Have you ever thought about seeing what a difference you could make – the entire masonry industry could make – by reaching beyond minimum code requirements? Committing to raising the bar could change America’s energy situation. Buildings consume 40% of this country’s energy. Let’s cut that in half – with the insulated masonry cavity wall. With this issue, we challenge you to step up and do your part in optimizing energy performance by utilizing the Masonry Cavity Wall for ALL Its Worth. Take advantage of the experts in this issue who share their knowledge. A variety of products, wall assemblies and techniques are explored, offering design options to meet almost any objective.

Superior Materials’ Steve Ryan and Chris Kissick believe in spreading the word about the value of the insulated masonry cavity wall. “It’s not enough now to just take orders... We need to proactively extol how the merits of this industry will benefit owners, designers and builders.”

Ed Kelly, principal at Archiopolis Architects, took advantage of the free energy provided by the sun in the form of a Trombe wall for the Mind, Body & Spirits Restaurant. Thermal mass of the loadbearing burnished block wall provides support and separation to the building’s addition. It also captures heat from the sun and radiates it back.

Joseph Lstiburek, principal of Building Science Corporation, explains “The Perfect Wall” in a modified version of his article that originally appeared in the AHSRAE Journal. The insulated masonry cavity wall is “the best wall that we know how to construct. Works everywhere in all climate zones.”

Two western Michigan A/E firms, Kingscott and TowerPinkster, have made the insulated masonry cavity wall their standard for buildings designed for energy efficiency and longevity. Tower Pinkster’s Perry Hausman illuminates the free energy resources of the sun and earth considering them for establishing a building’s optimal siting. Modeling a building’s potential energy use further allows for evaluation of energy conservation measures and points to potential energy hogs. Otsego High School, pictured on the cover, is one of several projects where Hausman has increased the R-value to significantly reduce energy consumption. Brendon Pollard of Kingscott describes how an R-21, 20” masonry cavity wall met the district’s accelerated goals for the new Gull Lake High School.

Elizabeth Young and I explore the boundaries of the masonry cavity wall in the High R Wall Model. With minor adjustments, the cavity can be expanded to accept even more insulation, resulting in greater energy efficiency.

Dan Tempas, Dow Building Products, shares information on maximizing the benefits of extruded polystyrene insulation in a cavity wall. Charles W Ostrander, executive director of the Masonry Advisory Council, introduces the high R polyisocyanurate insulation option for cavity walls. Its foiled facers add a new element to insulation’s effectiveness.

Paul Grahovac, Prosoco, explains how an air barrier in a masonry cavity wall saves “greater than 40% in natural gas and greater than 25% in electricity” of a building’s energy costs. Steve Loftis, NCFI Polyurethanes, discusses controlling heat, air and moisture by the application of a closed cell spray polyurethane foam in the cavity wall.

We welcome writers from the Chicago area in the first merged issue of Masonry Edge and The StoryPole magazine. Ostrander tells more in his Pushing Forward. Cliff Horn, president of A Horn Masonry, writes about best practices for negotiating and executing winter masonry work. Robert Allan Monroe, principal, Robert Allan Monroe Associates, describes the masonry composition of the brand new Northfield-Bend corporate and sales headquarters in Mundelein, IL in a way that makes you want to see for yourself the innovations in products, design and detailing.

Sharing this ENERGY issue with the greater Chicago area Masonry Edge readers was a natural. Ostrander has been my confidant throughout my 24 years with the MIM. We have seen much change in the industry. We are committed to keeping you, our readers, well informed about new products, technologies, software, systems, code changes; inspired with the artful designs expressed in masonry; and challenged to create a more sustainable built environment.

Please do your part to think responsibly and use Masonry for All Its Worth for high performance, well beyond code, to conserve our valued energy.

Daniel S Zechmeister
Executive Director
Masonry Institute of Michigan