



Promoting Concrete For Low/Mid-Rise Buildings

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Minneapolis' office building of the future will be made of, uh, wood?

By Peter Callaghan | 02/24/15 [Email](#) [Share](#) [Tweet](#) [Print](#)



© Daniel Greiner Architecture

The site for T3 is surface parking behind the Dock Street Flats at 333 Washington Avenue N., a trapezoidal parcel that abuts the 144 spaces from 3rd Street N. and the Cedar Lake Trail.



Developer breaks ground on modern all-timber office building in North Loop, Minneapolis

STAR TRIBUNE
TOP WORKPLACES
Nominate your company now 

By Kristen Leigh Painter | JULY 27, 2015 — 3:14PM

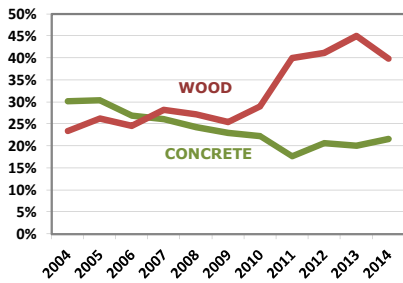



A Manhattan Condo Made of—Wood?

A New York partnership joins the movement for 'tall-wood' construction



% Share of Floor Area for Mid-Rise (4-7 Stories Excluding Parking Decks)



SOURCE: Dodge Data & Analytics





NEWS | EVENTS | UP TO SPEED | PODCAST | ABOUT |

Building Code Changes May Allow Higher-Density Midrise Construction

BY DAVID COLE — NOVEMBER 27, 2015

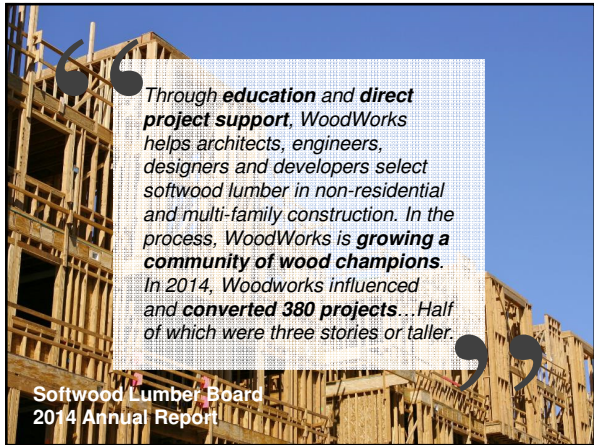
Changes adopted in the 2012 International Building Code (IBC), combined with advances in wood technology, may soon allow for taller midrise buildings at lower costs than what has previously been possible.

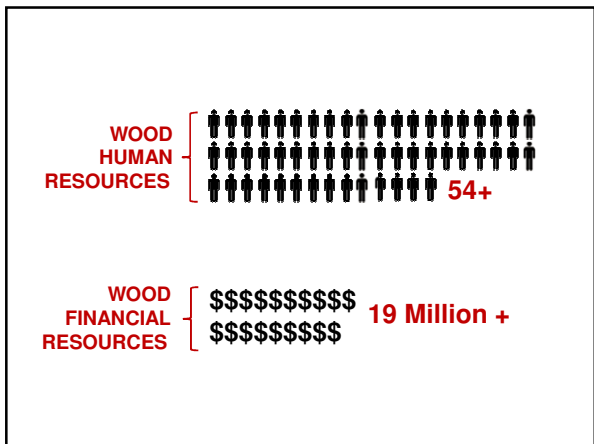
The importance of the changes to the IBC should not be overlooked, since it serves as a model building code throughout most of the United States. This means that states and local jurisdictions who lack the expertise to develop their own building code typically adopt a code written by an independent standards organization such as the International Code Council.

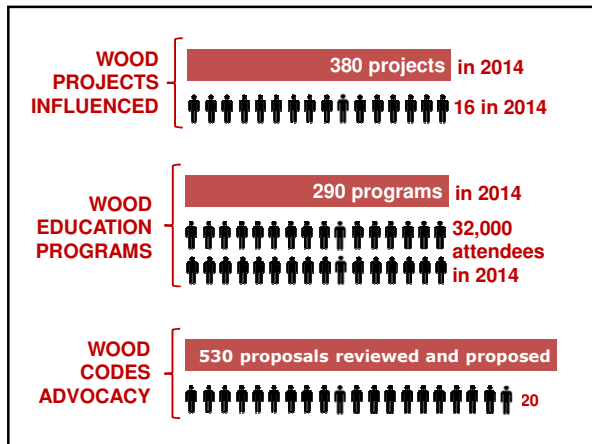
In fact, all 50 states and the federal government now use variations of the IBC, with the exception of Chicago which remains as the only major city in the United States with its own proprietary building code.





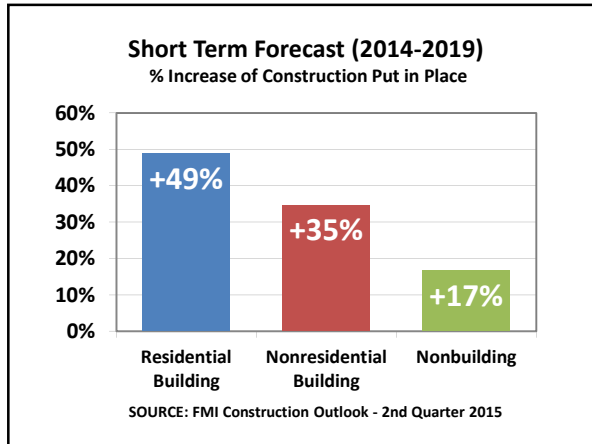












USA TODAY

Hotel building boom bringing 100,000 new rooms to U.S. cities

Business travelers looking for a home on the road will have lots of new choices this year, as a building boom gives rise to hundreds of new hotels from New York to Houston to Los Angeles.

At least 865 hotels, with 103,230 rooms, are currently under construction and scheduled to open in 2016, according to hotel research firm STR, as developers boost investments to match surging demand.

"Post-2009, lenders in the hotel space got very skittish," says Jan Freitag, STR's senior vice president of lodging insights. But "the industry continues to break records on the demand side and on the revenue side... Developers are playing catch up, and we're seeing a lot of attention on the U.S. lodging industry."

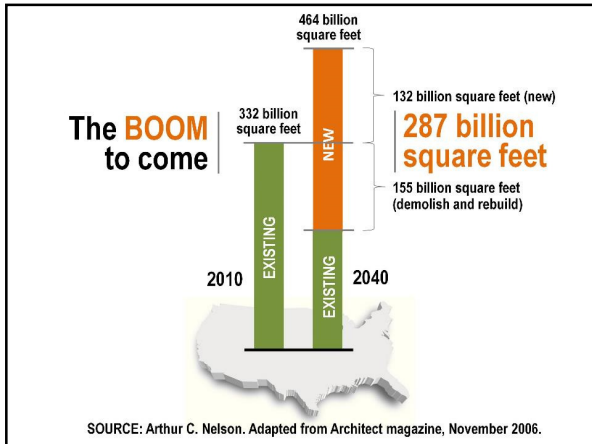
NRMCA

BUILDING DESIGN + CONSTRUCTION

MAGAZINE | BUILDING SECTORS | BUILDING TEAM | GIANTS | 40 UNDER 40 | BIM/VDC | AWARDS | BD+C EVENTS

Multifamily housing starts reached 358,000 in 2014, a 16 percent increase over 2013 and the highest total since 2007

NRMCA



EMBREY Development | Construction | Management
 Michaels DEVELOPMENT COMPANY
 BAINBRIDGE
 STREET LIGHTS RESIDENTIAL
 BOZZUTO
 LINCOLN PROPERTY COMPANY
 The Dinerstein Companies
 ContraVest
 WOOD PARTNERS
 LENNAR MULTIFAMILY COMMUNITIES
 Rushmark Properties
 GREYSTAR
 GID DEVELOPMENT
 Milestone Development, LLC
 THE HANOVER COMPANY
 AMLI RESIDENTIAL
 THE CALIDA GROUP Developing Lifespaces
 WOODFIELD INVESTMENTS
 EdR COLLEGIATE HOUSING
 PROMETHEUS
 FLOURNOY COMPANIES
 HOLLAND PARTNER GROUP
 FORESTCITY
 Equity Residential
 the NRP group LLC
 GABLES RESIDENTIAL
 CAPREIT

UNDERSTANDING DEVELOPERS

- First cost is the biggest hurdle
- Understand value of concrete – durability, noise, fire
- Would appreciate seeing concrete alternatives
- REIT's understand risks of wood vs. benefits of concrete
- Increasing preference for “green building” among tenants



Fire

Concern Princeton.avi Fire Chief News Conference.avi

Noise

Concern Princeton.avi Fire Chief News Conference.avi

Resilience



Green Building





Wood = Low Cost (First Cost)



Wood = Innovation

- Engineered Wood
- Glue Lam
- Cross Laminated Timber
- Tall Buildings



Wood = Low Carbon (embodied)

LCA Wood vs. Steel and Concrete

CORRIM Study Results:

- Wood vs. Steel: 17% embodied energy savings with wood
- Wood vs. Concrete: 16% embodied energy savings with wood

www.CORRIM.org

Carbon Storage

- Forests absorb and store carbon
- The wood in buildings is about 50% carbon by dry weight
- Recycled and reclaimed wood continues to store carbon



Green Building Initiatives

WOOD (2014)

Environmental Product Declarations

- 1W EPD for 8 wood products
- 0 product specific EPDs FY14

Responsible Sourcing

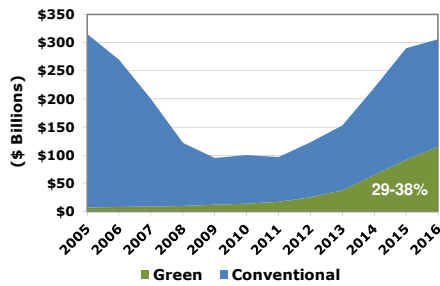
- FSC (Forest Stewardship Council) accepted by USGBC – resisted by wood industry
- SFI (Sustainable Forestry Initiative) not accepted by USGBC – preferred by wood industry

Material Ingredient Disclosure

- Likely exempt for sawn lumber
- Required for engineered lumber (none to date)



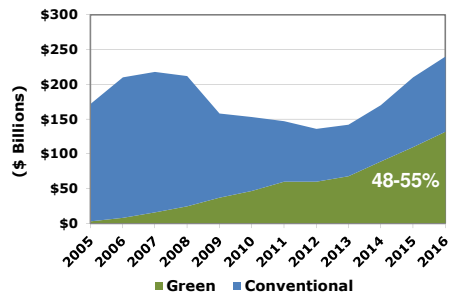
U.S. Residential Green Building Market 2005-2016



SOURCE: McGraw Hill Green Outlook 2013



U.S. Nonresidential Green Building Market 2005-2016



SOURCE: McGraw Hill Green Outlook 2013





PRIMARY GOAL
Increase share of concrete in low- and mid-rise residential and non-residential construction by 50% in 5 years

Year	Share of Concrete
Year 1	22%
Year 2	33%
Year 3	50%

**COMMUNICATIONS:
Key Components**

- Conduct market research
- Advertise in key media outlets
- **Promote Design Assistance**
- Promote education programs
- Exhibit at trade shows
- Promote local code changes
- Utilize MIT research

DDC


**PROJECT PROMOTION:
Goals**

- Convert buildings to concrete
- Increase knowledge of economical concrete construction
- Increase knowledge of concrete benefits



**PROJECT PROMOTION:
Key Components**

- Feasibility and cost study
- Personal consultative services
- Design assistance for walls and floors
- Education on economical design
- Education on the benefits of concrete



NRMCA STATE AFFILIATE

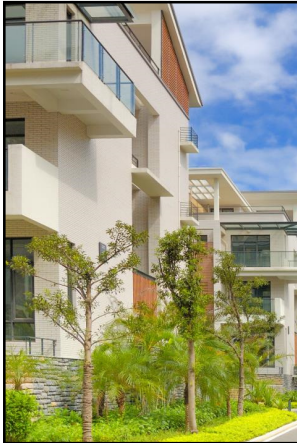
HARNESSING THE POWER OF OUR ALLIES & MEMBERS



**PROJECT PROMOTION:
The Role of Local Partners – YOU!**

- Promote DAP by identifying developers and upcoming development projects.
- Be on the lookout for local articles about wood. Notify NRMCA to coordinate response.
- Identify local champions who can support the outreach by drafting Op-eds, etc.





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THANK YOU!