

Written Public Comment to  
The Executive Committee of  
The Housing Development and Finance Committee  
May 26, 2026

**Sent:** Monday, May 25, 2026 3:55 PM

**To:** Courtney Pond <cpond@CalHFA.ca.gov>

**Subject:** [External] - Attention Courtney Pond, HDFC Executive Committee Administrator, HDFC Exec. Comte. 5/21/26 Meeting, Item 7., Written Record Copy, My Oral Comment -- Legislative Proposal

CAUTION: This email was sent from a non-CalHFA email address. Please do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Courtney:

I respectfully submit my attached documentation, rationale and initial suggested draft for the necessary legislative action for the only means to actually achieve affordable housing.

The purpose of this submission is to provide the HDFC Executive Committee members hard copies of my oral presentation on the above date,

for their familiarization in advance. They may follow along during my presentation. They appear below. Note that the price information fluctuates, and was retrieved months ago. If you will please distribute this documentation to each of the HDFC Executive Committee members.

The attached documentation highlights the long-festering state of the housing industry's collusive control over housing prices — illustrating the long overdue necessity for corrective legislative relief. The passage of AB103 has now preempted any remedial initiatives by California's housing authorities. This is the basis for my draft legislative proposal — outside of the Legislature, no recourse exists for relief against said collusion against the home buyer!

It is my hope that the foregoing will prompt concern and referral to pertinent policy makers at the state and federal levels.

Thank you for your understanding and assistance!

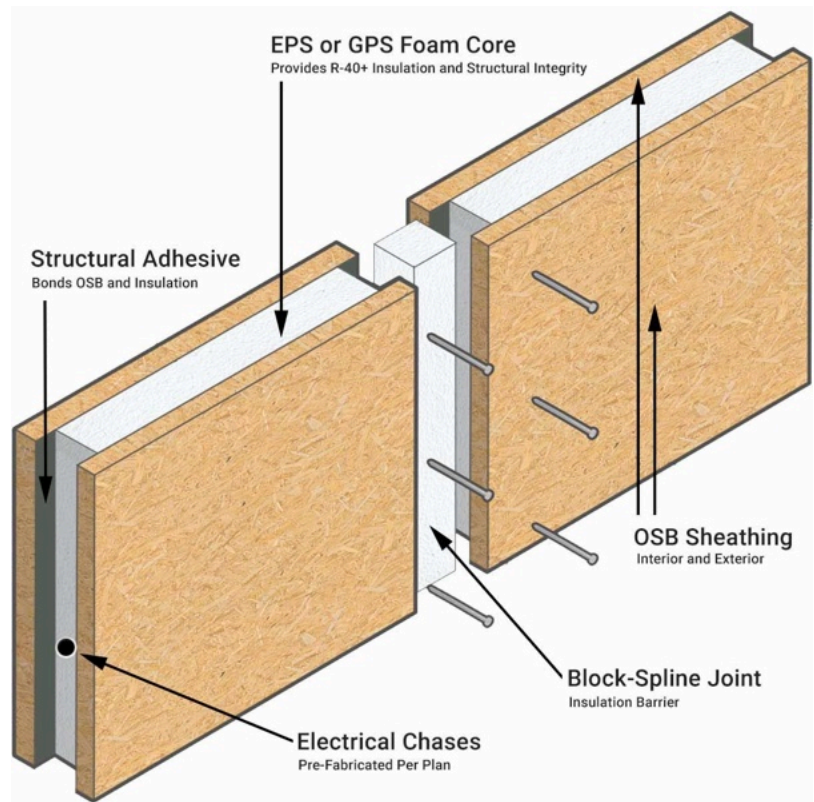
Assiduously,

David Brian Harrington

San Francisco

**PROPOSED MANDATORY STANDARDS -- PREFABRICATED STRUCTURAL INSULATED PANELS FOR ALL RESIDENTIAL CONSTRUCTION:**

Since the **Governor's office** has **declared a 3.5 million-unit housing need in California:** <https://www.sfchronicle.com/politics/article/gavin-newsom-housing-record-19971316.php>, **it will not be fulfilled by the prevailing "handmade" lumber or molded concrete methods. Instead I should like to proffer my documentation of prefabricated structural insulated panels (SIPs):**



**Under today's tight construction labor conditions, only mass production -- utilizing modularized SIP components -- will enable fulfillment of California's, indeed the nation's, housing shortage.**

**Not only volume, but affordability has been an unremitting impact on California's housing crisis. SIPs provide a solution to the labor-intensive, cost-bloating factor of our housing construction. You cannot expect affordability where housing is constructed piece-by-piece, on site, with scarce labor! Compare the stud lumber or molded concrete and steel housing construction components with the SIPs method for simplification of labor:**



Profligate Approach 1



Profligate Approach 2



SIPs Approach

Further, **concrete and steel follow fossil fuels as the planet's source of drought and flood-inducing global warming.** Note the car industry's transition to electric engines -- so must the construction industry come up to the 21st century's prevailing mass-production standard! **There is no logical reason why the construction industry has not become a mass production one** as have virtually all other major industries!

### **Fire resistance of SIPs housing construction?:**

[https://www.google.com/search?](https://www.google.com/search?q=fire+resistance+of+SIPs+housing+construction&oeq=fire+resistance+of+SIPs+housing+construction&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigATIHCAIQIRigATIHCAEQIRigAdIBCTIxMDE0ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8)

[q=fire+resistance+of+SIPs+housing+construction&oeq=fire+resistance+of+SIPs+housing+construction&gs\\_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigATIHCAIQIRigATIHCAEQIRigAdIBCTIxMDE0ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=fire+resistance+of+SIPs+housing+construction&oeq=fire+resistance+of+SIPs+housing+construction&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigATIHCAIQIRigATIHCAEQIRigAdIBCTIxMDE0ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8)

**Accordingly, we must mandate modularized, SIP construction -- perhaps the most cost-effective and sustainable one** (aside from Boxabl, which uses steel as their SIPs facings) -- **be instituted as our housing industry's predominant standard.** , **in view of the facts presented here, it is entirely to the benefit of the consumer, and to the detriment if not, that prefabricated housing be required.** Just as almost no one can afford a hand built car, appliance, or garments, the same is true when it comes to housing construction. **It is high time that industry becomes a mass-production one!** Wherefore **to correct our state's gross housing price imbalance, I should like to propose draft standards mandating modularized SIP prefabricated housing statewide:**

## **STANDARDS PROPOSAL: MANDATORY PREFABRICATED MODULARIZED STRUCTURAL INSULATED PANEL RESIDENTIAL CONSTRUCTION**

**PREFACE: In view of our ongoing climate crisis, wood must replace steel and concrete:**

<https://www.fastcompany.com/90574889/wood-buildings-should-be-a-requirement-of-any-climate-change-policy>

**The CBSC has the authority to mandate codes:**

<https://www.google.com/search?>

[q=Does+the+California+Building+Standards+Commission+have+the+authority+to+mandate+California+building+codes%3F&og=Does+the+California+Building+Standards+Commission+have+the+authority+to+mandate+California+building+codes%3F&gs\\_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAjIHCAIQIRiPAtiBCTQ0MDk5ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=Does+the+California+Building+Standards+Commission+have+the+authority+to+mandate+California+building+codes%3F&og=Does+the+California+Building+Standards+Commission+have+the+authority+to+mandate+California+building+codes%3F&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAjIHCAIQIRiPAtiBCTQ0MDk5ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8)

**Proper safety standards for more sustainable all-wood framing specifications -- again in view of our increasing frequency and severity of worldwide wildfires and flooding. SIPs already meet codes: <https://www.google.com/search?>**

**[q=Do+struvctural+insulated+panels+meet+California+building+codes%3F&og=Do+struvctural+insulated+panels+meet+California+building+codes%3F&gs\\_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAjIHCAIQIRiPAjIHCAMQIRiPAtiBCTIxNzg0ajBqNKgCALACAQ&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=Do+struvctural+insulated+panels+meet+California+building+codes%3F&og=Do+struvctural+insulated+panels+meet+California+building+codes%3F&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAjIHCAIQIRiPAjIHCAMQIRiPAtiBCTIxNzg0ajBqNKgCALACAQ&sourceid=chrome&ie=UTF-8) As for wood foundations and wood bottom and foundations plates, the ICC (International Code Council) has already codified these since their 2018 edition (!):**

**See Section 402.1, Wood foundations, Figure R403.1(2) PERMANENT WOOD FOUNDATION BASEMENT WALL SECTION, Figure R403.1(3) PERMANENT WOOD FOUNDATION CRAWL SPACE SECTION, and R404.3 Wood sill plates (scroll to near bottom):**

<https://codes.iccsafe.org/content/IRC2021P2/chapter-4-foundations>

**Video, SIPs foundation construction:** <https://www.youtube.com/watch?v=as4bipbfJYw&t=101s>

## **SECTION I General Provisions:**

***In view of the recurrent ravages of global warming trends -- increasing wildfires and flooding -- hence for sustainable building, henceforth all new construction (residential and commercial) shall be composed entirely of prefabricated, modularized (for further labor cost reduction) structural insulated panels (SIPs) for the foundation(s), all walls, and all roofs. Lumber roof reinforcing may specified as necessary. Floors framing shall be specified as lumber joists and/or trusses. Structural grade plywood (shear walling) shall be specified for those areas requiring it. For reasons stated in the foregoing, no concrete or steel shall be allowed for any foundation(s), floors, walls, or roofs except for fasteners and connection brackets/tie-downs/straps.***

**Documentation links:**

<https://www.youtube.com/watch?v=as4bipbfJYw>

<https://www.greenbuildingadvisor.com/article/concrete-free-slab>

<https://www.thermapan.com/product/foundation-panels/>

<https://www.wbdg.org/resources/structural-insulated-panels-sips#l>

[https://www.google.com/search?](https://www.google.com/search?q=Can+treated+wood%2Ftimber+be+used+for+foundation+footings%3F&sca_esv=cbc386de4b870031&ei=xHUJal7IH_ju0PEP_xuzAmA8&ved=0ahUKewiO1_ed8aCNaxV4NzQIHUY2EPMQ4dUDCBA&uact=5&oq=Can+treated+wood%2Ftimber+be+used+for+foundation+footings%3F&gs_lp=EGxnd3Mtd2l6LXNlcnAiOENhbiB0cmVhdGVkIHdvd2QvdGltYmVlIGJlIHVzZWQgZm9yIGZvdW5kYXRpb24gZm9vdGluZ3M_MgUQIRigATIFECEYoAEyBRAhGKABSPAmUO0SWJgicAJ4AZABAJgBkgGgAfoGqgEDMy41uAEDyAEA-AEBmAIJoALXBsICChAAGLADGNYEGEfCAgUQIRirApgDAIlgGAZAGCJIHAzMuNqAH8TCyBwMxLja4B8kG&sclient=gws-wiz-serp)

[q=Can+treated+wood%2Ftimber+be+used+for+foundation+footings%3F&sca\\_esv=cbc386de4b870031&ei=xHUJal7IH\\_ju0PEP\\_xuzAmA8&ved=0ahUKewiO1\\_ed8aCNaxV4NzQIHUY2EPMQ4dUDCBA&uact=5&oq=Can+treated+wood%2Ftimber+be+used+for+foundation+footings%3F&gs\\_lp=EGxnd3Mtd2l6LXNlcnAiOENhbiB0cmVhdGVkIHdvd2QvdGltYmVlIGJlIHVzZWQgZm9yIGZvdW5kYXRpb24gZm9vdGluZ3M\\_MgUQIRigATIFECEYoAEyBRAhGKABSPAmUO0SWJgicAJ4AZABAJgBkgGgAfoGqgEDMy41uAEDyAEA-AEBmAIJoALXBsICChAAGLADGNYEGEfCAgUQIRirApgDAIlgGAZAGCJIHAzMuNqAH8TCyBwMxLja4B8kG&sclient=gws-wiz-serp](https://www.google.com/search?q=Can+treated+wood%2Ftimber+be+used+for+foundation+footings%3F&sca_esv=cbc386de4b870031&ei=xHUJal7IH_ju0PEP_xuzAmA8&ved=0ahUKewiO1_ed8aCNaxV4NzQIHUY2EPMQ4dUDCBA&uact=5&oq=Can+treated+wood%2Ftimber+be+used+for+foundation+footings%3F&gs_lp=EGxnd3Mtd2l6LXNlcnAiOENhbiB0cmVhdGVkIHdvd2QvdGltYmVlIGJlIHVzZWQgZm9yIGZvdW5kYXRpb24gZm9vdGluZ3M_MgUQIRigATIFECEYoAEyBRAhGKABSPAmUO0SWJgicAJ4AZABAJgBkgGgAfoGqgEDMy41uAEDyAEA-AEBmAIJoALXBsICChAAGLADGNYEGEfCAgUQIRirApgDAIlgGAZAGCJIHAzMuNqAH8TCyBwMxLja4B8kG&sclient=gws-wiz-serp)

***For maximum housing unit production and affordability, multifamily buildings are necessary. Examples of affordable yet aesthetic multifamily housing:***

<https://www.sips.org/aeon-alliance-sip-multifamily-minneapolis-mn>

<https://www.sips.org/sip-senior-living-facility-minneapolis-mn>

<https://sips.premierbuildingsystems.com/project-portfolio/montana-student-housing>

<https://www.sips.org/zero-energy-sip-apartments-kansas-city-ks>

<https://offsitebuilder.com/multifamily-with-sips/>

## **SECTION II Structures Four Stories or Less:**

***In addition to the SIPs provisions in Section I, reinforcing framing shall be lumber, or multiple elements thereof where required. Any shear walling shall be conventional structural plywood.***

## **SECTION III Structures Above Four Stories:**

***In addition to the SIPs provisions in Section I, laminated veneer lumber (LVL) and/or cross laminated timber (CLT) shall be specified for reinforcement framing -- supplanting concrete and steel, for the reasons cited above and following:***

[https://www.google.com/search?](https://www.google.com/search?q=SIPs+construction+at+4+or+less+stories+can+be+SIPs+alone%2C+while+above+4+stories+requi)

[q=SIPs+construction+at+4+or+less+stories+can+be+SIPs+alone%2C+while+above+4+stories+requi](https://www.google.com/search?q=SIPs+construction+at+4+or+less+stories+can+be+SIPs+alone%2C+while+above+4+stories+requi)

res+CLT+and%2For+LVL+reinforcement&sca\_esv=7bb009e77409c6d9&ei=-6dtaLuPC5nKkPIP\_a7K  
uA8&ved=0ahUKEwjL-  
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an+be+SIPs+alone%2C+while+above+4+stories+requires+CLT+and%2For+LVL+reinforcement&gs\_  
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NhbiBiZSBTsvBzIGFsb25lLCB3aGlzS3BhYm92ZSA0IHNo3JpZXMgcmVxdWVlyZXMgQ0xUIGFuZ  
C9vciBMVkwgcmVpbmZvcmlbWVudEgAUABYAHAeAGQAQCYAQCgAQCqAQC4AQPIAQD4AQ  
GYAgCgAgCYAwCSBwCgBwCyBwC4BwDCBwDIBwA&sclient=gws-wiz-serp

**Current Housing prices -- a further impetus for prefabricated, modularized SIPs construction requirements:**

Median price, California single family home, 2,000 sq. ft., 3 bedroom, 2 bathroom: \$930,000.

[https://www.google.com/search?  
q=median+California+price+2%2C000+sq.+ft.+3BR+2BA+single+family+home&sca\\_esv=6b693d  
07bb019c16&ei=0vOvalf3D9KnqtsP7ZjKsQU&ved=0ahUKEwi3qKyR7ayPAXXSk2oFHW2MMIYQ  
4dUDCBA&oq=median+California+price+2%2C000+sq.+ft.+3BR+2BA+single+family+home&gs\\_  
lp=Egxnd3Mtd2l6LXNlcnAidVnJUHMgY29uc3RydWN0aW9uIGF0IDQgb3IgbGVzcyBzdG9yaWVzIG  
NhbiBiZSBTsvBzIGFsb25lLCB3aGlzS3BhYm92ZSA0IHNo3JpZXMgcmVxdWVlyZXMgQ0xUIGFuZ  
C9vciBMVkwgcmVpbmZvcmlbWVudEgAUABYAHAeAGQAQCYAQCgAQCqAQC4AQPIAQD4AQ  
GYAgCgAgCYAwCSBwCgBwCyBwC4BwDCBwDIBwA&sclient=gws-wiz-serp](https://www.google.com/search?q=median+California+price+2%2C000+sq.+ft.+3BR+2BA+single+family+home&sca_esv=6b693d07bb019c16&ei=0vOvalf3D9KnqtsP7ZjKsQU&ved=0ahUKEwi3qKyR7ayPAXXSk2oFHW2MMIYQ4dUDCBA&oq=median+California+price+2%2C000+sq.+ft.+3BR+2BA+single+family+home&gs_lp=Egxnd3Mtd2l6LXNlcnAidVnJUHMgY29uc3RydWN0aW9uIGF0IDQgb3IgbGVzcyBzdG9yaWVzIGNhbiBiZSBTsvBzIGFsb25lLCB3aGlzS3BhYm92ZSA0IHNo3JpZXMgcmVxdWVlyZXMgQ0xUIGFuZC9vciBMVkwgcmVpbmZvcmlbWVudEgAUABYAHAeAGQAQCYAQCgAQCqAQC4AQPIAQD4AQGYAgCgAgCYAwCSBwCgBwCyBwC4BwDCBwDIBwA&sclient=gws-wiz-serp)

Median price, California single family home, modularized, SIPs, 2,000 sq. ft., 3BR 2BA: \$570,000 - \$800,000.

[https://www.google.com/search?  
q=The+median+California+price%2C+prefabricated+modularized+SIPs+2%2C000+sq.+ft.+3BR+2B  
A+single+family+home&sca\\_esv=6b693d07bb019c16&ei=H\\_avaK-  
2lajQkPIPIZ6TkAk&ved=0ahUKEwjvwauq76yPAXUoKEQIHRXPBJIQ4dUDCBA&oq=The+median+C  
alifornia+price%2C+prefabricated+modularized+SIPs+2%2C000+sq.+ft.+3BR+2BA+single+family+h  
ome&gs\\_lp=Egxnd3Mtd2l6LXNlcnAidVnJUHMgY29uc3RydWN0aW9uIGF0IDQgb3IgbGVzcyBzdG9yaWVzIG  
NhbiBiZSBTsvBzIGFsb25lLCB3aGlzS3BhYm92ZSA0IHNo3JpZXMgcmVxdWVlyZXMgQ0xUIGFuZC9vciBMVkwgcmVpbmZvcmlbWVudEgAUABYAHAeAGQAQCYAQCgAQCqAQC4AQPIAQD4AQH4AQKYAgmgAieoAhTCAGoQABiwAxjWBBhHwgIUeAAYgAQYkQIYtAIYigUY6gLYAQHCAhQQABiABBjjBBi0AhjpBBjqAtgBAclCEBAAGAMYtAIY6gIYjwHYAQLCAhAQLhgDGLQCGOoCGI8B2AECmAMG8QWSB1wj0CeozYgGAZAGCLoGBAgBGAE6BgYIAhABGAqSBwE5oAeYAbIHALgHAMIHBTauMy42yAce&sclient=gws-wiz-serp](https://www.google.com/search?q=The+median+California+price%2C+prefabricated+modularized+SIPs+2%2C000+sq.+ft.+3BR+2BA+single+family+home&sca_esv=6b693d07bb019c16&ei=H_avaK-2lajQkPIPIZ6TkAk&ved=0ahUKEwjvwauq76yPAXUoKEQIHRXPBJIQ4dUDCBA&oq=The+median+California+price%2C+prefabricated+modularized+SIPs+2%2C000+sq.+ft.+3BR+2BA+single+family+home&gs_lp=Egxnd3Mtd2l6LXNlcnAidVnJUHMgY29uc3RydWN0aW9uIGF0IDQgb3IgbGVzcyBzdG9yaWVzIGNhbiBiZSBTsvBzIGFsb25lLCB3aGlzS3BhYm92ZSA0IHNo3JpZXMgcmVxdWVlyZXMgQ0xUIGFuZC9vciBMVkwgcmVpbmZvcmlbWVudEgAUABYAHAeAGQAQCYAQCgAQCqAQC4AQPIAQD4AQH4AQKYAgmgAieoAhTCAGoQABiwAxjWBBhHwgIUeAAYgAQYkQIYtAIYigUY6gLYAQHCAhQQABiABBjjBBi0AhjpBBjqAtgBAclCEBAAGAMYtAIY6gIYjwHYAQLCAhAQLhgDGLQCGOoCGI8B2AECmAMG8QWSB1wj0CeozYgGAZAGCLoGBAgBGAE6BgYIAhABGAqSBwE5oAeYAbIHALgHAMIHBTauMy42yAce&sclient=gws-wiz-serp)

A specific aesthetic modular home model, Sacramento area, 1,796 sqft 3BR 2BA \$214,415 - \$294,415 (not SIPs; upgraded, including 9' ceiling, 2-car garage, sales tax, delivery, setup):

<https://build.thehomedirect.com/homes/66a7e467fc3cd485948c70d2/design>

[https://www.google.com/search?q=How+much+more+for+a+9-ft.+ceiling+vs.+8-ft.+ceiling+in+a+2%2C000+sq.+ft.+Sacramento%2C+CA%3F&sca\\_esv=ffd48def480ec45e&hl=en&ei=ygGwaM\\_1LvzykPIPq8y1oAI&ved=0ahUKEwjPguG6-qyPAxV8OUQIHStmDSQQ4dUDCBA&uact=5&oq=How+much+more+for+a+9-ft.+ceiling+vs.+8-ft.+ceiling+in+a+2%2C000+sq.+ft.+Sacramento%2C+CA%3F&gs\\_lp=Egxnd3Mtd2l6LXNlcnAiVkhvdyBtdWNolG1vcuUgZm9yIGEGOS1mdC4gY2VpbGluZyB2cy4gOC1mdC4gY2VpbGluZyBpbjBhIDIsMDAwIHNxLiBmdC4gU2FjcmFtZW50bywgQ0E\\_Slt\\_UOsdWMNpcAF4AZABAjgBb6ABwQGqAQMxLjG4AQPIAQD4AQGYAgKgAnrCAgoQABiwAxjWBBhHwgIEECEYCpgDAIlgGAZAGApIHAzEuMaAHkgWyBwMwLjG4B3PCBwUwLjEuMcgHBQ&sclient=gws-wiz-serp](https://www.google.com/search?q=How+much+more+for+a+9-ft.+ceiling+vs.+8-ft.+ceiling+in+a+2%2C000+sq.+ft.+Sacramento%2C+CA%3F&sca_esv=ffd48def480ec45e&hl=en&ei=ygGwaM_1LvzykPIPq8y1oAI&ved=0ahUKEwjPguG6-qyPAxV8OUQIHStmDSQQ4dUDCBA&uact=5&oq=How+much+more+for+a+9-ft.+ceiling+vs.+8-ft.+ceiling+in+a+2%2C000+sq.+ft.+Sacramento%2C+CA%3F&gs_lp=Egxnd3Mtd2l6LXNlcnAiVkhvdyBtdWNolG1vcuUgZm9yIGEGOS1mdC4gY2VpbGluZyB2cy4gOC1mdC4gY2VpbGluZyBpbjBhIDIsMDAwIHNxLiBmdC4gU2FjcmFtZW50bywgQ0E_Slt_UOsdWMNpcAF4AZABAjgBb6ABwQGqAQMxLjG4AQPIAQD4AQGYAgKgAnrCAgoQABiwAxjWBBhHwgIEECEYCpgDAIlgGAZAGApIHAzEuMaAHkgWyBwMwLjG4B3PCBwUwLjEuMcgHBQ&sclient=gws-wiz-serp)

[https://www.google.com/search?q=median+Sacramento-area+California+attached+2-car+garage+addition+price&sca\\_esv=ffd48def480ec45e&hl=en&ei=FAKwaLDjHPCgur8Pwp6r4Q8&ved=0ahUKEwiwvPd-qyPAxVwkO4BHULPKvwQ4dUDCBA&uact=5&oq=median+Sacramento-area+California+attached+2-car+garage+addition+price&gs\\_lp=Egxnd3Mtd2l6LXNlcnAiRm1lZGhbiBTYWNyYW1lbnRvLWFFyZWEgQ2FsaWZvcu5pYSBhdHRhY2hIZCAyLWNhcnBnYXJhZ2UgYWRkaXRpb24gcHJpY2VI0aUDUABYxKEDcAF4AZABAjgByQGgAds5qgEHNDMuMjUuMbgBA8gBAPgBAZgCPqACjbbCAgsQABiABBiRAhiKBcICDhAAGIAEGLEDGIMBGloFwglQEAAyGAYsQMYQxiDARiKBcICCxAAGIAEGLEDGIMBwgIOEC4YgAQYsQMYgwEYigXCAgsQLhiABBixAxiDAcICCxAuGIAEGNEDGMcBwgIKAAyGAYQYQxiKBcICDRAAGIAEGLEDGEMyigXCAggQABiABBixA8ICCxAAGIAEGJIDGloFwglNEAAyGAYQYQxjJAXiKBcICBRAAGIAEwgIPEAAyGAYQYQxiKBRhGGPsBwgILEAAyGAYsQMYyQPCAhSQAABiABBhDGlOFGEYY-wEYlwUYjAUy3QTYAQHCAggQABiABBjJA8ICBhAAGBYHsICCxAAGIAEGIYDGlOFwglIEAAyGAYQYiQXCAggQABiABBiiBMICBRAAGO8FwglFECEYoAHCAgUQIRirApgDALoGBggBEAEYE5IH Bzl0LjM2LjKgB6L0ArIHBzIzLjM2LjK4B4o2wgcJMC4zNC4yNi4yyAfRAQ&sclient=gws-wiz-serp](https://www.google.com/search?q=median+Sacramento-area+California+attached+2-car+garage+addition+price&sca_esv=ffd48def480ec45e&hl=en&ei=FAKwaLDjHPCgur8Pwp6r4Q8&ved=0ahUKEwiwvPd-qyPAxVwkO4BHULPKvwQ4dUDCBA&uact=5&oq=median+Sacramento-area+California+attached+2-car+garage+addition+price&gs_lp=Egxnd3Mtd2l6LXNlcnAiRm1lZGhbiBTYWNyYW1lbnRvLWFFyZWEgQ2FsaWZvcu5pYSBhdHRhY2hIZCAyLWNhcnBnYXJhZ2UgYWRkaXRpb24gcHJpY2VI0aUDUABYxKEDcAF4AZABAjgByQGgAds5qgEHNDMuMjUuMbgBA8gBAPgBAZgCPqACjbbCAgsQABiABBiRAhiKBcICDhAAGIAEGLEDGIMBGloFwglQEAAyGAYsQMYQxiDARiKBcICCxAAGIAEGLEDGIMBwgIOEC4YgAQYsQMYgwEYigXCAgsQLhiABBixAxiDAcICCxAuGIAEGNEDGMcBwgIKAAyGAYQYQxiKBcICDRAAGIAEGLEDGEMyigXCAggQABiABBixA8ICCxAAGIAEGJIDGloFwglNEAAyGAYQYQxjJAXiKBcICBRAAGIAEwgIPEAAyGAYQYQxiKBRhGGPsBwgILEAAyGAYsQMYyQPCAhSQAABiABBhDGlOFGEYY-wEYlwUYjAUy3QTYAQHCAggQABiABBjJA8ICBhAAGBYHsICCxAAGIAEGIYDGlOFwglIEAAyGAYQYiQXCAggQABiABBiiBMICBRAAGO8FwglFECEYoAHCAgUQIRirApgDALoGBggBEAEYE5IH Bzl0LjM2LjKgB6L0ArIHBzIzLjM2LjK4B4o2wgcJMC4zNC4yNi4yyAfRAQ&sclient=gws-wiz-serp)

**The foregoing is what the market SHOULD be producing, but the prevailing graftitious stick building or molded concrete methods stymie it. Please forward this documentation/draft to your code adoption staff for final drafts. I will will be glad to assist -- so we may all collaborate to at last bring the demand-price ratio into proper balance!**

Abidingly,

David Brian Harrington  
San Francisco

**I preface this proposal with the following imprimatur:**

“Hello David,

Thank you for contacting the California Building Standards Commission and providing this information; it was very educational. Your email will be forwarded to all interested parties.

Sincerely,

**Stoyan Bumbalov**

**Executive Director**

**California Building Standards Commission**

dgs.ca.gov/BSC

(916) 263-0998”

I respectfully submit this **critical documentation on optimizing California's wildfire redevelopment -- and for future *affordable* housing construction** for your review and forwarding to your relevant colleagues. **As you know, maximizing the number of units per taxpayer dollar is the chief objective. Yet this intent has remained routinely beset with obstacles.**

**Read on how this may be circumvented.**

For your urgent consideration, Membership, :

**For our current fire disaster redevelopment and future real affordable, sustainable housing construction please review the following:**

**BEFORE APPROPRIATING TO ANY HOUSING CONSTRUCTION OR REDEVELOPMENT PROJECTS, PLEASE CONSIDER COST EFFICIENCY — THE CONSTRUCTION METHOD — FIRST:**

**We all agree that housing costs must come back to earth. But they can't. Why?** The construction industry remains in its archaic "hand-build" approach while all other industries have long ago shifted to mass production. You have observed this yourself with every look at a building site. Everything is cut to size and fastened together by hand -- on site. What other industry does this? No one can expect affordable housing under these circumstances. Insist on mass-produced housing components instead of onsite, "stick-built" ones. In fact, even 3D-printed housing has begun.

Therefore do not allow the architectural-construction block's "front" to perpetuate bilking of the buyer. **PLEASE DO NOT ALLOCATE FUNDING TO PROJECTS NOT ENGAGED IN SUSTAINABLE INTERIOR WOOD PREFABRICATION. This is mere shark baiting. DO ALLOCATE FOR SUSTAINABLE, FACTORY-PRODUCED MODULAR HOUSING CONSTRUCTION METHODS!**

**Why wood?:** [https://www.google.com/search?](https://www.google.com/search?q=Why+wood+for+construction%3F&sca_esv=48a8953d78a497d8&ei=UIOPZ_P1I4zckPIP8qrf0Qk&ved=0ahUKEwjz5pvJq4aLAXUMLkQIHXLVN5oQ4dUDCBA&uact=5&oq=Why+wood+for+construction%3F&gs_lp=Egxnd3Mtd2l6LXNlcnAiGldoeSB3b29kIGZvciBjb25zdHJ1Y3Rpb24_MgYQABgIGB4yBhAAGAgYHjIGEAAAYCBgeMgsQABiABBiGAXiKBTILEAAAYgAQYhgMYigUyCBAAGIAEGKIEMggQABiABBiiBDIIEAAAYgAQYogRI-zpQ0A1Y9DNwAXgBkAEAmAFroAHxCqoBBDE2LjG4AQPIAQD4AQGYAhKgAp8LwgIKEAAAYsAMY1gQYR8ICCxAAGIAEGJECGIoFwgIFEAAAYgATCAgYQABgHG B7CAggQABgHGAgYHsICCBAAGKIEGikFwgIFECEYoAHCAgUQIRirApgDAIGAZAGCJIHBDE3LjGgB9Nq&sclient=gws-wiz-serp)

q=Why+wood+for+construction%3F&sca\_esv=48a8953d78a497d8&ei=UIOPZ\_P1I4zckPIP8qrf0Qk&ved=0ahUKEwjz5pvJq4aLAXUMLkQIHXLVN5oQ4dUDCBA&uact=5&oq=Why+wood+for+construction%3F&gs\_lp=Egxnd3Mtd2l6LXNlcnAiGldoeSB3b29kIGZvciBjb25zdHJ1Y3Rpb24\_MgYQABgIGB4yBhAAGAgYHjIGEAAAYCBgeMgsQABiABBiGAXiKBTI

LEAAAYgAQYhgMYigUyCBAAGIAEGKIEMggQABiABBiiBDIIEAAAYgAQYogRI-zpQ0A1Y9DNwAXgBkAEAmAFroAHxCqoBBDE2LjG4AQPIAQD4AQGYAhKgAp8LwgIKEAAAYsAMY1gQYR8ICCxAAGIAEGJECGIoFwgIFEAAAYgATCAgYQABgHG B7CAggQABgHGAgYHsICCBAAGKIEGikFwgIFECEYoAHCAgUQIRirApgDAIGAZAGCJIHBDE3LjGgB9Nq&sclient=gws-wiz-serp

**Prefabricated housing:** [https://www.sips.org/documents/TGE\\_Offsite-Construction-Part-I.pdf](https://www.sips.org/documents/TGE_Offsite-Construction-Part-I.pdf)

<https://www.tamarackgrove.com/post/offsite-construction-2>

**Why Structural Insulated Panels (SIPs)?** Labor-saving: prefabricated, panelized wall/roof sections -- no studs! <https://www.sips.org/blog/advancing-energy-efficiency-blog>

<https://www.sips.org/sip-cost-vs-stick-frame>

**Why modular?** (Scroll to top of page) [https://www.bobvila.com/articles/modular-home-prices/#:~:text=Q.%20What%20is%20the%20average%20cost%20of,%20\\$360%2C000%2C%20with%20many%20homeowners%20spending%20approximately%20\\$270%2C000.](https://www.bobvila.com/articles/modular-home-prices/#:~:text=Q.%20What%20is%20the%20average%20cost%20of,%20$360%2C000%2C%20with%20many%20homeowners%20spending%20approximately%20$270%2C000.)

**There are no width constraints:** [https://www.google.com/search?](https://www.google.com/search?q=Can+modular+housing+units+be+placed+side-by-side%3F&sca_esv=0cc5f8e8113380e9&ei=n6WPZ-_nGNnw0PEP8tDrYQ&ved=0ahUKEwivs86H-oaLAXVZODQIHXLooGwQ4dUDCBA&uact=5&oq=Can+modular+housing+units+be+placed+side-by-side%3F&gs_lp=Egxnd3Mtd2l6LXNlcnAiMUNhbiBtb2R1bGFyIGhvdXNpbmcdW5pdHMgYmUgcGxhY2VkIHNPZGUtYnktc2lkZT8yBRAhGKABMgUQIRigATIFECEYoAEyBRAhGKsCSPTOAVCTG1jxxwFwA3gBkAEAmAGrAaABnCeQAQUyNC4yNbgBA8gBAPgBAZgCNKACuyjCAgoQABiWAXjWBBhHwgINEAAAYsAMY1gQYRxxjJA8ICDhAAGIAEGLA)

q=Can+modular+housing+units+be+placed+side-by-side%3F&sca\_esv=0cc5f8e8113380e9&ei=n6WPZ-\_nGNnw0PEP8tDrYQ&ved=0ahUKEwivs86H-oaLAXVZODQIHXLooGwQ4dUDCBA&uact=5&oq=Can+modular+housing+units+be+placed+side-by-

side%3F&gs\_lp=Egxnd3Mtd2l6LXNlcnAiMUNhbiBtb2R1bGFyIGhvdXNpbmcdW5pdHMgYmUgcGxhY2VkIHNPZGUtYnktc2lkZT8yBRAhGKABMgUQIRigATIFECEYoAEyBRAhGKsCSPTOAVCTG1jxxwFwA3gBkAEAmAGrAaABnCeQAQUyNC4yNbgBA8gBAPgBAZgCNKACuyjCAgoQABiWAXjWBBhHwgINEAAAYsAMY1gQYRxxjJA8ICDhAAGIAEGLA

DGJIDGIoFwgIKEAAAYgAQYQxiKBcICCxAAGIAEGJECGIoFwgINEAAAYgAQYsQMYQxiKBcICERAUgIAEGLEDGNEDGIMBGMcBwgILEC4YgAQYsQMYgWHCAggQABiABBixA8ICDhAUgIAEGLEDGNEDGMcBwgIOEC4YgAQYsQMYgWEYigXCA

g4QABiABBixAxiDARiKBcICCBAuGIAEGLEDwgIQEC4YgAQY0QMYQxjHARiK  
BcICCxAuGIAE

GLEDDGOUEwgIFEAAyGATCAhEQLhiABBixAxiDARjHARivAcICBxAAGIAEGA3C  
AggQABgIGA0YHsICCxAAGIAEGYDGIoFwgIIEAAyGaqYogTCaggQABiiBBiJBc  
ICBhAAGBYHpgDAIgGAZAGBpIHBTI1LjI3oAfRigI&scient=gws-wiz-serp

**Specify SIPs within the modular method** (note all those **studs** shown in the photo **add to costs**): <https://www.modular.org/2022/01/28/inside-the-modular-building-process/>

**SIPs modular builders (some of the nation's largest builders are among these -- volume production is at hand!):** <https://www.google.com/search?>

q=Are+there+any+modular+housing+builders+using+SIPs+besides+Go+Modular+SIP+Homes%3F&oq=Are+there+any+modular+housing+builders+using+SIPs+besides+Go+Modular+SIP+Homes%3F&gs\_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAjIHCAIQIRiPatIBCTE1MTc4ajBqN6gCALACAA&sourceid=chrome&ie=UTF-8. **Don't allow the stick-building cabal to dissuade us any longer!**

Alternatives such as recycled plastic or 3D-printing have not yet achieved volume production:

<https://www.sciencedirect.com/science/article/abs/pii/S0950061823010243>

[https://www.google.com/search?q=Has+3D-printed+housing+reached+mainstream%3F&oq=Has+3D-printed+housing+reached+mainstream%3F&gs\\_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigATIHCALACAA&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=Has+3D-printed+housing+reached+mainstream%3F&oq=Has+3D-printed+housing+reached+mainstream%3F&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigATIHCALACAA&sourceid=chrome&ie=UTF-8)

printed+housing+reached+mainstream%3F&gs\_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRigATIHCALACAA&sourceid=chrome&ie=UTF-8

In light of our recent LA fire disasters, the most important redevelopment-construction issue is of course **fireproofing**. Consequently exposed wood or vinyl has not proved to be safe. Therefore only steel, concrete or ceramic brick/tile is feasible for roofing and **exterior** walls.

According to Angi, brick veneer is **the most cost efficient** in terms of cost-fire resistance-longevity at \$3-\$10/sqft, 70-100 yrs. is brick veneer vs \$3-\$6, 20-40 yrs. aluminum, and \$4-\$16, 50 yrs. steel:

<https://www.angi.com/articles/how-much-does-siding-cost-replace.htm>.

They also state that brick veneer is less "noisy" in heavy rain, wind and high heat (ibid.).

**For truly fireproof housing we must specify brick veneer also for window and door shutters:**

<https://www.google.com/search?>

q=Can+brick+veneer+be+used+for+exterior>window+shutters+and+doors%3F&sca\_esv=63657ae716cdf89c&ei=iqWTZ9KiJLf00PEPuuS-

gQU&ved=0ahUKEwjSj9jFyo6LAXU3OjQIHTqyL1AQ4dUDCBA&uact=5&oq=Can+brick+veneer+be+used+for+exterior>window+shutters+and+doors%3F&gs\_lp=Egxnd3Mtd2l6LXNlcnAiQENhbiBicmljayB2ZW5lZXIgaUgdXNlZCBmb3IgaUgd2luZG93IHNoZXJzIGFuZCBkb29ycz9lZ5ECUM5fWNuKAnADeAGQAQCYAaEBoAGDL6oBBTQ5LjE1uAEDyAEA-

AEBmAl\_oAKyLsICChAAGLADGNYEGEfCAhAQABiABBiRAhiKBRhGGPkBwgILEAAYgAQYkQIYigXCAggQABiABBixA8ICDhAuGIAEGLEDGNEGDMcBwgIREC4YgAQYsQMY0QMYgWEYxwHCAGsQABiABBixAxiDAcICDhAAGIAEGLEDGIMBGloFwgIqEAAYgAQYkQIYigUYRhj5ARiXBRiMBRjdBBhGGPkBGPQDGPUDGPYD2AEBwgILEC4YgAQYkQIYigXCAgoQABiABBhDGloFwgILEC4YgAQYsQMYgWHCAGgQLhiABBixA8ICCxAuGIAEGLEDGOUEwgIFEAAAYgATCAGYQABgWGB7CAGsQABiABBIGAxikBcICCBAAGKIEGikFwgIIEAAAYgAQYogTCAGUQIRigAcICBRahGKsCmAMaAiAYBkAYIugYGCAEQARgTkgcFNDQuMTmgB9LiAg&sclient=gws-wiz-serp

**For more fire-resistant roofing:** [https://www.google.com/search?](https://www.google.com/search?q=Can+brick+veneer+be+used+for+fire-resistant+roofing%3F&sca_esv=029406e1c61d5581&ei=uXKaZ8_6Npes0PEPzazjMA&ved=0ahUKEwiPu9SIx5uLAXUXFjQIHU3WGAYQ4dUDCBI&uact=5&oq=Can+brick+veneer+be+used+for+fire-resistant+roofing%3F&gs_lp=Egxnd3Mtd2l6LXNlcnAiNENhbiBicmljayB2ZW5lZXIgaUgdXNlZCBmb3IgaUgd2luZmlyZS1yZXNpc3RhbnQgc9vZmluZz8yCBhGKABGMMESIbsAVCSQLid3gFwBHgBkAEAmAG3AqAB1BWqAQgyLjEyLjMuMbgBA8gBAPgBAZgCE6AC5RDCAgoQABiwAxjWBBhHwgIKECEYoAEYwwQYCsICBBAhGARCAgUQIRirAsIC)

q=Can+brick+veneer+be+used+for+fire-resistant+roofing%3F&sca\_esv=029406e1c61d5581&ei=uXKaZ8\_6Npes0PEPzazjMA&ved=0ahUKEwiPu9SIx5uLAXUXFjQIHU3WGAYQ4dUDCBI&uact=5&oq=Can+brick+veneer+be+used+for+fire-resistant+roofing%3F&gs\_lp=Egxnd3Mtd2l6LXNlcnAiNENhbiBicmljayB2ZW5lZXIgaUgdXNlZCBmb3IgaUgd2luZmlyZS1yZXNpc3RhbnQgc9vZmluZz8yCBhGKABGMMESIbsAVCSQLid3gFwBHgBkAEAmAG3AqAB1BWqAQgyLjEyLjMuMbgBA8gBAPgBAZgCE6AC5RDCAgoQABiwAxjWBBhHwgIKECEYoAEYwwQYCsICBBAhGARCAgUQIRirAsIC

BxAhGAoYqwKYAwCIBgQBgSBwg2LjExLjEuMaAHkWo&sclient=gws-wiz-serp

**What about aesthetics?**

<https://www.procore.com/jobsite/23-best-modular-homes#:~:text=Clayton%20Modular%20Homes&text=Clayton's%20modular%20homes%20are%20Energy,than%2034%2C000%20homes%20in%202015.>

**Affordable residing with brick veneer info:**

<https://www.azfauxbeams.com/blog/installing-faux-brick-panels-on-an-exterior/>

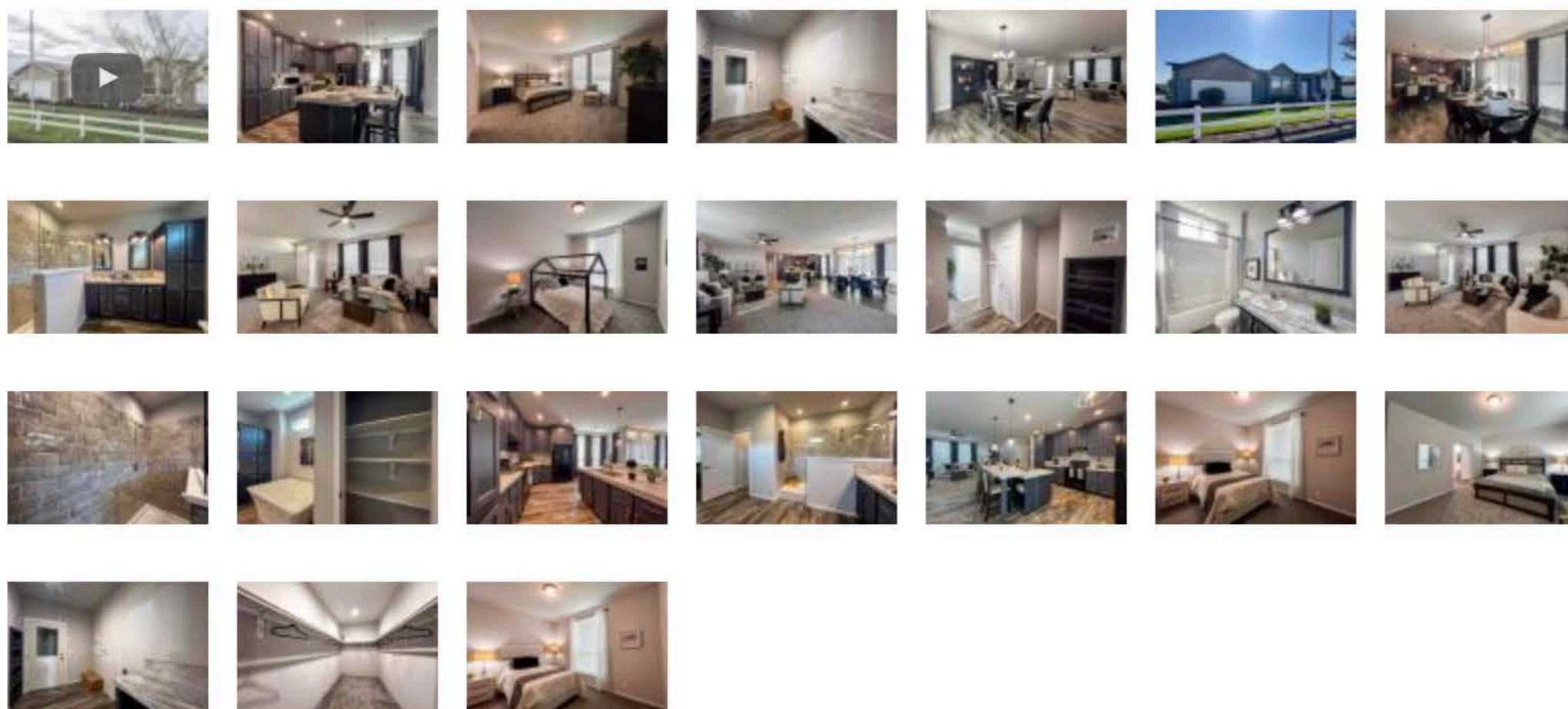
**Now with the LA fire disaster added to the already severe housing shortage, costs are sure to escalate further. Therefore the profligate prevailing approach to housing construction will not suffice -- only the mass-produced, modularized SIPs method will! Again, if we are to fulfill California's 3.5 million unit shortage: <https://>**

[www.sfchronicle.com/politics/article/gavin-newsom-housing-record-19971316.php](http://www.sfchronicle.com/politics/article/gavin-newsom-housing-record-19971316.php)  
**we must MASS PRODUCE — AS HAVE ALL MAJOR INDUSTRIES EXCEPT  
CONSTRUCTION. SIPs ARE THE MOST EFFICIENT MEANS OF DOING SO.  
If you would please forward this data to your relevant colleagues for legislative  
consideration. Thank you for your assistance in this overriding issue!**

Assiduously,

David Brian Harrington  
San Francisco, California

## DETAILED VIEW



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Mt. Vernon, Washington

# \$166,524\*

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 [Download](#) brochure

\*Online price is for the base model only (no options) and does not include setup and delivery or sales tax.