THE 7 THINGS YOU CAN DO TO PLACE MORE CONCRETE IN BUILDINGS
ANTITRUST POLICY STATEMENT

The National Ready Mixed Concrete Association assigns the highest priority to full compliance with both the letter and the spirit of the antitrust laws. Agreements among competitors that unreasonably limit competition are unlawful under federal and state antitrust laws, and violators are subject to criminal fines and incarceration, civil fines and private treble-damage actions. Even the successful defense of antitrust litigation or an investigation can be very costly and disruptive. It is thus vital that all meetings and activities of the Association be conducted in a manner consistent with the Association’s antitrust policy.

Examples of illegal competitor agreements are those that attempt to fix or stabilize prices; to allocate territories or customers, to limit production or sales, or to limit product-quality and service competition. Accordingly, it is inherently risky and potentially illegal for competitors to discuss under Association auspices, or elsewhere, the subjects of prices, pricing policies, other terms and conditions of sale, individual company costs (including planned employee compensation), the commercial suitability of individual suppliers or customers, or other factors that might adversely affect competition.

It is important to bear in mind that those in attendance at Association meetings and activities may include competitors, as well as potential competitors. Any discussion of sensitive antitrust subjects with one’s competitors should be avoided at all times before, during, and after any Association meeting or other activity. This is particularly important because a future adversary may assert that such discussions were circumstantial evidence of an illegal agreement, when viewed in light of subsequent marketplace developments, even though there was, in fact, no agreement at all.

If at any time during the course of a meeting or other activity, Association staff believes that a sensitive topic under the antitrust laws is being discussed, or is about to be discussed, they will so advise and halt further discussion for the protection of all participants. Member attendees at any meeting or activity should likewise not hesitate to voice any concerns or questions that they may have in this regard.

Adopted by the NRMCA Board of Directors

September 18, 2006.
BUILD WITH STRENGTH

A COALITION OF THE NATIONAL READY MIXED CONCRETE ASSOCIATION
THE SITUATION

% SHARE OF FLOOR AREA MID-RISE 4-7 STORIES
(Excludes Parking Decks)

SOURCE: FW DODGE
THE GOAL

Increase share of concrete in buildings

22%  33%

www.nrmca.org/promotion
STRATEGIES

Communication  Direct Project Promotion  Advocacy
A SHOW OF STRENGTH
...the National Ready Mix Concrete Association recently launched a $20 million, five-year effort to win back eroding mid-rise market share from the wood industry."

Mike Case, President & CEO, The Westervelt Company Chair, Softwood Lumber Board
WHILE EQUAL, WOOD’S IMAGE HAS MORE INTENSITY

THE WOOD INDUSTRY
81% Favorable
42% 
39%
11% 
-7%
8% Unfavorable

THE CONCRETE INDUSTRY
81% Favorable
36% 
45%
10% 
-7%
9% Unfavorable

Research findings by Axis Research.
MOST IMPORTANT CONSIDERATIONS FOR PROJECTS

- Durability: 72%
- Cost: 58%
- Strength: 54%
- Energy Efficiency: 51%
- Occupant Health & Safety: 40%
- The Environment: 37%
- Resilience: 35%
- Fire Resistance: 31%
- Speed of Construction: 28%
- Aesthetics: 19%
WOOD VS CONCRETE

The three biggest benefits of concrete vs wood.

1. **Is the most fire resistant**
   - Concrete: 85%
   - Wood: 5%
   - Both/Neither/Don't Know: 11%

2. **Is the strongest**
   - Concrete: 77%
   - Wood: 8%
   - Both/Neither/Don't Know: 15%

3. **Is more durable**
   - Concrete: 70%
   - Wood: 10%
   - Both/Neither/Don't Know: 20%

4. **Can best resist natural disasters**
   - Concrete: 69%
   - Wood: 9%
   - Both/Neither/Don't Know: 22%

5. **Controls house the best**
   - Concrete: 60%
   - Wood: 18%
   - Both/Neither/Don't Know: 22%

6. **Is the most energy efficient**
   - Concrete: 45%
   - Wood: 25%
   - Both/Neither/Don't Know: 30%

7. **Reduces environmental impacts**
   - Concrete: 85%
   - Wood: 27%
   - Both/Neither/Don't Know: 33%

8. **Is the most innovative**
   - Concrete: 34%
   - Wood: 18%
   - Both/Neither/Don't Know: 48%

9. **Is more cost effective**
   - Concrete: 31%
   - Wood: 43%
   - Both/Neither/Don't Know: 27%

10. **Is the most versatile**
    - Concrete: 28%
    - Wood: 40%
    - Both/Neither/Don't Know: 32%

11. **Can be easily procured and used**
    - Concrete: 27%
    - Wood: 28%
    - Both/Neither/Don't Know: 45%

12. **Can improve the appearance of a building**
    - Concrete: 25%
    - Wood: 43%
    - Both/Neither/Don't Know: 32%

13. **Is the most recyclable**
    - Concrete: 20%
    - Wood: 53%
    - Both/Neither/Don't Know: 27%
KEY RESEARCH TAKEAWAYS

1. In comparison to wood, **concrete has a natural advantage** that we haven’t taken advantage of.

2. Concrete wins on two of the three factors that determine building decisions: durability and strength.
The following coalition name, logo, and mission statement has been focus group tested to ensure that research drives the direction of the coalition.
OUR MISSION:

Educate the building and design communities and policymakers on the benefits of ready mixed concrete, and encourage its use as the building material of choice for low- to mid-rise structures. No other material can replicate concrete’s advantages in terms of strength, durability, safety, and ease of use.
BUILD WITH STRENGTH

A COALITION OF THE NATIONAL READY MIXED CONCRETE ASSOCIATION
DID PERCEPTION OF CONCRETE CHANGE? YES.

Upon commencement & completion of the focus groups, participants were asked about their impression of the Concrete Industry and how likely they were to use concrete. Below are the changes in perception and intensity from completion of the focus group.

- **59%**: More favorable to Concrete Industry
- **18%**: Very favorable from favorable
- **2%**: Much more likely to use concrete when designing or building a low to mid-rise structure

Research findings by Axis Research.
1. Strength and durability are what people want in a residential building
2. Safety above all else
3. Flexibility of Use = Creative and Unique Living Spaces
4. Long-term ROI strengthens communities
TELLING OUR STORY AND BUILDING A COALITION

COMMUNICATIONS PROGRAM FOCUSED ON

- Media relations
- Stakeholder communications
- Member support programs
- Targeted legislator and policy maker communications
STATE ROLLOUT

In-market events across the country that dig deeper into campaign messages, themes, and resources with target audiences, stakeholders and the media.

Each unique and tailored specifically to the needs and opportunities of each particular market:

Morning News Conference
Afternoon Policy Roundtable
Evening Social Function
DIRECT PROJECT
PROMOTION
Recommendations
Recommended Wall Section

Structural Design
Cost Estimates
Energy Analysis
LEED Optimization
Whole Building LCA
ADVOCACY
HB1472 Provides Smart, Durable, and Resilient Growth for Maryland
Concrete is a responsible choice for sustainable, durable development. It offers an economically sound path forward for building safe and resilient communities and infrastructure.

Building owners, builders, architects, and designers have come to recognize that durable concrete public buildings, private homes, and businesses resist damage from natural disasters and reduce the impact on entire communities.

Public safety professionals attest to how resilient construction products like concrete protect the people who live and work in public spaces, as well as the first responders charged with responding to fire and natural disasters.

Durability, safety, and resilience are important for all structures, but especially those that house at-risk populations such as schools, assisted living facilities, public housing, and commercial multi-family residential homes.

A National Institute of Building Sciences Multi-Hazard Mitigation Council study reported that every dollar spent on reducing the potential impact of disasters saves society an average of $4. With durable construction, the damage from major storms can be less severe, reducing the amount of energy and resources that the local community will have to spend on emergency response, reconstruction, repair, and recovery.

Concrete and other resilient building products provide a long-term return that is comparable to no other product, especially wood or wood products like CLT.

Studies by MIT have shown that homes with concrete walls can use 8 to 15 percent less energy than other homes. With heating, cooling, and general operations of buildings and homes in the United States accounting for approximately 70 percent of national energy consumption each year and more than 40 percent of CO2 emissions generated in the U.S., concrete provides a cost savings that goes well beyond initial project cost.

The amount of ready mixed concrete made by producers in Maryland annually is 3.3 million cubic yards. This is enough concrete to either pave a two lane highway 12 inches thick from Baltimore to Savannah, Georgia, build four Fort McHenry Tunnels or build 7 Pentagons per year.

The direct annual cement and concrete related contribution to Maryland State Revenues in 2014 was $1.13 billion. This is enough to pay for tuition, room and meals for nearly 62,000 University of Maryland students. It is also more than the combined player’s salaries of the Baltimore Ravens and the Baltimore Orioles for the past 5 years.

Maryland Developments Affected by HB 1472 (2014-15)

<table>
<thead>
<tr>
<th>County</th>
<th>Developments</th>
<th>Units</th>
<th>$ Value ($1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anne Arundel</td>
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<td>6,265</td>
<td>69,725</td>
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<tr>
<td>Baltimore</td>
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<td>186</td>
<td>136,315</td>
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<td>Harford</td>
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<td>104,141</td>
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<tr>
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<td>1,112</td>
<td>152,300</td>
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<td>90</td>
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<tr>
<td>Total</td>
<td>34</td>
<td>5,885</td>
<td>727,780</td>
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</tbody>
</table>

The truth behind HB2857 and wood construction.

CLT as a Job Creator is a Myth

- In 2013, Oregon Governor John Kitzhaber issued Executive Order No. 12-16 calling for an analysis of the economic impact of jobs created by the utilization of wood products (not just CLT) in the construction of all available state buildings in the 2014-2015 biennium.
- Final Report (released on January 24, 2014): A whopping 381 jobs; $2 million in labor income; and an increase in personal income tax revenues to the state of $64,000.

CLT is a Fire Risk

- CLT does not have a long enough history to provide firefighters with information on their behavior during situations like fires. CLT fire resistance is based upon the insulating properties of the char layer that develops during the exposure to fire. However, according to "Fire Safety Challenges of Tall Wood Buildings," R. Gerard, et al, Arup North America, Ltd.:
  - "In a real fire situation, the load-bearing elements in CLT are expected to 'load-share,' or 'redistribute' in a method that is not easily predicted in simple fire testing."
  - "Previous CLT fire testing has resulted in delamination and char fall-off when exposed to fire conditions."
  - "This has the potential to increase the fire temperature and burning rate within the compartment, and could impact the structural fire resistance at later stages in the fire duration."

- See news of the 111 building in the U.K. that went up in flames. The fire tests it as: "not so carbon neutral now. New eco-friendly £150m university laboratory built out of wood goes up in flames!"

CLT is a Green Myth

- A big advantage of the product is that it is more sustainable than traditional building materials, such as concrete and steel, because of wood's capacity to store carbon.
- The most significant impacts of industrial forestry—harm to forest ecosystems, biodiversity, and soil and water qualities—are not addressed when advocates of CLT are promoting its green values. The most important impacts underlying forest products—namely, those arising from logging—are simply not considered when focusing on carbon sequestration. This not only hides major impacts but also points typical logging practices as having an economically risky, environmental profile for the state.
SEVEN THINGS YOU CAN DO
1. PASS BOARD RESOLUTION

- State affiliates: support building promotion
- Building promotion committee
- Identify champions
- Commit resources
2. UNDERSTAND CHANGE

- Developers using more wood for buildings
- Growth in building construction
- Wood industry developing new products

![Graph showing the percentage share of floor area mid-rise 4-7 stories (Excludes Parking Decks)](source: FM Dodge)
Forecast (2014-2019)
% Increase of Construction Put in Place

- Residential Building: +49%
- Nonresidential Building: +35%
- Nonbuilding: +17%

SOURCE: FMI Construction Outlook
3. BE ENTREPRENEURIAL

- Promote concrete as material of choice
- Use concrete design center
4. USE INDUSTRY MESSAGING

- Strength and durability are what people want
- Safety above all else
- Flexibility of Use = Creative and Unique Spaces
- Long-term ROI strengthens communities
5. USE INDUSTRY RESOURCES

- People
- Promotional
- Technical
- Education

www.BuildWithStrength.com
THE TEAM

Lionel Lemay
Sr VP, Structures and Sustainability

John Loyer
Sr. Director, State and Local Government Affairs

Gregg Lewis
Sr Director, Building Innovations

Tien Peng
VP, Sustainability Codes and Standards

James Bogdan
Sr Director, Sustainability Initiatives

Michael Wymant
Sr Director, Building Innovations

Others

Marketing
DDC Public Affairs
Government Affairs
Pavement
Engineering
Promotional Resources

Library of fact sheets

Library of case studies
Free concrete project design and technical assistance is available through the National Ready Mixed Concrete Association’s Design Center. The Design Center can assist you in choosing the right concrete solution for a wide variety of projects, from multi-family residential/mixed use to industrial and health care facilities. NRMCA’s expert team of engineers and architects are available to help you select the most appropriate concrete system, including:

- Concrete frame and post-tension flat plate systems
- Voided slab systems
- Insulating concrete forming (ICF) systems
- Tilt-up concrete wall systems
The following educational opportunities are available to industry professionals through NRMCA.

**Concrete Buildings Education Programs**
NRMCA offers several courses on the design and construction of high performance concrete buildings. Courses can be tailored to different formats—from all-day seminars, half-day seminars, lunch-and-earns to webinars.
6. ASSIST CHANGING LOCAL CODES

[Map showing states color-coded for Disaster Resilience, Fire Safety, and Green Building]
7. SEE OPPORTUNITY

- Introduce us to developers
- Find champions
MORE “SEVEN THINGS” WEBINARS

- May 26, 11 am eastern
- June 23, 11 am eastern

www.nrmca.org/promotion