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 9 counties’ boards of freeholders, representing 5.5 million people, equal to 62% of the population of New Jersey.

Latest Actions

• The Burlington and Salem county boards of freeholders have begun the process of adopting a resolution in support of the fire safety bills A 135 and S 1261.
Resolutions of support passed for A 135 & S 1261:

By counties:
- 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)
• An ordinance containing our model code language is planned for introduction in Philadelphia this year and supported by a broad-based coalition of business groups and building trades unions.

• State representative Brian Sims has indicated support, and is assisting the coalition.

• 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.

• Coalition building outreach continues to build relationships with community organizations representing Philadelphia residents, chambers of commerce, business associations, and affordable housing groups.

Latest Actions

• Build With Strength is hosting a roundtable event on Thursday, May 23rd, featuring current and prospective coalition partners.

• “The Block Gives Back,” a non-profit organization based in Lower Northeast Philadelphia with the goal of giving back to the community, has joined Build With Strength as a coalition partner.

• 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.
• Build With Strength is working with the LA City Council staff to finalize language that would establish fire-safe zones where light-frame construction is limited.

• 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.

• Recent California wildfires have inspired a greater sense of urgency for fire safety legislation among council members.
The International Code Council (ICC) amends its model codes on a three-year basis. Currently, International Building Code (IBC) is open to public comment, testimony, and proposals for changes to the previous version, published in 2018. Approved changes become a part of the 2021 IBC. The I-codes, including the IBC, are widely adopted models in most states and major cities.

**Highlights**

**S100-19**  
**Position:** OPPOSED

This proposal would subject mass timber construction, including cross-laminated timber (CLT), to periodic special inspections only. It was proposed by the ICC’s own Ad Hoc Committee on Tall Wood Buildings (TWB).

Periodic inspection requires only intermittent checks of construction work by a special inspector, an independent expert in specific techniques or products. This is opposed to continuous special inspection, described below.

**S101-19**  
**Position:** SUPPORT (Sponsored)

This proposal would require continuous inspection of screws, adhesive anchors, and specialized connections in mass timber buildings. 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.

Continuous inspection requires full-time observation of construction work by a special inspector, from the start to the completion of work on a particular technique or product. Often, the elements to be inspected cannot be examined after installation.
OTHER STATE LEGISLATION

<table>
<thead>
<tr>
<th>WIN</th>
<th>ONGOING Efforts</th>
<th>LOSSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3 Bills Supported</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6 Bills Opposed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Bill Monitored</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Ordinance Opposed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Other Ongoing Effort</td>
<td></td>
</tr>
</tbody>
</table>

CALIFORNIA – 3 bills

AB 343

Status: In 2st 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.

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

HAWAII – 2 bills

HB 562
Status: In 2nd Chamber
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.

Actions:
Build With Strength has recommended support for this bill to the state affiliate. If the bill moves forward, 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: In 1st Chamber
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.

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

MAINE – 1 bill

LD 1280 (aka SP 400)
Status: In 1st Chamber
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.

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

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.

HD 1294
Status: In 1st Chamber
Position: MONITOR pending release of full text

Summary:
This bill’s text is forthcoming. It is entitled “An Act relative to safe building materials,” and has 16 bipartisan sponsors (13 Democrat, 3 Republican). The bill’s title indicates its relevance to Build With Strength efforts, and it will be analyzed and further action recommended upon the release of the full text.

Actions:
Build With Strength and the state affiliate are monitoring the bill, and will recommend action on its release.
MINNESOTA – 2 bills

HF 2203 “Buy Clean Minnesota Act”
Status: In 1st Chamber
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).

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

HF 2204
Status: In 1st Chamber
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.

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

A 2776
Status: In 1st Chamber
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.

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 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 1257 & SB 5293
Status: In 1st Chamber
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). Build With Strength plans to testify in support of the bill at a future committee hearing.

“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.