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# On a Pathway to Green Construction Practices

**By Nick Carver, City Building Official, City of Maplewood, Minn.**

Recently, the City of Maplewood, Minn., became the first—and so far, the only—jurisdiction in the Midwest to adopt the 2012 *International Green Construction Code*™ (IgCC) as its Green Building Program Ordinance. The adoption has turned into a big deal for Maplewood's future. In fact, the Code Council sent its No. 1 sustainability official to commemorate the ordinance's final hearing and passage before the Maplewood City Council.

"Cities throughout Minnesota will be looking to Maplewood and your leadership," Dave Walls, Executive Director of Sustainability Programs for ICC, told the Maplewood City Council. "In fact, cities in the states around Minnesota will look to your example. In their eyes, Maplewood wins the honor as the first to go green in the Midwest with its construction codes. Congratulations for your ambition. Congratulations for your leadership."

Led by Mayor Will Rossbach, the City Council voted unanimously to adopt Maplewood's new Green Building Program Ordinance. More to the point, the city's new IgCC ordinance didn't attract a negative comment at the first and second hearings on the new law. The Mayor and the Council led the applause for the passage of the new ordinance, and its first real application will occur later this year with the construction of Maplewood's new Fire Station #1 on McKnight Road, next to the 3M complex.

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## Why was the IgCC a sensible choice for Maplewood at this time?

The answer is the same reason it would be a good choice for any community in any part of the United States. The IgCC is a geographically-responsive model code. It is flexible for any community, any climate and any set of political considerations in the United States. Local jurisdictions can make the adjustments to the model code to meet the growing demand for green construction in their communities.

The ICC began developing the 2012 IgCC, its first green construction code for commercial structures, several years ago when it became clear that sustainable construction was going to be a more prevalent method of building commercial, high-rise and government structures. As with the trend in residential structures, the market will pay higher and higher premiums as time goes by on structures that are more resilient, more energy efficient and more sustainable.

It is nearly the same proposition of trying to sell a vintage gas-guzzling car from the 1970s or a car that gets 30 or more miles per gallon on the highway. The market is steadily swinging toward sustainable construction, especially if you've got plans to sell that new building 10 or 15 years from now.

In Maplewood, the process started when the city adopted its energy efficiency and conservation strategy in late 2009, as required in an energy efficiency conservation block grant. An objective of the grant was to move Maplewood in the direction of long-term operational energy efficiency.

The city later approved an exploratory green building program to search for a strategy that would promote effective and efficient citywide green construction practices. That led to the National Green Building Standard (NGBS) for residential buildings and the IgCC for commercial buildings. In short, Maplewood set out to be recognized as a leader in "green building" and bridging the gap for progress.

As a frequent participant in ICC Code Development Committees, I took a strong interest in investigating the IgCC as a useful tool for Minnesota communities. Still, I was skeptical in those early days, because a lot of interest seemed to be influenced by trends from the national green building movement. The science of green building techniques still seemed to be uncertain, and vested interests were certainly looking for opportunities. At the code development level, we were shaping something that was different, a model code outlining green construction practices which could be overlaid on the 2012 *International Building Code*. We created a revolutionary moment in the built environment.

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My involvement started with the code hearings in Chicago when Public Version #1 was being developed. At the meetings we looked at various models with the idea of producing a code that was not focused on a rating system leading to the highest level of sustainable construction designs and techniques. The discussions drew a wide variety of people from different professions in the built environment. Some had very strong and divergent views, but the focus remained on developing the IgCC as a flexible jurisdiction-based construction code that could define whether a structure was built to meet minimum green standards. So we decided if a building owner

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wants to achieve higher sustainability goals beyond the basic code, there are other ratings programs available to do so. The IgCC and those ratings systems are not in competition. I believe the green construction code generates interest to go beyond the basics.

The IgCC adoptions are also an incentive for community building officials and inspectors to get the training to perform inspections on green construction projects and provide the assurance to building owners and their communities that the IgCC standards, as adopted in the individual jurisdictions, are being met. As the trend grows here in Minnesota and surrounding states, look for a new crop of building inspectors who have added a new skill set in green construction, which should increase their value when they are job-hunting.

One of the first people at the Code Council who helped mentor my task for Maplewood was Ravi Shah, the Director of Urban Development from Carrollton, Texas, who serves on the ICC Board of Directors. Ravi was very resourceful and provided quite a lot of information and support on how to develop a good fit for Maplewood and whom to include in the code development process. A big first step was constructing a comprehensive seminar to familiarize stakeholders in Maplewood's city government and business. Also included would be stakeholders from the NGBS and IgCC to seek their input on an incentive plan and implementation schedule. The objective was to not only describe these standards and how they function, but also what makes practical sense for a metro community in the Twin Cities area.

The full-day presentation was completed in May 2010 and approved as an educational seminar by the Minnesota Department of Labor & Industry. We targeted groups that needed to learn about the IgCC and its practical application in Minnesota, starting with the city manager's office and the city offices for code enforcement, inspections, planning and public works. We engaged the mayor and members of the

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City Council to be part of the discussion. We invited contractors, non-government community leaders, commercial property owners and other stakeholders to learn about our plan and to provide their input.

In all, there were about 25 presentations made to groups inside and outside Maplewood that were interested in green construction issues. The folks we contacted represented a wide swath in the community. Some seemed to have a particular vested interest. Some had diverging political views. Some had a particular product they wanted in the market. But the work in front of us was to create a basic code that met the City Council mandate to promote citywide green construction practices that were effective and would produce efficiencies starting this year. By the time we finished reaching out to these various stakeholders in our community, we were able to move forward an ordinance and to stamp it as a great fit for Maplewood's economic future. Click here to read the ordinance.

The ordinance's scope is mandatory for government buildings in the community and to buildings which get funding from government incentives. It can pertain to other non-government financed buildings if the owners accept the ordinance provisions voluntarily, and the city is developing an incentive plan to encourage these owners to choose the voluntary commitment to build green.

The first and second readings and passage of the Green Building Program Ordinance seemed anti-climactic following all the preceding seminars, discussions and collaboration. The more difficult tasks may lie ahead as contractors and inspectors get used to the new approaches, and decide whether the scope should be expanded.

The City Council will have opportunities to update the ordinance with improvements made in the 2015 IgCC to be considered at the Committee Action Hearings in Memphis April 27–May 3 and at the Group C Public Comment Hearings Oct. 1–5 in Ft. Lauderdale. The important thing is Maplewood has a firm footing on its pathway to

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green construction practices, and code officials will have a new skill set to enhance their professional portfolios. Hopefully, we will serve as a shining example to other communities in Minnesota and the Upper Midwest, as the market grows for structures with built-in durability and higher value retention. **bsj**

***Nick Carver** has served as Assistant Building Official in Maplewood, Minn., since 1987, and was recently promoted to City Building Official. He also has served as a volunteer firefighter/EMT/Fire inspector for the City of White Bear Lake. He has chaired the ICC Region III Code Development Committee and the ICC Green Building/Energy Code Development Committee and has served on the IgCC Code Development Committee and ICC Green Exam Development Committee.*


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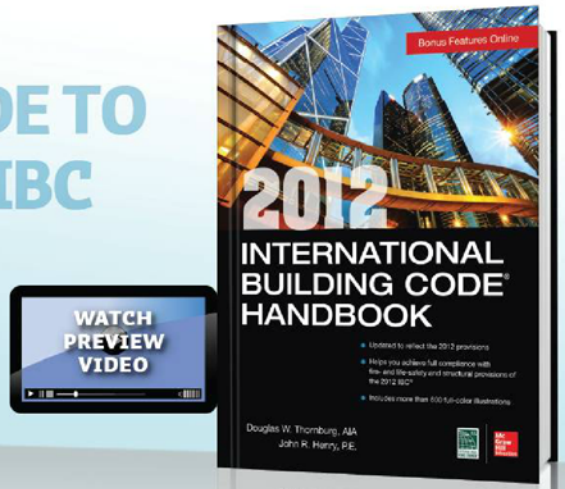


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