protection Association Australia is the national peak body for fire safety that provides information, services and education to the fire protection industry and the community. Fire Protection Association Australia supports and represents accredited and competent practitioners working across all disciplines of the fire protection, building and construction industry. The association is supported by approximately 1,700 members consisting of leading companies, organisations and individuals around Australia with a growing reach of up to 30,000 people operating across every aspect of the fire protection, building and construction industry.



## Supporters

#### HFSC supporters (current July 2021):

- > Blackash Bushfire Consulting
- > Lucid Consulting Australia
- > Infotech IT
- > International Fire Suppression Alliance
- > Johnson Controls Australia
- > UL International Australia
- > Viking Group Australia
- > Wormald Australia

## Australian fire authorities are supportive of the HFSC through AFAC:

- > Australian Capital Territory Fire and Rescue Service
- > Country Fire Authority Victoria
- > Country Fire Service South Australia
- > Department of Fire and Emergency Services, Western Australia (TBC)
- > Fire and Rescue New South Wales
- > Fire and Rescue Victoria
- > Metropolitan Fire Service South Australia
- > Northern Territory Fire and Rescue Service
- > Queensland Fire and Emergency Services
- > Rural Fire Service New South Wales
- > Tasmania Fire Service

## Stakeholders

## Stakeholders include those working to support public safety and improved resilience in the built environment, from a variety of sectors including:

- > Education and research institutions
- > Architects/designers
- > Fire authorities
- > Fire protection equipment industry manufacturers, suppliers, designers, installers and servicing companies
- > Home builders/developers/owners
- > Insurers

- > Peak community organisations
- > Plumbing (retail and installation)
- > Water supply authorities
- > Building regulators
- > Building certifiers/surveyors
- Housing and planning departments federal, state and local governments

## Influencing change

The HFSC will contribute to the protection of Australian communities from the impact of home fires and support the sustainability of the built environment through six key influencing strategies:

#### **ADVOCACY**

Advocate the cost-effective benefits of home fire sprinklers to influence changes to consumer sentiment, building codes, legislation and industry adoption.

### EDUCATION

Educate the community, industry, governments and fire services about the life saving benefits of installing home fire sprinklers.

#### **RESEARCH**

Establish a research agenda for home fire sprinklers to better understand consumer behaviour and expectations, building risk and environmental benefits.

#### CAPABILITY AND CAPACITY BUILDING

Develop and provide training, competencies and incentive schemes to support industry adoption of home fire sprinklers.

#### **TECHNICAL ADVICE**

Develop and provide tools, guidance and evidence to support the community, industry, governments and fire services to better understand and adopt home fire sprinklers.

#### STANDARD SETTING

Support and develop minimum standards for home fire sprinkler systems to ensure product conformity and build consumer and industry confidence.

## Policy alignment

This strategy is aligned with and enables contribution to existing national policy and programs and will adapt as policy changes. Existing relevant policy (June 2021) includes:

- > Australian Building Codes Board National Construction Code 2019 (ABCB, 2019)
- Council of Australian Governments National Disaster Risk Reduction Framework – Priority 1: Strategies A, D and F [COAG, 2018]
- Council of Australian Governments National Strategy for Disaster Resilience – Collective Responsibility and Reducing Risks in the Built Environment (COAG, 2011)
- Green Building Council Australia Building to Bounce Back
   Recommendation 2 "Recognise whole of life benefits
   upfront and prioritise projects that deliver significant
   liveability and sustainability dividends." (GBCA, 2020)
- > AFAC Residential Fire Fatality and Injury Prevention Strategy: towards zero fatalities - Strengthening partnership approaches to reduce residential fire risk [AFAC, 2021]

### What success looks like

By the end of this strategy in 2025, HFSC expects:

- > a growing number of competent designers and installers of home fire sprinklers
- a growing number of developers offering and promoting home fire sprinklers as a cost effective, sustainable and resilient feature of new home builds
- > a growing number of insurers providing discounts to premiums for homes with fire sprinklers installed
- changes in government policy requiring residential sprinklers in social housing

- establish a number of high profile champions of change to support media messaging
- > to be considered as an influential and trusted professional source of home fire sprinkler information for consumers, the building industry and fire services
- > building regulators are aware and supportive of the HFSC purpose and value the HFSC as a credible industry partner.

### **Priorities**

#### Short term

#### **Advocacy**

- to improve public safety through residential sprinklers
- Support the extension of home fire sprinklers to one, two and threelevel Class 2 and 3 buildings through a further proposal for change to the National Construction Code 2025.
- Continue advocacy and support for the installation of home fire sprinklers in social housing.

#### **Education**

- to improve consumer, industry, fire authorities and government awareness
- Develop case studies for consumer and industry and promotion.
- Increase the 'signed up' supporter base to ensure broad stakeholder engagement.
- > Support the installation of home fire sprinkler training props in fire service training facilities.

#### Research

- to help tell our compelling story
- > Undertake cost benefits analyses to provide the evidence to support the expansion of home fire sprinklers.
- Lead and support research to build the evidence base for home fire sprinklers, including the efficacy of home fire sprinklers in bushfire defence.

# Capability and capacity building

- to ensure industry and practitioners can deliver
- > Finalise online training modules for plumbers/sprinkler installers.

#### **Technical advice**

- to improve understanding and increase adoption of residential sprinklers
- > Promote home fire sprinklers to industry, fire services and the community.
- Develop relevant tools, advice and guidance to support market expansion.

#### **Standard setting**

- to ensure quality, reliability and safety
- Support the updating of technical specification guides.
- Develop home sprinkler technical specifications for Class 1a/b homes
   metropolitan and rural/regional applications.

#### Medium term

- Raise the profile of HFSC and home fire sprinklers through mainstream and social media coverage.
- Achieve financial security through the development of a sustainable business model.
- Support the development of a proposal for change to the National Construction Code 2025 to mandate home fire sprinklers in Class 1a/b homes.
- Partner with a volume builder to include home fire sprinkler information at display homes nationally and incorporate into their sales process as a design option.

### **Focus**

### **Advocacy**

Advocate the cost-effective benefits of home fire sprinklers to influence consumer sentiment, changes to building codes, legislation and industry adoption.

#### Consumers

- > Develop incentives for consumers to increase the demand for residential sprinklers in the market.
- > Promote the lifesaving benefits of home sprinklers at home shows and other avenues.

#### Commonwealth (code change)

- Engage the Australian Building Codes Board to advocate for further changes to the National Construction Code to introduce home fire sprinklers into more residential building classes. In particular, the HFSC seeks to extend residential fire sprinklers in one, two and three-level Class 2 and 3 buildings.
- Engage with the national planning body to advocate the inclusion of home sprinklers in model approaches to residential subdivisions.

## State and Territory governments (for provision of sprinklers)

- Engage with State and Territory governments to advocate for and support the installation of home fire sprinklers in social housing, to improve fire safety in the homes of our most at-risk communities.
- Advocate for the establishment of a class of practitioners for 'domestic sprinkler installers'. This will assist with the containment of installation costs.
- Engage with state governments in relation to planning policy for residential subdivisions.

#### Local government (for awareness and promotion)

Support local fire authorities to engage local governments to support planning initiatives for new housing estates that include home fire sprinklers.

#### Insurance companies

 Advocate to insurance companies to incentivise uptake of home fire sprinklers in return for discounted insurance premiums.

## Fire agency personnel as front-line advocates

Encourage and equip fire agencies to advocate for home fire sprinklers with state government regulators and in local communities.

The community places great trust in fire agencies on issues of public safety, so agencies are well placed to support this work.

#### Peak bodies

- Continued advocacy to peak bodies such as the Insurance Council of Australia, Master Builders Association, Housing Industry Association, Green Building Council Australia, Water Services Association of Australia and others to grow awareness and acceptance of home fire sprinklers.
- > Engage with peak bodies to support initiatives that would incorporate home fire sprinklers.

#### Developing an advocacy network

Develop and support a network of "champions" within key industries and organisations to advocate the importance of home fire sprinklers within their sphere of influence.

#### **Education**

Inform industry, fire services and the community about the lifesaving benefits of installing home fire sprinklers.

#### Changing behaviour and expectations

HFSC will develop education and awareness campaigns, including webinars, seminars, workshops and forums to change behaviour and expectations of the building industry, fire agencies and the community that will result in greater awareness, acceptance and adoption of home fire sprinklers, beyond regulatory change. We will:

#### Educate the community

- > Partner with key stakeholders to raise awareness of home fire sprinklers in the community.
- > Develop material to directly educate the community on the lifesaving benefits of home fire sprinklers.

#### Educate developers

- Inform and educate developers of the benefits of home fire sprinklers as a low-cost lifesaving initiative that they should inform prospective buyers to consider.
- Develop material to directly educate developers on the lifesaving benefits and low cost to install home fire sprinklers.

#### Educate fire agencies

Develop resources targeted to fire agencies to educate them about the benefits of home fire sprinklers and equip them to better engage industry and the community.

#### **Educate industry**

Develop resources targeted to industry to educate plumbers, sprinkler fitters, surveyors, designers, developers and builders about the cost-effective, sustainable and lifesaving benefits of home fire sprinklers.

#### Research

Establish a research agenda for home fire sprinklers to better understand consumer behaviour and expectations, building risk and environmental benefits.

## HFSC to set research agenda for home fire sprinklers

- Develop a research agenda to improve understanding and address identified knowledge gaps of home fire sprinklers.
- Continue to grow national and international partnerships in research.

#### Cost benefit analysis

> Undertake a cost benefit analysis for the compulsory installation of home fire sprinklers in higher risk Class 1 buildings, specifically those identified risks in bushfire-prone developments and social housing.

#### Consumer behaviour research

Develop research proposals to gain a better understanding of consumer behaviour of new home buyers when provided with an option of home fire sprinkler installation.

### Capability and capacity

Develop and provide training, competencies and incentive schemes to support industry adoption of home fire sprinklers.

#### **Training**

- > Develop and support the delivery of training modules for the installation of home fire sprinklers.
- Support fire agencies in the installation of home fire sprinkler equipment at training centres, for better understanding of and advocacy for domestic water supplied sprinkler systems.

#### Competencies

Support the development of appropriate competencies for registered training organisations to deliver training for the installation of residential sprinklers.

#### Incentive schemes

Develop and support incentive schemes to support industry adoption of home fire sprinklers.

### **Technical advice**

Develop and provide tools, guidance and evidence to support industry, fire services and the community to better understand and adopt home fire sprinklers.

#### Tools

 Develop practical tools for industry to support design, installation and maintenance of home fire sprinklers.

#### Guidance

- > Develop guidance material for industry to support design, installation and maintenance of home fire sprinklers.
- Develop guidance material for fire services to support their advocacy of home fire sprinklers with governments, regulators, developers, community, media and other stakeholders.
- > Develop guidance for homeowners so they understand their installed sprinkler systems.

#### Evidence

> All tools, guidance, education and training are evidence to provide confidence to industry, governments and the community. The research agenda will continue to add to this evidence.

### **Standard setting**

Support and develop minimum standards for home fire sprinkler systems to ensure product and installation conformity to build consumer and industry confidence.

#### Product certification

Support appropriate product certification and other efforts to demonstrate product conformity and compliant use of quality fit-for-purpose products that conform to standards.

#### Training conformity

> Support appropriate training and accreditation schemes to improve compliance with installation standards.

#### Fire sprinkler standards

- > Support revisions and use of appropriate design standards and specifications in all residential buildings.
- > Develop a specification for Class 1a/b homes to ensure minimum standards for home fire sprinklers in all residential homes.
- Develop a concept design and, if feasible, a sprinkler technical specification for Class 1a/b homes offering protection for residential fires and bushfires

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