

NEIL ABERCROMBIE
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**STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS**

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April 2, 2012

The Honorable Marcus Oshiro, Chair
Committee on Finance
House of Representatives
State Capitol, Room 306
Honolulu, Hawaii 96813

Dear Chair Oshiro:

Subject: S.B. 2397, S.D. 1, H.D. 2 Relating to Fire Sprinklers

I am Kenneth G. Silva, Chair of the State Fire Council (SFC) and Fire Chief of the Honolulu Fire Department (HFD). The SFC and the HFD strongly oppose S.B. 2397, S.D. 1, H.D. 2.

During its Regular Session of 2011, the Twenty-Sixth Legislature enacted House Resolution No. 47, H.D. 2, which requested that the State Building Code Council (SBCC) submit a report no later than 20 days before the Regular Session of 2015 convenes of its findings, recommendations, and actions taken to adopt the requirement that automatic fire sprinklers be installed in new one- and two-family dwellings.

The SBCC is reviewing the 2009 editions of the International Building and Residential Codes, which require residential fire sprinklers in new one- and two-family dwellings as minimum requirements. The SBCC formed a fire sprinkler investigative committee of stakeholders from public/private sectors, industry, and code regulators to explore issues relating to automatic fire sprinkler installations. The investigative committee's work is ongoing, and most infrastructure issues are complete.

However, issues relating to in-house systems must still be addressed. It would be a disservice to the community to enact an antisprinkler law based on one viewpoint without considering the research done by this committee, which represents all interests. The investigative committee's final report will be forwarded to the SBCC, who will decide what to adopt for the entire state.

The building codes are a comprehensive compilation of codes that address all aspects of the built environment. The resulting national codes reflect a consensus that balances safety; cost/benefit; and the most technologically advanced products, materials, and processes. Code revisions are enacted slowly, and many are a result of fatalities, serious injuries, or large property losses. When building codes are adopted at the county and state levels, they must undergo the administrative rules process, including being discussed at public hearings to allow the public an opportunity to participate and provide input. This process should not be circumvented.

There is no requirement in the current county or state building codes that mandates the installation of fire sprinklers in new one- and two-family residential dwellings. When homes undergo the county building permit process and do not meet fire department access road or fire fighting water supply requirements (hydrants), the fire code allows fire sprinklers to be installed as an alternative to meet the intent of the fire code. An amendment to allow fire sprinklers in residences that require a variance for access road or fire fighting water supply requirements was added by the House Housing Committee but was not in the crossover senate version. Without this amendment, a structure will not be approved for a building permit unless the homeowner complies with access road and water supply requirements, which costs more than installing fire sprinklers.

In addition, nonresidential agricultural or aquacultural buildings outside of the urban area would be exempt from the fire sprinkler installation requirement. However, S.B. 2646, which is proceeding through committee and exempts agricultural or aquacultural buildings from a county building permit, has a provision that masonry or wood-framed buildings with structural spans of 25 feet or more shall be designed or engineered according to the state building code. We believe there is a potential conflict, as this type of building may require sprinklers in order to meet the state building code, depending on the size and type of occupancy.

By not allowing counties to mandate fire sprinklers in residential homes, adult residential care homes may not be allowed to be permitted or built, as fire sprinklers are required in this type of occupancy due to its incapacitated residents. If this bill passes, it would eliminate the counties' home rule to permit residential homes to be built when they do not meet other building or fire code requirements.

Home fire sprinklers are a proven way to protect lives and property against fires. These life saving systems respond quickly and effectively to the presence of a nearby fire. Approximately 90% of the time, fires are contained by the operation of just one sprinkler head. Hundreds of gallons of water are saved, and toxic air pollutants and ground water runoff are also significantly reduced.

Smoke alarms and other building safety requirements have progressively reduced fire losses and deaths. Working smoke alarms reduce the risk of fire fatalities by 50 percent. However, they are only effective if occupants are cognitively and physically capable of responding during a limited timeframe of rapid fire growth. National statistics have shown disproportionate fire deaths for the young and elderly for decades, which is an example of the types of individuals unable or incapable of exiting a home fire in a timely manner. The risk of dying in a home fire decreases by approximately 80 percent when fire sprinklers are present. Home sprinkler systems respond quickly to reduce heat, flames, and smoke from a fire, thus allowing families valuable time to safely exit.

Opponents of residential fire sprinkler systems like to boast that newer homes are safer and the fire and death problem is limited to older homes. The age of a home is a poor predictor of fire death rates. When an older home is associated with a higher death rate, it is usually a result of a disproportionate share of poorer, less educated households. Statistically, the only fire safety issue that is relevant to the home's age is outdated electrical wiring. Beyond that, it has little or nothing to do with fire safety.

A fire at 2 a.m. is just as deadly in a new home as it is in an older one. In fact, new methods of construction negatively impact occupant and fire fighter life safety under fire conditions. The National Research Council of Canada tested the performance of unprotected floor assemblies exposed to fire and found that these structures are prone to catastrophic collapse as early as six minutes from the onset of fire. Underwriters Laboratories conducted a study to identify the danger to fire fighters created by the use of lightweight wood trusses and engineered lumber in residential roof and floor designs. The findings point to the failure of lightweight engineered wood systems when exposed to fire. The same study found that the synthetic construction of today's home furnishings increased the risk by providing a greater fuel load. Fire sprinklers can offset increased dangers posed by lightweight construction and create a safer fire environment for fire fighters to operate in.

The contention that new home prices will dramatically rise is inaccurate. Hawaii's higher home prices are more directly impacted by high land prices, shipping costs for building materials, and contractor costs. On a national average, home fire sprinkler systems add 1% to 1.5% of the total building cost to new construction. In Hawaii, estimates obtained by the SBCC's fire sprinkler investigative committee were approximately \$1.50 per square foot. For example, a system, including permitting, installation, and materials, for a 2,500-square foot home, would cost \$6,000 to \$7,000. At \$200 per square foot, the home would cost \$500,000. The residential sprinkler system would be 1.3% of the total price. The most economical time to install sprinklers is during new construction.

The Honorable Marcus Oshiro, Chair
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April 2, 2012

Saving lives means more than just preventing deaths. Fire sprinklers not only reduce the risk of death, they also reduce property loss. In the City and County of Honolulu from 2006 to 2010, single-family home fires accounted for 40.7% (499) of the total fires; 52.6% (\$40,517,668) of all fire dollar losses; 53.3% (56) of the fire injuries; and 66.7% (10) of the fire fatalities. In contrast, buildings that were sprinklered accounted for 4.2% (52) of the total fires; 0.6% (\$428,320) of all fire dollar losses; 5.7% (6) of the fire injuries; and 6.7% (1) of the fire fatalities. The statistical report for this period is attached.

Prohibition laws are normally enacted to control or ban potentially dangerous or harmful products or behaviors. Automatic fire sprinklers are a proven fire, life safety, and property protection measure with an outstanding performance record in reducing fire fatalities, injuries, and property losses.

The SFC and the HFD urge your committee's deferral of S.B. 2397, S.D. 1, H.D. 2.

Should you have any questions, please contact SFC Administrator Socrates Bratakos at 723-7151 or sbratakos@honolulu.gov.

Sincerely,



KENNETH G. SILVA
Chair

KGS/LR:cn

Attachment

William P. Kenoi
Mayor



Darren J. Rosario
Fire Chief

Renwick J. Victorino
Deputy Fire Chief

County of Hawai'i
HAWAI'I FIRE DEPARTMENT
25 Aupuni Street • Suite 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

March 30, 2012

The Honorable Marcus Oshiro, Chair
Committee on Finance
House of Representatives
State Capitol, Room 306
Honolulu, Hawaii 96813

Dear Chair Oshiro:

Subject: S.B. 2397, S.D. 1, H.D. 2 Relating to Fire Sprinklers

I am Darren J. Rosario, Member of the State Fire Council (SFC) and Fire Chief of the Hawaii Fire Department of the County of Hawaii (HCFD). The SFC and the HCFD strongly oppose S.B. 2397, S.D. 1, H.D. 1.

During its Regular Session of 2011, the Twenty-Sixth Legislature enacted House Resolution No. 47, H.D. 1, which requested that the State Building Code Council (SBCC) submit a report no later than 20 days before the Regular Session of 2015 convenes of its findings, recommendations, and actions taken to adopt the requirement that automatic fire sprinklers be installed in new one- and two-family dwellings.

The SBCC is reviewing the 2009 editions of the International Building and Residential Codes, which require residential fire sprinklers in new one- and two-family dwellings as minimum requirements. The SBCC formed a fire sprinkler investigative committee of stakeholders from public/private sectors, industry, and code regulators to explore issues relating to automatic fire sprinkler installations. The investigative committee's work is ongoing, and most infrastructure issues are complete.

However, issues relating to in-house systems must still be addressed. It would be a disservice to the community to enact an anti-sprinkler law based on one viewpoint without considering the research done by this committee, which represents all interests. The investigative committee's final report will be forwarded to the SBCC, who will decide what to adopt for the entire state.



The Honorable Henry Aquino, Chair
March 30, 2012
Page 2

The building codes are a comprehensive compilation of codes that address all aspects of the built environment. The resulting national codes reflect a consensus that balances safety; cost/benefit; and the most technologically advanced products, materials, and processes. Code revisions are enacted slowly, and many are a result of fatalities, serious injuries, or large property losses. When building codes are adopted at the county and state levels, they must undergo the administrative rules process, including being discussed at public hearings to allow the public an opportunity to participate and provide input. This process should not be circumvented.

There is no requirement in the current county or state building codes that mandates the installation of fire sprinklers in new one- and two-family residential dwellings. When homes undergo the county building permit process and do not meet fire department access road or fire fighting water supply requirements (hydrants), the fire code allows fire sprinklers to be installed as an alternative to meet the intent of the fire code. An amendment to allow fire sprinklers in residences that require a variance for access road or fire fighting water supply requirements was added by the House Housing Committee, but was not in the crossover senate version. Without this amendment the structure would not be approved for a building permit and it would cost much less for a fire sprinkler installation.

Another exemption was made for non-residential agricultural or aquacultural buildings outside of the urban area to not be required to install sprinklers. However, S.B. 2646, which is proceeding through committee and exempts agricultural or aquacultural buildings from a county building permit, has a provision that masonry or wood-framed buildings with structural spans of 25 feet or more shall be designed or engineered according to the state building code. We believe there is a potential conflict in that this type of building may require sprinklers in order to meet the state building code depending on the size and type of occupancy.

By not allowing counties to mandate fire sprinklers in residential homes, adult residential care homes may not be allowed to be permitted or built, as fire sprinklers are required in this type of occupancy due to its incapacitated residents. If this bill passes, it would eliminate the counties' homerule to permit residential homes to be built when they do not meet other building or fire code requirements.

Home fire sprinklers are a proven way to protect lives and property against fires. These life saving systems respond quickly and effectively to the presence of a nearby fire. Approximately 90% of the time, fires are contained by the operation of just one sprinkler head. Hundreds of gallons of water are saved, and toxic air pollutants and ground water runoff are also significantly reduced.



Smoke alarms and other building safety requirements have progressively reduced fire losses and deaths. Working smoke alarms reduce the risk of fire fatalities by 50 percent. However, they are only effective if occupants are cognitively and physically capable of responding during a limited timeframe of rapid fire growth. National statistics have shown disproportionate fire deaths for the young and elderly for decades, which is an example of the types of individuals unable or incapable of exiting a home fire in a timely manner. The risk of dying in a home fire decreases by approximately 80 percent when fire sprinklers are present. Home sprinkler systems respond quickly to reduce heat, flames, and smoke from a fire, thus allowing families valuable time to safely exit.

Opponents of residential fire sprinkler systems like to boast that newer homes are safer and the fire and death problem is limited to older homes. The age of a home is a poor predictor of fire death rates. When an older home is associated with a higher death rate, it is usually a result of a disproportionate share of poorer, less educated households. Statistically, the only fire safety issue that is relevant to the home's age is outdated electrical wiring. Beyond that, it has little or nothing to do with fire safety.

A fire at 2 a.m. is just as deadly in a new home as it is in an older one. In fact, new methods of construction negatively impact occupant and fire fighter life safety under fire conditions. The National Research Council of Canada tested the performance of unprotected floor assemblies exposed to fire and found that these structures are prone to catastrophic collapse as early as six minutes from the onset of fire. Underwriters Laboratories conducted a study to identify the danger to fire fighters created by the use of lightweight wood trusses and engineered lumber in residential roof and floor designs. The findings point to the failure of lightweight engineered wood systems when exposed to fire. The same study found that the synthetic construction of today's home furnishings increased the risk by providing a greater fuel load. Fire sprinklers can offset increased dangers posed by lightweight construction and create a safer fire environment for fire fighters to operate in.

The contention that new home prices will dramatically rise is inaccurate. Hawaii's higher home prices are more directly impacted by high land prices, shipping costs for building materials, and contractor costs. On a national average, home fire sprinkler systems add 1% to 1.5% of the total building cost to new construction. In Hawaii, estimates obtained by the SBCC's fire sprinkler investigative committee were approximately \$1.50 per square foot. For example, a system, including permitting, installation, and materials, for a 2,500-square foot home, would cost \$6,000 to \$7,000. At \$200 per square foot, the home would cost \$500,000. The residential sprinkler system would be 1.3% of the total price. The most economical time to install sprinklers is during new construction.

Prohibition laws are normally enacted to control or ban potentially dangerous or harmful products or behaviors. Automatic fire sprinklers are a proven fire, life safety, and property protection measure with an outstanding performance record in reducing fire fatalities, injuries, and property losses.



The Honorable Henry Aquino, Chair
March 30, 2012
Page 4

The SFC and the HCFD urge your committee's deferral of S.B. 2397, S.D. 1, H.D. 2.

Should you have any questions, please contact SFC Administrator Socrates Bratakos at 723-7151 or sbratakos@honolulu.gov.

Sincerely,



DARREN J. ROSARIO
Fire Chief





Hawaii Farm Bureau
F E D E R A T I O N

2343 Rose Street • Honolulu, Hawaii 96819
Phone: (808) 848-2074 • Neighbor-Islands: (800) 482-1272
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April 2, 2012

HEARING BEFORE THE
HOUSE COMMITTEE ON FINANCE

**TESTIMONY ON SB 2397 SD1 HD2
RELATING TO FIRE SPRINKLERS**

Room 308
4:00 PM

Chair Oshiro, Vice Chair Lee, and Members of the Committee:

I am Brian Miyamoto, Chief Operating Officer and Government Affairs Liaison for the Hawaii Farm Bureau Federation (HFBF). Organized since 1948, the HFBF is comprised of 1,800 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

HFBF supports SB 2397 SD1 HD2, which would prohibit the requirement of installing or retrofitting of fire sprinklers for non-residential agricultural and aquacultural buildings and structures located outside of urban areas, as well as for new or existing detached one- or two-family dwelling units in a structure used only for residential purposes. Requiring sprinklers would add substantially to the cost of building or renovating these structures, and would provide little benefit for most agricultural structures such as greenhouses, shade houses, fish tanks, sheds, and storage buildings that are not used as dwellings. At present, unlike the building codes in many other states, Hawaii's building codes generally treat agricultural structures the same as residential or commercial buildings. If Hawaii's codes were modified to require sprinklers, that requirement would probably apply to farm structures too.

HFBF is supporting other bills introduced this session that would reduce the cost and construction time of low-risk, *non*-residential farm structures by exempting these structures from county building permit requirements. Due to their location and functions, these buildings and structures present a lower risk of property damage and personal harm from fire than do dwelling units. Their exemption from permit requirements is necessary to allow farmers to build, at reasonable cost, production facilities and structures to protect their crops and equipment from thieves, vandals, and the weather. Prohibiting a requirement for sprinkler systems would remove one major potential cost of constructing these structures, and would therefore further the State's goal of greater food self-sufficiency.

Thank you for the opportunity to testify. I can be reached at (808) 848-2074 if you have any questions or would like more information.

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Website: www.gcahawaii.org



GCA of Hawaii

GENERAL CONTRACTORS ASSOCIATION OF HAWAII

Quality People. Quality Projects.

Uploaded via Capitol Website

April 2, 2012

TO: HONORABLE REPRESENTATIVES MARCUS OSHIRO, CHAIR, MARILYN LEE, VICE CHAIR AND MEMBERS OF THE HOUSE COMMITTEE ON FINANCE

SUBJECT: **SUPPORT OF S.B. 2397, SD1, HD2, RELATING TO FIRE SPRINKLERS.**
Prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural buildings and structures located outside the urban area; provided that this does not apply to new homes that require a variance from access road or fire fighting water supply requirements. Effective January 1, 2050. (SB2397 HD2)

HEARING

DATE: Monday, April 2, 2012
TIME: 4:00 p.m.
PLACE: Conference Room 308

Dear Chair Oshiro, Vice Chair M. Lee and Members of the Committee:

The General Contractors Association (GCA) is an organization comprised of over six hundred (600) general contractors, subcontractors, and construction related firms. The GCA was established in 1932 and is celebrating its 80th anniversary this year; GCA remains the largest construction association in the State of Hawaii whose mission is to represent its members in all matters related to the construction industry, while improving the quality of construction and protecting the public interest. GCA **supports** S.B. 2397, SD1, HD2, Relating to Fire Sprinklers.

S.B. 2397, SD1, HD2 amends Chapter 46 of the Hawaii Revised Statutes by adding a new section that would prohibits counties from mandating the installation or retrofitting of automatic fire sprinklers in (1) new or existing one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural buildings and structures located outside the urban area; provided that this does not apply to new homes that require a variance from access road or fire fighting water supply requirement.

GCA understands the necessity of protection and safety in homes and other non-residential buildings. However, GCA is opposed to mandates that would present a significant cost burden to homebuilders and homeowners alike. Instead, GCA encourages incentives that would encourage homebuilders and homeowners to install fire safety measures that would reduce the likelihood of fire hazards. This bill addresses such mandates being considered in building codes.

GCA is opposed to the mandated installation of automatic sprinklers in residential homes for the following reasons: (1) cost burden to homeowners is significant; (2) new homes are built safer; (3) newer technologies to address fire hazards may be available in near future, negating installation of fire sprinklers; and (4) incentives are encouraged, rather than mandates. Further, no data exists that suggests that the installation or retrofitting of automatic sprinklers will significantly improve the fire safety of homes.

GCA is in support of S.B. 2397, SD1, HD2 and would respectfully request that this Committee pass this measure.

Thank you for the opportunity to present our views on this matter.

BIA-HAWAII

BUILDING INDUSTRY ASSOCIATION

Testimony to House Committee on Finance

Monday, April 2, 2012

4:00 p.m.

Capitol Room 308

RE: S.B. 2397 SD1 HD2, Relating to Fire Sprinklers

Dear Chair Oshiro, Vice-Chair M. Lee, and members of the Committee:

My name is Gladys Marrone, Government Relations Director for the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, BIA-Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii.

BIA-Hawaii strongly supports SB 2397 SD1 HD2 which, as written, prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in new or existing one- or two-family dwelling units used only for residential purposes, provided that this does not apply to: (1) new homes that require a variance from access road or fire fighting water supply requirements; and (2) non-residential agricultural and aquacultural buildings and structures located outside the urban area.

The home building industry is committed to the safety of the communities in which they build, but BIA-Hawaii opposes mandating fire sprinklers in new one- and two-family homes because: 1) new homes are built with better fire safety measures and other fire safety measures are already required that are proven to save lives; 2) fire sprinklers are not cost-effective; 2) targeted fire safety education programs work; 3) fire sprinklers have not been proven to enhance the safety of occupants; and 4) if a homeowner wants to install a fire sprinkler, that option should be theirs.

It is important to note that Hawaii would not be the first state to do what SB 2397 SD1 HD2 proposes to do. To date, at least **35 states** across the nation have either amended the mandate out at the state level, or have passed legislation requiring that no model code be adopted by a municipality mandating residential sprinklers.

New homes are built better and safer.

There have been significant improvements to the fire safety of homes over the past few decades leading to a dramatic and continued decrease in fire incidents, injury, death, and property loss. There is no data to suggest that sprinklers will significantly improve this decline.

Several examples of inexpensive fire safety improvements to residential construction that have led to these reductions in fire incident, injury and death include:

- Interconnected, hardwired smoke alarm systems

- Carbon monoxide detectors
- Improved electrical systems
- Improved framing and fire blocking techniques, and
- Improved fire ratings on interior furnishings and building material

Furthermore, the majority of residential fires that occur today are in older homes that generally do not have many of the improved fire safety features required in today's construction. Based on our own research (see attached), since 2005, of available data, residential fires on Oahu involved older homes. Most were built prior to 1970, and as far back as 1912. Sprinkler proponents argue that "new homes become old." However, that argument lacks substance because it does not acknowledge that the fire safety features required in today's construction are permanent, as is the protection they provide. Fire sprinklers in new homes will not make them safer. Fire sprinklers in old homes will make them safer.

Fire sprinklers are not cost-effective.

Costs for residential fire sprinklers can vary. One of our developers received an estimate of **\$6,500** from a reputable sprinkler company using union labor for a new 1,400 square foot, two-story home, or **\$4.64** per square foot. Additionally, another developer got an estimate in 2008 for **\$34,000** to sprinkler a 6-plex consisting of 3-bedroom units at 1,100 square feet each, or **\$5.15** per square foot. The latter cost did not include the cost of infrastructure to bring the water to the building as it was on a separate water supply to ensure adequate pressure.

Proponents have presented estimates of \$4,000 and up, but those are based on mainland figures and do not include the cost of shipping and labor. As we have seen recently in Kailua, homeowners were quoted upwards of \$16,000 for a sprinkler system, and it was unclear whether that cost included connecting the system to the City's water source. Depending on where the new home will be built, issues such as water pressure, or whether trenching is required, all add to the cost of the system.

We are committed to the safety of the communities we build and the residents who live there, but this additional cost can disqualify a family for a mortgage.

Fire education programs work.

BIA-Hawaii supports fire safety education programs for consumers as one of the most effective and reasonable means to preventing residential fires and reducing death, injury, and property loss well as cost-effective residential fire protection technologies that are required by current codes. Education is key in deterring human behavior that may start residential fires, such as leaving a stove unattended or smoking in bed.

Other fire prevention efforts, such as targeted fire safety/prevention education programs, have also been successful. Programs of this nature should be considered first since they will ultimately prevent more fires and property loss and, more importantly, injury and death. For example: The State of South Carolina successfully implemented a fire safety program entitled "Get Alarmed South Carolina." As a result their fire death rate dropped 41% from 1996 to 1998. The program included a smoke alarm distribution component. Fire prevention education programs work, especially for those homes and home environments at greatest risk.

Fire sprinklers have not been proven to enhance the safety of occupants.

Representative Marcus Oshiro, Chair
Committee on Finance
April 2, 2012
SB 2397 SD1 HD2
BIA-Hawaii testimony

Sprinkler mandates apply only to those homes at least risk. Furthermore, based on National Fire Protection Data, the risk of death in a home with sprinklers is still close to 30% and property loss is still substantial and would still be far less overall than the overall cost of sprinklers under mandatory requirements.

Homeowners should decide.

Since the homeowner will be burdened with the tremendous cost of a fire sprinkler system, they should be able to decide whether a sprinkler system suits their needs. Homeowners should decide whether a 5-10% savings in homeowner's fire insurance, which equates to about \$65/year for one of our members, works for them. Proponents also discuss a possible tax credit as an incentive to install fire sprinklers. However, if sprinklers are mandated, tax credits as incentives don't work.

Additional important information.

Decreased fire deaths: According to the National Fire Protection Association, civilian fire deaths in the home in the United States, from 1977 to 2005, decreased from 5,865 to 3,030, respectively. The Centers for Disease Control states that the number of fatalities and injuries caused by residential fires has declined gradually over the past several decades, and many residential fire-related deaths remain preventable through education.

Fire Sprinkler Investigative Committee: Finally, fire sprinkler proponents argue that this requirement is not yet required in any code, so this bill is premature. However, the State Building Code Council (SBCC) has formed an investigative committee that is preparing a report pursuant to H.R. 47 HD1 (2011), which requested that the SBCC adopt the requirement that automatic fire sprinklers be installed in new one- and two-family residences. That report is due to the Legislature in 2015, but it will likely favor the mandating of residential fire sprinklers, as urged in H.R. 47 HD1.

SB 2397 SD1 HD2 is required because discussions at the SBCC on the upcoming 2009 IRC, which includes the sprinkler requirement, will likely begin in mid-2012 and the requirement can be adopted before the committee report is due. If it is adopted, then State DHHL housing projects, the Administration's plan for affordable housing, and Hawaii's economic recovery will be negatively impacted.

BIA-Hawaii strongly supports SB 2397 SD1 HD2 and urges your Committee to pass this measure.



Testimony of Maurice Morita
Assistant Director
Hawaii LECET
1617 Palama Street
Honolulu, HI 96817

HOUSE COMMITTEE ON FINANCE
April 2, 2012
4:00 p.m., Conference Room 325

SB 2397 - RELATING TO FIRE SPRINKLERS

Aloha Chair Oshiro, Vice Chair Lee, and Members of the Committee:

My name is Maurice Morita and I am the assistant director of Hawaii LECET (Laborers-Employers Cooperation and Education Trust). Hawaii LECET is a partnership between the Hawaii Laborers' Union, Local 368 and our union contractors.

The Hawaii LECET **strongly supports** SB 2397, SD1, HD 2 which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in new or existing one-or two family dwelling units used only for residential purposes.

The Hawaii LECET strongly feels the "choice" of what type of safety device to put into one's home should be up to the homeowner. Besides fire sprinklers, there are wired smoked alarms and other safety devices to warn someone there is a fire in one's home.

The cost to put a fire sprinkler in a new or existing one or two family dwelling would be an additional cost to the homeowner which some estimate approximately \$6,000 to \$7,000.00. This cost may not include the trenching of new water pipes for the fire sprinkler.

Thank you for the opportunity to submit this testimony.



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www.ccs-hawaii.com

Testimony to House Committee on Finance

Monday, April 2, 2012

4:00 p.m.

Capitol Room 308

RE: S.B. 2397 SD1 HD2, Relating to Fire Sprinklers

Dear Chair Oshiro, Vice-Chair M. Lee, and members of the Committee:

My name is Greg Thielen and I am the President and Owner of Complete Construction Services. We are a small business that builds and remodels single family homes and also does light commercial construction. I have over 20 years of experience in the Construction Industry in Hawaii.


Because my experience is in both commercial and residential construction I have a better understanding of the impact residential fire sprinklers will have on our industry and how they will affect our businesses our customers and our employees. In my 20 plus years of experience I have discussed the possibility of installing fire sprinklers in homes we are building as an option with my clients. In all that time **NO ONE HAS EVER CHOSEN TO INSTALL SPRINKLERS IN THEIR HOMES.** Why have they chosen not to? It's simple –

1. **Cost** – The cost for a sprinkler system will vary in large degree depending on the size of the house. I was recently awarded a Contract for a retail space off about 1000 square feet and the cost of the fire sprinklers was \$3,647. The big difference though is this space already had sprinklers and the infrastructure in place for a sprinkler system. Large commercial structures share these facilities. Each new home will need it's own and these costs can range from \$10,000 to \$50,000 depending on where the point of connection will be. I have built one home where we spent in excess of \$80,000 to bring the underground electrical service to the property line. Water lines for Sprinklers will face similar issues.
2. **Maintenance** – Fire Sprinklers require regular maintenance and service. This adds to the upfront cost.

3. False Alarm – We've all had a smoke detector go off accidentally while cooking bacon or performing some other activity. While annoying it is relatively harmless. Not so a sprinkler false alarm. Depending on the finishes in a home the cost of this type of accidental discharge could eclipse the cost of the system and is not covered by Home Owners insurance.
4. Suitability – Fire sprinklers are designed to spray water and this is a completely unsuitable fire suppression system for grease and electrical fires. In commercial construction we understand this and use different suppression systems for different applications. If a grease fire starts in a house with fire sprinklers, the result of a sprinkler system will be to **cause more damage than in a home without fire sprinklers.**
5. Need – There is no real need for the sprinklers. New homes built to today's building codes with interconnected smoke alarms are already very safe. The insignificant increase in safety (a fraction of 1%) is simply not worth all the other negative consequences.
6. Appearance – Let's face it, sprinklers are ugly. Even the concealed head kind are not attractive.

So if nobody wants fire sprinklers in their homes why create a building code that requires them? Again the answer is simple. Our Building Codes are adopted from the International Code Councils (ICC) model codes. These one size fits all codes are not created by knowledgeable experts reasonable debating the benefits and problems with code changes. They are decided on by popular vote at the ICC meetings. A few years back an alliance of pipe manufacturers, plumbing unions and fire departments stacked the deck at one of these elections and as a result a model code was created with residential fire sprinklers. While the motivation of the fire departments is I am sure pure their allies are motivated strictly by greed rather than the greater public good. To date 35 other States in our country have seen this ridiculous greed for what it is and have passed laws similar to SB 2397. They understand how important home ownership is and how this is woven together with the cost of construction. Please join them and pass SB 2397. Let's say enough is enough to these continued erosions of our ability to construct reasonably affordable housing in Hawaii.

Sincerely,



Greg Thielen
President/RME



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April 2, 2012

Testimony to the House Committee on Finance

Monday, April 2, 2012

4:00 p.m.

State Capitol, Room 308

Honolulu, Hawaii 96813

RE: S.B. 2397 SD1 HD2, Relating to Fire Sprinklers

Dear Chair Oshiro, Vice-Chair M. Lee, and members of the Committee:

My name is Anthony Borge, General Manager of RMA Sales. RMA Sales is a small, locally owned and operated company that started business in 1961. We fabricate and distribute vinyl, aluminum window and door products/components as well as other related building materials to the construction trade. We currently employ a full-time staff of 16.

We are in support of SB 2397 SD1 HD2 that which prohibits the counties from requiring installation or retrofitting of automatic fire sprinkler systems in new or existing one or two family dwellings used for residential purposes, provided that this does not apply to new homes that require a variance from an access road or fire fighting water supply requirements; and non-residential agricultural buildings and structures situated outside the urban area.

We firmly believe in the safety of our homes to protect the occupants not only from nature's elements and natural disasters, but fire hazards/accidents as well. The constant improvement in technology has provided homeowners with the tools, materials and devices to enhance in-home fire protection. Examples of these safety improvements to residential homes that have resulted in the reduction in household fires, injury and death include:

- Interconnected, hardwired smoke alarm systems
- Carbon monoxide detectors
- Improved fire ratings on building materials and furnishings

Fire sprinkler systems for residential use, is another tool and option currently available to homeowners that should remain just that: **an option**. Mandating fire sprinkler systems in residential dwellings will significantly increase the cost of home ownership and fall short of the desired intent.

Thank you.

Respectfully submitted,



Anthony B. Borge



Alan Shintani Inc.
GENERAL CONTRACTOR BC 13068

April 2, 2012

Representative Marcus Oshiro, Chair
Representative Marilyn Lee, Vice Chair
Committee on Finance
State Capitol, Room 308
Honolulu, Hawaii 96813

RE: SB 2397 SD1 HD2, Relating to Fire Sprinklers

Dear Chair Oshiro, Vice Chair Lee, and Members of the Committee:

Alan Shintani, Inc. strongly supports SB 2397 SD1 HD2, which would prohibit counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural buildings and structures located outside the urban area; provided that this does not apply to new homes that require a variance from access road or fire fighting water supply requirements. Effective January 1, 2050. (SB2397 HD2)

Alan Shintani, Inc. is committed to the safety of the communities in which we build, but opposes mandating fire sprinklers in new one- and two-family homes because: 1) new homes are now being built with better fire safety measures and other fire safety measures are required that are proven to save lives; 2) fire sprinklers are not cost-effective; 3) targeted fire safety education programs work; 4) fire sprinklers have not been proven to enhance the safety of occupants; and 5) if a homeowner wants to install a fire sprinkler system, that option should be theirs to make.

New homes are now being built better and safer.

There have been significant improvements to the fire safety of homes over the past few decades leading to a dramatic and continued decrease in fire incidents, injury, death, and property loss. There is no data to suggest that sprinklers will significantly improve this decline. Furthermore, majority of residential fires that occur today are in older homes that generally do not have many of the improved fire safety features required in today's construction.

Fire sprinklers are not cost-effective.

Costs for residential fire sprinklers can vary, but proponents have only presented cost estimates based on mainland figures and the County of Maui, about \$7,000 to \$9,000. As we have recently seen, Kailua homeowners were quoted a price upwards of \$16,000 for a sprinkler system. It was unclear whether that cost also included connecting the system to the City's water source. Depending on where the new home will be built, issues such as water pressure or whether trenching is required, will also significantly add to the cost of the system. Substantial expenses not included in price, is the cost of shipping, labor, and maintenance.

Fire education programs work.

Fire safety education programs for consumers are one of the most effective and reasonable means to preventing residential fires and reducing death, injury, and property loss. Education also informs builders and homeowners of other cost-effective residential fire protection technologies that are required by current codes.

Other fire prevention efforts, such as targeted fire safety/prevention education programs, have been successful. Programs of this nature should be considered first since they will ultimately prevent more fires and property loss, and more importantly injury and death. For example: The State of South Carolina successfully implemented a fire safety program entitled "Get Alarmed South Carolina." As a result their fire death rate dropped 41% from 1996 to 1998. The program included a smoke alarm distribution component. Fire prevention education programs work, especially for those homes and home environments at greatest risk.

Fire sprinklers have not been proven to enhance the safety of occupants.

Sprinkler mandates apply only to those homes at least risk. Based on National Fire Protection Data, the risk of death in a home with sprinklers is still close to 30% with property loss still substantial. Overall, this would still be far less than the total cost of sprinklers under mandatory requirements.

Homeowners should have the choice to choose.

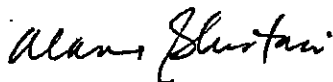
The homeowner should decide whether a sprinkler system is what they want. Even though the government is responsible for the public's health and safety, the homeowner is still who will bear the additional cost. Proponents also discuss a possible tax credit as an incentive to install fire sprinklers. However, if sprinklers are mandated, tax credits as incentives do not work. Also, the price of unmaintained sprinkler systems can be costly due to water damages. The bottom line is this mandate would price more people out of the already high housing market in Hawaii.

Hawaii would not be the first state to do what SB 2397 SD1 HD2 proposes to do. To date, according to the National Association of Home Builders, at least 35 states across the nation either have amended the mandate out at the state level, or have passed legislation requiring that a municipality mandating residential sprinklers adopt no model code.

Alan Shintani, Inc. strongly supports SB 2397 SD1 HD2.

Thank you for the opportunity to share my views with you.

Sincerely,



President
Alan Shintani, Inc.

THE GENTRY COMPANIES



April 2, 2012

The Honorable Marcus R. Oshiro, Chair
The Honorable Marilyn B. Lee, Vice Chair
House Committee on Finance
State Capitol, Room 306
Honolulu, HI 96813

RE: S.B. 2397, S.D. 1, H.D. 2 Relating to Fire Sprinklers

Dear Chair Oshiro, Vice Chair Lee and Members of the Committee:

My name is Debbie Luning, Director of Government Affairs for Gentry Homes, Ltd., testifying in **strong support** of S.B. 2397, S.D. 1, H.D. 2 Relating to Fire Sprinklers. The purpose of this bill is to prohibit the counties from requiring the installation or retrofitting of automatic fire sprinklers or an automatic fire sprinkler system in any new or existing detached one- or two-family dwelling unit in a structure used only for residential purposes. Certain exemptions would apply.

We believe that mandatory installation of fire sprinklers in single family and duplex homes, while well-intentioned, will not necessarily achieve the desired results of saving lives due to home fires. We are also concerned about the added cost to new homebuyers if it becomes a mandate. Our concerns about mandating fire sprinklers are summarized below.

- 1) **The requirement to install fire sprinklers would apply only to newly constructed homes, not to older homes which are basically the source of the problem.** Homes built nowadays are much safer in terms of fire prevention because of the types of materials, construction design and methods that are used. Examples include safer electrical wiring, double wall drywall construction, fire-rated garages, draft stops, cement siding and integrated smoke detector alarm systems that are very sensitive. These features were not necessarily included in homes built over 15 years ago; yet, the mandates in these resolutions would not apply to older homes -- they would only apply to newly constructed homes.
- 2) **Fire sprinklers will be ineffective unless there is a direct source of heat that triggers the sprinklers.** Smoke and noxious gases are the biggest threats in a home fire, and asphyxiation by poisonous fumes in the air outweighs burning as cause of death by a 3:1 ratio. A fire sprinkler, unless triggered by heat, will be ineffective under these circumstances.

3) **Fire sprinklers will be ineffective unless they are regularly maintained.** One cannot merely install a fire sprinkler system; it has to be regularly maintained in order for the system to work effectively. It is our contention that many homeowners will be negligent in regularly maintaining their fire sprinkler systems, thereby rendering them ineffective.

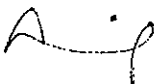
4) **Insurance companies will not cover the cost of damage caused by false alarms.** This is a very real and very practical concern. Insurance companies will not cover the cost of water damage should the fire sprinkler go off accidentally or unexpectedly – there has to be an actual fire in order for them to do so. This could mean tens of thousands of dollars of damage that the homeowner will have to pay for out of his/her own pocket.

5) **Mandating the installation of fire sprinklers in new homes would affect affordability.** Whenever additional requirements are placed on the development of newly constructed homes, the cost of homes increase and more people get priced out of the housing market. If one of the goals of the Legislature and government is to provide more affordable homes for Hawaii's people, it doesn't make sense to place additional requirements that add to the cost of a home, especially when the requirement has not been proven to be necessary. We are by no means advocating placing people's lives at risk, but we do have concerns about mandating fire sprinklers which may not be needed in newly constructed homes.

For the reasons stated above, we are strong support of this bill. However, we recommend that it be amended to take effect upon its approval and that the sunset clause be removed. Thank you for the opportunity to provide comments.

Sincerely,

GENTRY HOMES, LTD.



Debra M. A. Luning
Director of Governmental Affairs and
Community Relations

March 31, 2012

House Committee on Finance

Hearing Date: Monday, April 2, 4:00p.m., Conference Room 308

Honorable Representatives, Marcus R. Oshiro Chair; Marilyn B. Lee, Vice Chair; and Members of the House Committee on Finance

Subject: **SB 2397 SD-1 HD-2 Relating to Fire Sprinklers**

Honorable Chair and Members

The Coalition of Hawaii Engineering & Architectural Professionals represents several professional Engineering and Architectural organizations including American Council of Engineering Companies Hawaii; Hawaii Chapter of the American Society of Civil Engineers; American Public Works Association Hawaii Chapter; Structural Engineering Association of Hawaii; and the Hawaii Society of Professional Engineers. **We SUPPORT to SB 2397, Relating to Fire Sprinklers.**

Our A/E/C industry has been working together for many years to support legislation that is fair and reasonable. This bill will prohibit Counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing one- or two family dwelling units used only for residential purposes; and (2) non-residential agricultural and aqua-cultural buildings and structures located outside the urban area; provided that this does not apply to new homes that require a variance from access road or fire fighting water supply requirements.

There are several fundamental reasons that fire sprinklers should not be required: Safety codes and new construction are built with internal safety measures; water systems for residential areas are designed with adequate fire hydrants and access to homes; fire sprinkler systems will be costly and passed on to the consumer this should be a option for the homeowner not mandated.

We appreciate your concern on this matter and urge your Support of SB 2397.

Sincerely,
Coalition of Hawaii Engineering & Architectural Professionals
Lester H. Fukuda, P.E., FACEC

Lester Fukuda

FINTestimony

From: Greg Thielen [greg@ccs-hawaii.com]
Sent: Monday, April 02, 2012 11:32 AM
To: Mailing List
Cc: FINTestimony
Subject: Re: Testimony for SB2397 on 4/2/2012 4:00:00 PM

Supposed to be support, not oppose

Sent from my iPhone

On Apr 2, 2012, at 10:47 AM, "mailinglist@capitol.hawaii.gov"
<mailinglist@capitol.hawaii.gov> wrote:

> Testimony for FIN 4/2/2012 4:00:00 PM SB2397
>
> Conference room: 308
> Testifier position: Oppose
> Testifier will be present: No
> Submitted by: Greg Thielen
> Organization: Complete Construction Services
> E-mail: greg@ccs-hawaii.com
> Submitted on: 4/2/2012
>
> Comments:
> <SB2397 Testimony 4-1-11.pdf>

FINTestimony

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, April 01, 2012 11:35 AM
To: FINTestimony
Cc: greg@ccs-hawaii.com
Subject: Testimony for SB2397 on 4/2/2012 4:00:00 PM

Testimony for FIN 4/2/2012 4:00:00 PM SB2397

Conference room: 308
Testifier position: Support
Testifier will be present: No
Submitted by: Greg Thielen
Organization: Complete Construction Services
E-mail: greg@ccs-hawaii.com
Submitted on: 4/1/2012

Comments: