Model Code language

This model code would affect multi-residential structures built with light-frame wood, defined as:

- **Light-frame**: Vertical, horizontal, and/or load-bearing elements are primarily made from combustible materials, including all wood truss and joist construction.

- **Multi-residential**: R-occupancy structures containing more than two sleeping or dwelling units. This covers apartments, hotels, and multi-use buildings with residential units, etc.

- Single-family dwellings and townhouses are exempt, were townhouses are defined as three or more adjacent but separated units, which extend foundation-to-roof and are open on at least two sides each.

Proposed Model Code Language:

- Height and story limits.

- **Unprotected framing**: 3 stories or 60 feet.

- **Protected framing**: 4 stories or 70 feet.

- **Story height must be measured from grade plane**. This means the use of non-combustible pedestals/podiums on otherwise combustible buildings no longer allows them to go above height limits for their materials.
• **NFPA 13 Sprinkler Protection.** This is an upgrade from the current requirement for NFPA 13-R (residential), which leaves concealed spaces (between walls, attics, etc.) unprotected.

• **Fire partitions, horizontal assemblies, and fire walls.** All must be non-combustible or fire-retardant treated wood. Fire partitions and horizontal assemblies must be rated at one hour of fire resistance, and fire walls must be rated at two hours.

• In structures with five or more sleeping/dwelling units, horizontal assemblies don’t create separate structures for the purposes of height limits, area limits, continuity of firewalls, or construction type.

• **24/7 fire watch.** From the beginning of construction to the installation of sprinklers and certificate of occupancy, whenever construction work is not underway. The developer or owner is responsible for hiring and training the fire watch warden to inspect, patrol, and report weekly on potential fire safety threats.

• Fire watch wardens can be active or retired firefighters, fire inspectors/marshals, building trades council members, police officers, first responders, or certified security guards.

• **Signage indicating building material.** An 8x11 white placard with large, bold letters must be displayed prominently within 10 feet of the entrance, with a description of the building material in this format: “Load-bearing light-framed combustible walls serve as the primary structural system of this structure”.

This measure is product-neutral, so other building materials would display appropriate descriptions, such as “load-bearing concrete walls,” “structural steel frame,” or “fire-treated lumber”. 

• Bills A 135 and S 1261 will amend the state code with our model language. Both are publicly endorsed by Senate Pres. Steve Sweeney and Assembly Speaker Craig Coughlin.

• All major building trades unions have now joined a Build With Strength coalition in support of the bills: contractors, carpenters, teamsters, bricklayers, IUPAT/painters, electrical workers, pipe- and sprinkler-fitters, and more.

• Build With Strength held a press conference on November 14th, 2018, where our coalition unveiled our fire safety legislation, Assembly Bill 135 and Senate Bill 1261. The bills were presented by their primary sponsors: Senate President Stephen M. Sweeney, Deputy Speaker Wayne P. DeAngelo, and State Senator Brian P. Stack. The press conference received print, television, and radio coverage.

• Resolutions of support for our legislation have been passed by 10 counties’ boards of freeholders, representing 5.8 million people, equal to 65% of the population of New Jersey.

Latest Actions

• The Atlantic county Board of Freeholders voted unanimously to support our fire safety legislation. This is the first majority-Republican-controlled county to pass such a resolution, strengthening support for fire safety as a bipartisan issue.

• The New Jersey Senate has concluded budget discussions, and is set to begin discussion of S 1261 soon. The Assembly will discuss the bill in the fall of this year.
Resolutions of support passed for A 135 & S 1261:

By counties:
- Atlantic
- Bergen
- Camden
- Essex
- Gloucester
- Hudson
- Mercer
- Middlesex
- Passaic
- Union

By cities:
- Edgewater Borough (in Bergen County)
- Maplewood Township (in Essex County)
- Wall Township (in Monmouth County)

We anticipate the support of at least 14 counties, representing 6.5 million people, equal to 74% of the population of New Jersey.
• **Bill H 3844** will amend the state code with our model language.

• As in New Jersey, Philadelphia, and Los Angeles, Build With Strength will pursue a coalition-building strategy that includes building trades unions, community organizations representing Massachusetts residents, chambers of commerce, and business associations.

• The New England Regional Council of Carpenters (NERCC), Massachusetts & Northern New England Laborers’ District Council (MNNELDC), and the Fire Chiefs’ Association of Massachusetts (FCAM) have joined the coalition in support of stronger fire safety laws for Massachusetts.

• Massive fires have struck Massachusetts’ wood residential buildings in recent years, including the **264-unit Edison on the Charles apartment complex in Waltham**, and the **83-unit, $45 million Treadmark building in Dorchester**. Both buildings burned in 2017 while under construction, while the unprotected framing of a wood building is especially vulnerable.
• An ordinance containing our model code language is planned for introduction in Philadelphia this year and supported by a broad-based coalition of building trades unions, community organizations representing Philadelphia residents, chambers of commerce, business associations, and affordable housing groups.

• On June 28th, 2018, Mayor Jim Kenney signed new building codes into law, based on 2018 I-Codes. Build With Strength is working with potential sponsors on the city council to introduce the model code language as an amendment to the new code.

• Build With Strength welcomes our latest coalition partner, the Philadelphia Building Trades Council, which provides coordination and support to over 50 affiliated local unions in the Greater Philadelphia region.

• On May 23rd, 2019, Build With Strength hosted a roundtable discussion with coalition partners, Philadelphia legislators, organized labor, community groups, and construction industry representatives. Build With Strength has issued a press release with more details.

**Latest Actions**

• Two options for future action were presented to coalition members for comments and feedback: amendments to the city-wide building code, and the creation of a fire district in which fire safety requirements would be made stricter. The Build With Strength coalition will pursue one or both strategies.
As in New Jersey and Philadelphia, our coalition enjoys the support of the main building trades union groups. Recently, we have garnered the full support of the Carpenters/Contractors Cooperation Committee (statewide) and the LA Building Trades with outreach.

Build With Strength published a press release highlighting the financial risks of wood-framed construction, which includes the contributions of Build With Strength member David Kersh, executive director of the Carpenters/Contractors Cooperation Committee.

Build With Strength has issued a press release following a wood-framed apartment fire in West Hollywood on May 16th, 2018. This fire highlights the urgent need for strong fire legislation in Los Angeles. A recent Columbia University study estimates that Los Angeles could lose $22.6 billion in wood-framed residential fire loss over the next fifteen years.

**Latest Actions**

Councilmembers Bob Blumenfield and Monica Rodriguez introduced a comprehensive measure to expand fire-resistant building codes, which are currently only applicable in dense downtown areas. Councilmember Blumenfield has issued a press release with details. Build With Strength has also issued a press release in support of the measure.

The measure expands Fire District 1, which has the strongest fire safety regulations, to cover all areas within the city covered by the state of California’s Very High Fire Severity Zone, the city’s High Wind Velocity Zone, and population centers with a density of at least 5,000 residents per square mile.

The measure has received support from many Build With Strength coalition partners representing Los Angeles’ diverse communities (press releases linked):
- Carpenters/Contractors Cooperation Committee
- Los Angeles Civil Rights Association
- Gloria Colazo, St. Jude Health Centers and El Salvador Chamber of Commerce
- Churches In Action
- Da’At Torah Jewish Education Center of Los Angeles
- Southern California Hispanic Chamber of Commerce
MODEL CODE PROPOSALS

The International Code Council (ICC) amends its model codes on a three-year basis. Proposed changes to be implemented in the 2021 edition of the International Building Code (IBC) are decided this year. Code changes proceed in two phases:

- Committee hearings, which occurred last month. Code change proposals approved by the 14-member committee are automatically entered onto the ballot this fall. Code change proposals disapproved by the committee must receive public comments to be entered onto the ballot.

- Final voting, which takes place in late fall 2019. Approved changes, and disapproved changes with comments, are voted on by the ICC’s national membership of building officials to become part of the 2021 IBC.

The following describes the results of committee hearings. Build With Strength will pursue a grassroots advocacy campaign targeting the final voting phase in fall 2019.

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<tr>
<th>9 Cosponsored Changes Approved</th>
<th>14 Supported Changes Not Approved</th>
<th>1 Opposed Change Approved (S100)</th>
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<tr>
<td>Automatically entered onto ballot for fall 2019</td>
<td>14 Cosponsored 1 Supported (S101) Build With Strength will pursue public comments to enter these items into the ballot</td>
<td>Automatically entered onto ballot for fall 2019 Build With Strength will oppose this code change in the final voting phase</td>
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S100-19
Outcome: Approved – Ongoing Effort to oppose final adoption
Position: OPPOSED

This proposal would subject mass timber construction, including cross-laminated timber (CLT), to periodic special inspections only, requiring intermittent checks of construction work by an independent expert in specific techniques or products. This is opposed to continuous special inspection, described in S101-19.

S101-19
Outcome: Disapproved – Ongoing Effort to reintroduce for adoption using public comments
Position: SUPPORT (Sponsored)

This proposal would require continuous inspection of some metal elements of connections in mass timber buildings. Continuous inspection requires observation of work on a particular technique or product by a special inspector, from the start to the completion. In addition, engineering analysis or fire resistance testing must demonstrate that all parts of the connection would not increase beyond 250 °F on average, or 325 °F at maximum, in a fire scenario. This is essential because all elements of connections, including metal, experience higher temperatures in a fire scenario in a tall wood building.
## OTHER STATE LEGISLATION

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<th>2 LOSSES</th>
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### CALIFORNIA – 3 bills

**AB 343**
Status: In 1st Chamber
Position: **OPPOSED**

**Summary:**
This bill directly subsidizes the transportation of wood to CLT plants. The bill was introduced as a Natural Resources Agency program that allows grants to communities that export wood to be burned as fuel, at a rate of $20 to $30 per ton. It was amended to subsidize exports to “innovative forest products” and mass timber facilities.

**Actions:**
Build With Strength has notified the state affiliate to be ready for action if the bill moves forward.

**AB 966**
Outcome: Held until 2020 – **WIN**
Position: **OPPOSED**

**Summary:**
This bill would require each cement plant in the state to develop a facility-specific EPD by January 1, 2022. This bill imposes similar See **NRMCA.org** for reasons Build With Strength opposes “Buy Clean”.

**Actions:**
Build With Strength and the state affiliate developed an in-depth analysis of the bill and its effects, and provided testimony to the primary sponsor. The bill was referred to the Assembly Natural Resources Committee for further review after an Assembly rules deadline, which means it cannot be acted on until the 2020 legislative session.
**AB 1388**

**Status:** In 1st Chamber  
**Position:** OPPOSED

**Summary:**  
This bill appropriates $500 million to the Natural Resources Agency for a number of objectives and programs. One such program is financial assistance in the form of either grants or loans to projects that:

- Expand capacity at existing wood processing facilities
- Build new wood processing facilities
- Retrofit existing facilities to produce different products (this includes the retrofit of regular lumber mills to produce mass timber)
- Promote “innovate products from biomass material,” a euphemism for mass timber.

What proportion of the $500 million is to be spent on this financial assistance program is not specified by the bill, and is at the Natural Resources Agency’s discretion.

**Actions:**  
Build With Strength has notified the state affiliate to be ready for action if the bill moves forward.

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**HAWAII – 2 bills**

**HB 562**

**Status:** Failed Sine Die - LOSS  
**Position:** SUPPORT

**Summary:**  
This bill creates a “construction waste reuse and recycling working group”, to create and determine how to implement a requirement for the reuse or recycling of construction waste. The group must make a report including recommendations and proposed legislation for the 2020 legislative session. There is significant concrete in construction waste. Recycling would be directly beneficial, and aligned with green building objectives.

The bill failed sine die at the end of Hawaii’s legislative session on May 2nd, 2019. It can be reintroduced in the 2020 legislative session.

**Actions:**  
Build With Strength recommended support for this bill to the state affiliate, which submitted testimony in support. If the bill is reintroduced, the state affiliate and/or Build With Strength will work to ensure that the concrete industry is represented in the working group.
HB 859
Status: Failed Sine Die - LOSS
Position: SUPPORT

Summary:
This bill directs the Hawaii Housing Finance and Development Corporation to establish a plan to develop and construct a net-zero emissions, self-sustaining community development before the 2020 legislative session. The transit-oriented development (TOD) surrounds a rail corridor under construction in East Kapolei, outside Honolulu. This presents an opportunity for the industry, as concrete benefits net-zero construction.

The bill failed sine die at the end of Hawaii’s legislative session on May 2nd, 2019. It can be reintroduced in the 2020 legislative session.

Actions:
Build With Strength recommended support for this bill to the state affiliate, which submitted testimony in support.

MAINE – 1 bill

LD 1280 (aka SP 400)
Status: Held until special session or 2020 - WIN
Position: OPPOSED

Summary:
This act, titled the "Buy American and Build Maine Act," requires all public agencies’ construction projects (including reconstruction and repair) to purchase cement, iron, and steel from US manufacturers. Wood is not included in the materials that must be US-made. Exceptions are allowed if materials are not available or if they would increase the cost by an unreasonable amount. In Maine, this harms local members, who source cement for their concrete from Canada.

The bill failed sine die at the end of Maine’s regular legislative session on June 19th, 2019. A joint order of the legislature carried this bill over to be automatically reintroduced at the start of the next special session (possible in 2019) or regular session (2020).

Actions:
Build With Strength has notified the state affiliate to be ready for action if the bill moves forward.
MASSACHUSETTS – 1 bill

SD 1409
Status: In 1st Chamber
Position: OPPOSED

Summary:
This bill promotes the construction of municipal public buildings with wood, instead of concrete or steel. It orders the Department of Natural Resources to develop a program of grants and loans for “communities for sustainable climate”. To qualify for the program, a community must pass a number of laws protecting natural resources and habitats. In addition, it must pass a procurement policy that substitutes wood for concrete and steel, where feasible, in public buildings. The objectives of forest protection and sustainability on one hand, and a subsidy for wood products on the other, are in obvious contradiction.

Actions:
Build With Strength has notified the state affiliate to be ready for action if the bill moves forward.
MINNESOTA – 2 bills

HF 2203 “Buy Clean Minnesota Act”
Status: Failed Sine Die - WIN
Position: OPPOSED: see NRMCA.org for reasons Build With Strength opposes “Buy Clean”

Summary:
This bill is the “Buy Clean Minnesota Act”. It requires the Commissioner of Administration to establish “maximum acceptable Global Warming Potential” (GWP) for concrete, cement, structural steel, structural timber, and other materials. GWP can be set separately for different products. It is supposed to be set at the "industry average" for each product.

It applies to buildings over 5,000 square feet, where bids are awarded by:
- the Dept. of Admin
- state colleges and universities
- natural resource agencies, and any state agencies
- nonprofits funded by capital appropriations

Successful bidders on these projects must submit facility-specific EPDs that show that each of the listed products is below the GWP limit (industry average).

The bill failed sine die at the end of Minnesota’s legislative session on May 20th, 2019.

Actions:
Build With Strength has recommended opposition to this bill to the state affiliate.

HF 2204
Status: Failed Sine Die - WIN
Position: OPPOSED: see NRMCA.org for reasons Build With Strength opposes “Buy Clean”

Summary:
This bill is a variation of HF 2204, the “Buy Clean Minnesota Act. It applies only to steel rebar, glass, mineral wool board insulation, and structural steel, but does not apply to concrete or cement. It applies to contracts awarded or funded by all agencies in the state executive branch. It applies to buildings of any floor area, including those below the 5,000 square foot limit in HF 2203.

The bill failed sine die at the end of Minnesota’s legislative session on May 20th, 2019.

Actions:
Build With Strength has recommended opposition to this bill to the state affiliate.
NEW YORK – 1 bill

A 2776
Status: Failed Sine Die - **WIN**
Position: **OPPOSED**

Summary:
This bill amends the New York Buy American Act to include wood laminated structural components of bridges. The existing law requires that state contracts for public works over $1 million must buy construction materials from U.S.-based manufacturers, unless they are not available or would significantly increase the cost of a project.

The bill died sine die at the end of New York’s regular legislative session on June 21st, 2019. It was not heard in its assigned Government Operations committee, to which Build With Strength sent a letter of opposition.

Actions:
Build With Strength sent a letter of opposition to the Assembly Committee on Government Operations, opposing the bill on the grounds that it artificially incentivizes laminated wood over other building materials. Laminated wood is insufficiently tested for fire resistance and long-term performance.

PORTLAND, OREGON – 1 ORDINANCE

Proposed Requirement for Product-Specific EPDs
Status: Public Comment Period
Position: **OPPOSED**: see [NRMCA.org](http://NRMCA.org) for reasons Build With Strength opposes “Buy Clean”

Summary:
This regulation is a version of Buy Clean legislation, introduced as an ordinance in the city of Portland. It introduces new requirements for commercial grade concrete (CGC) and Portland cement concrete (PCC) submitted to the City of Portland for city construction projects. These products are required to have a product-specific Type III Environmental Product Declarations (EPDs). Beginning January 1st, 2021, concrete submitted to the City of Portland must have a Global Warming Potential (GWP) below the regional average for its strength class, as determined by a product-specific EPD.

Actions:
Build With Strength is submitted public comments to the Portland municipal government, including all the criticisms of “Buy Clean” legislation found on page 7 of this report. Alternative green building solutions were also recommended, including use of LEED certifications instead of EPDs.
WASHINGTON – 1 BILL, 1 ONGOING EFFORT

HB 1102 (Capital Budget)
Status: Favorably Amended - WIN
Position: SUPPORT as Amended

Summary:
The capital budget appropriated $40 million to a program which would award competitive grants for the replacement of portable school buildings with “modular classrooms made with mass timber products, including cross-laminated timber”.

The budget item was amended down to only $2 million, and concrete constriction is also eligible for the same grants.

Actions:
Build With Strength distributed a statement in opposition to the budget item, which was distributed to members of the House Budget Committee. It was opposed on the grounds that it unreasonably subsidized wood construction, that building and fire professionals should determine whether mass timber is a safe material for schools, and that a pilot project in 2016 demonstrated that modular CLT classrooms were too expensive, and cuts, including in classroom size, were required to meet the pilot program’s budget.

HB 1257 & SB 5293
Status: Enacted - WIN
Position: SUPPORT

Summary:
This bill requires that by July 1, 2020, the department of commerce must establish by rule a state energy performance standard for covered commercial buildings and early adoption incentive program. The standard must take into account embodied carbon emissions, as well as life-cycle cost benefits due to energy efficiency in the design of a building.

Actions:
Build With Strength, the state affiliate, and allies have prompted the sponsor to consider not only embodied carbon, but emissions in the operational use phase, as measured by life-cycle analyses (LCAs).
“BUY CLEAN WASHINGTON” PILOT and STUDY
Status: Ongoing Effort in Future Legislation and Regulation

Summary:
In 2018, Build With Strength and the state affiliate successfully defeated HB 2412, the “Buy Clean Washington” Act. The bill mandated costly Environmental Product Declarations (EPDs) for certain structural materials for public buildings and infrastructure projects.

The 2018 Capital Budget included funds for a “Buy Clean” pilot program and a study conducted by the University of Washington (UW) College of Built Environments.

See NRMCA.org for reasons Build With Strength opposes “Buy Clean”.

Actions:
While there are areas that are misleading, the study report is very comprehensive and considers the major concerns of the concrete industry. Build With Strength and the state affiliate, and partners are developing an approach to promote Life-Cycle Analyses (LCAs) in future Washington legislation. LCAs and green building standards (such as LEED) are a more equitable and accurate alternative to product-specific EPDs to determine the climate impact of a construction project.