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”.

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**Note:** The text above is a direct transcription of the content from the image provided. It has been formatted for readability and clarity, maintaining the original structure and meaning as closely as possible.
• Bills A 135 and S 1261 will amend the state code with our model language. Both are publicly endorsed by Senate President Steve Sweeney, Assembly Speaker Craig Coughlin, Deputy Speaker Wayne DeAngelo, and Senator Brian Stack.

• 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.

• 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.

• See the Build With Strength New Jersey webpage, highlighting news stories and analysis that support the need for comprehensive fire safety in the state.

• Build With Strength welcomes Assemblyman John Armato as a cosponsor of A 135, bringing the combined total number of sponsors across legislative chambers to five primary sponsors and six cosponsors.

**Latest Actions**

• The Atlantic county Board of Freeholders voted unanimously (9-0) 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 deliberations, and the bill there is expected to move to a third and final committee hearing in October/November, and a floor vote shortly thereafter. The Assembly is set to discuss the bill following the November primary election.
Resolutions of support passed for A 135 & S 1261:

By counties:
- Atlantic (2019)
- Bergen
- Camden
- Essex
- Gloucester
- Hudson
- Mercer
- Middlesex
- Passaic (2019)
- 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 and S 1799 will direct the Board of Building Regulations and Standards (BBRS) to 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, affordable housing groups, and social justice organizations.

• 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.

• Build With Strength has launched a Massachusetts webpage, highlighting news stories and analysis that support the need for comprehensive fire safety in the Commonwealth.

**Latest Actions**

• On August 15th, 2019 NRMCA staff held meetings with stakeholders, including:
  - A group of state legislators
  - Local 534 Cement Masons
  - New England Masonry Association
  - Massachusetts State Fire Marshall
  - Massachusetts Firefighters’ Union
  - Fire Chiefs’ Association of Massachusetts
  - MaCAPA (Massachusetts Concrete and Aggregate Producers Association)
  - New England Carpenters’ Union
  - Massachusetts Precast Concrete Association
  - Mason Contractors Association of Massachusetts (MCAM)
• 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.

• Build With Strength is pursuing this ordinance in the form of a city-wide fire district with stricter fire safety regulations, similar to New York City, Chicago, and the proposed ordinance in Los Angeles.

• NRMCA staff met with many city council members and secured their support for upcoming fire safety legislation.

• Build With Strength welcomes the support of the AFL/CIO, the Philadelphia Building Trades Council, representing over 50 affiliated unions in the metro area, and the Philadelphia Fire Fighters’ & Paramedics’ Union.

• 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.

• See the Build With Strength Philadelphia webpage, highlighting news stories and analysis that support the need for comprehensive fire safety in the city.

**Latest Actions**

• Build With Strength is hosting roundtable meetings with local stakeholders and community organizations in each city council district, in anticipation of the passing of the ordinance.

• Build With Strength attended a community fair held by Councilwoman Cherelle Parker on September 21st, 2019. Build With Strength members educated attendees of the coalition’s fire safety effort, and welcomed new coalition member Jeffrey Hackett, a highly respected life-long community leader in the local area. A roundtable in Councilwoman Maria Sanchez’s district, originally scheduled for Oct. 2, is being rescheduled for later in October.
On June 5th, 2019 Councilmembers Bob Blumenfield and Monica Rodriguez introduced “Building a Safer Los Angeles,” 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.

As in New Jersey and Philadelphia, our coalition has 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.

The proposed ordinance 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
- HOPE – Helping Others Prosper Economically
- CLUE – Clergy and Laity United for Economic Justice

See the Build With Strength Los Angeles webpage, highlighting news stories and analysis that support the need for comprehensive fire safety in the city.

Latest Actions


Meetings are being scheduled with the Mayor’s office and the President of City Council for October to get the ordinance placed on the agenda for early fall.
OTHER STATE LEGISLATION

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

AB 343
Status: Held until 2020 – WIN
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 notified California Nevada Cement Association (CNCA). NRMCA and CNCA staff and lobbyists met with the Assembly Appropriations Committee. As a result, the bill was placed in the committee suspense file, and cannot be acted upon until 2020.

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 CNCA 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 for committee assignments, which means it cannot be acted on until the legislative session resumes in 2020.
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:
The bill was re-referred to the Natural Resources Committee after amendment. Due to the involvement of staff and lobbyists representing NRMCA and CNCA, the bill had no further hearings scheduled. The California is on recess until 2020, so the bill cannot be acted upon until then.
HAWAII – 3 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.
HB 1282
Status: Failed Sine Die - WIN
Position: OPPOSED

Summary:
This bill would require state building projects to use "post-industrial carbon dioxide mineralized concrete" unless it would increase the cost of the project, or delay completion. This technology (commercially known as CarbonCure) has carbon dioxide injected into it during the mixing process, where that carbon "mineralizes." This concrete sequesters carbon, effectively having "negative" emissions. However, it is costly and proprietary, which unfairly burdens small and rural business. It also singles out concrete for emission offsets, while not requiring steel, wood, or other materials to offset their carbon emissions.

The bill failed sine die at the end of Hawaii’s legislative session on May 2nd, 2019.

Actions:
Build With Strength alerted the state affiliate, and provided recommendations for amendments or alternatives to this bill, in the case that it moved forward. Recommendations include using LEEDv4 credits for environmental product declarations (EPDs) and life-cycle assessments (LCAs) to gauge emissions reduction, rather than requiring a proprietary technology. Further, existing pilot projects using post-industrial carbon dioxide mineralized concrete should be surveyed for their impacts on Hawaii’s unique climate and soil conditions.
INTERNATIONAL CODE COUNCIL – ongoing model codes effort

Status: Ongoing Effort

Summary:
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 in May 2019, and final voting, which takes place in late fall 2019. The following are the results of Build With Strength activity at committee hearings.

<table>
<thead>
<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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</thead>
</table>
| Automatically entered onto ballot for fall 2019 | • 14 Cosponsored  
  • 1 Sponsored (S101)  
  Build With Strength will pursue public comments to enter these items into the ballot | Automatically entered onto ballot for fall 2019  
  Build With Strength will oppose this code change in the final voting phase |

Actions:
Build With Strength will pursue a grassroots advocacy campaign targeting the final voting phase in fall 2019.

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 – 4 bills

H 842 & S 2014
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.

H 2123 & S 1396 “Building Code Coordinating Council”
Status: In 1st Chamber
Position: SUPPORT

Summary:
This bill creates the Building Code Coordinating Council (BCCC) under state law, with the authority to reject inconsistent or redundant code proposals from state code-making bodies. The BCCC currently exists under an executive order, and can only advise code-making bodies. This bill also orders the BCCC to create a code proposal and public comment process, which will also be subject to BCCC review.

Actions:
Build With Strength has notified the state affiliate to be ready for action if the bill moves forward.
Status: In 1st Chamber
Position: SUPPORT

Summary:
This bill orders the Board of Building Regulations and Standards (BBRS) to establish a net zero energy stretch code. Within one year, the board must adopt a new definition of “net zero buildings.” Within two years, it must promulgate a net zero stretch energy code to be “fully implemented” by 2030, and updated triennially alongside the state energy code (the International Energy Conservation Code, or IECC) and the existing energy stretch code.

In Massachusetts, municipalities cannot amend codes to be more stringent than the state code, except by adopting a stretch code established on the state level. A more stringent stretch energy code already exists, and is adopted by a majority of the state’s municipalities. This net zero energy stretch code represents an additional, even more stringent option for municipalities.

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

H 3846 “Greenworks”
Status: In 1st Chamber
Position: SUPPORT

Summary:
This bill appropriates $1 billion and creates Greenworks, a sustainable/resilient infrastructure program under the Office of Energy and Environmental Affairs. $705 million of its funding is set aside for the office to make grants to municipal governments. Municipalities can apply for Greenworks grants for the new construction or major improvements to existing public infrastructure that improve climate resiliency, reduces climate impact (including but not limited to carbon emissions), or implements energy efficiency measures.

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 Administration, state colleges and universities natural resource agencies, and 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 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.
AUSTIN, TEXAS – 1 ORDINANCE

Proposed Adoption of Wildland Urban Interface Code (WUIC)
Status: Proposed
Position SUPPORT

Summary:
The Austin Fire Department wildfire division is pursuing the adoption of a Wildland-Urban Interface (WUIC) code based on the 2015 version of the ICC model code, with the preliminary support of the Public Safety Commission. Austin would be the first municipality in Texas to adopt a WUI code. California wildfires in 2018, including the Camp fire, provide evidence that WUI codes are necessary and effective.

Actions:
Build With Strength sent a letter indicating support for the adoption of a Wildland-Urban Interface Code. The proposal is expected to go before the Building and Fire Code Board of Appeals in late fall of 2019, before its introduction as a city council ordinance.

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.

Action
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.