

2021 Business Plan

Masonry Institute of Michigan

Executive Summary

The 2021 MIM Strategic Business Plan is developed to update the 2005-2006 Business Plan based on current market trends and data. Given the significant decrease in the masonry usage in the new building markets in Michigan and throughout the country, the Strategic Business Plan will serve as a *living* document. At a minimum, the Strategic Business Plan will be reviewed and approved on an annual basis at the first MIM Board meeting in January.

In response to the softwood lumber industry federal checkoff program (established in 2012) and the widespread usage of wood framed construction across the United States; the masonry industry needs to educate designers, educators, owners, building officials, and construction managers on the many benefits of masonry construction.

Additionally, given the COVID-19 pandemic and widespread usage of virtual marketing and business development, this Strategic Business Plan addresses MIM communications and outreach efforts.

MIM is and always has been a **members-first** organization. With that in mind, this Strategic Business Plan is truly our members' document. This Plan outlines a direction that was developed by a Board subcommittee, and I would like say THANK YOU to the following individuals who have volunteered their time and energy in developing this document: Bill Barker, Doug Barron, Greig Carnevale, Michelle Corrigan, Tim Frankland, Melissa Kline, Christopher Sass, Scott Schepers, Jeff Snyder, and Dan Zechmeister. These individuals represent our Board, which drives our industry and our success at MIM.

I encourage all Board members to read the Strategic Business Plan and identify areas that you and your firms can support our mission: to promote and advance the masonry industry. Every member has the potential to move our industry forward, and I appreciate all that you do.

Philippe J. Ledent | Executive Director Masonry Institute of Michigan

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Customer Presentations

1. Quarterly Seminars

i. Description

The current tools available to designers include:

- MIM Generic Wall Design Details/Specification
- MIM Fire Guide
- MIM Energy Guide
- MIM Flashing Guide
- MIM Sound Guide
- MIM Control/Expansion Joint Guides
- MIM Excel Tools, including:
 - Wall Design
 - o Lintel Design
 - Column Design
 - o Control/Expansion Joint Design
 - Lap Splice Design
- NCMA Direct Design Software
- NCMA EleMasonry Software (upcoming)
- NCMA Fire Calculator
- NCMA Unit Strength Calculator
- NCMA Energy Calculator
- Masonry iQ/Masonry iQ Build

To combine all these tools and show architects/engineers how they can be used on actual projects, MIM will develop prototypical models in Autodesk Revit for conventional masonry buildings. The *Executive Director* of MIM will host a virtual 4-hour seminar once per quarter that will focus on a specific building type (i.e. industrial, residential, school, office, etc.) and demonstrate the following:

- a. Masonry iQ The Revit model will be used to demonstrate how Masonry iQ can be used for rendering, detailing, movement joint layout, and modularity.
- b. MIM Control/Expansion Joint Guides The Revit model will be used to develop wall elevations and prompt a discussion of control joint and expansion joint locations. A live demonstration of the MIM Guides and spreadsheets will be given to illustrate best practices for locating movement joints in masonry.
- c. NCMA Direct Design Software/EleMasonry/MIM Excel Tools The Revit model will be exported to DDS and a full structural analysis will be run to determine rebar size and spacing requirements. Individual elements will also be evaluated through proprietary spreadsheets to demonstrate the efficiency that can be achieved in masonry design.



- d. MIM Generic Wall Design Details/Specification The GWDC details will be converted to Revit, and they will be included in the Revit model as "live" sections to illustrate best practices for masonry detailing. The Specification will also be evaluated with specific emphasis on areas that typically are missed when using specification software.
- e. MIM Fire Guide/NCMA Fire Calculator Specific walls in the plan will be identified as rated walls, and MIM will demonstrate options for meeting current fire resistance ratings.
- f. MIM Energy Guide/NCMA Energy Calculator The Revit model and NCMA Energy Calculator will be used to demonstrate how to calculate U-factors and R-values of the wall assembly and how to demonstrate energy code compliance with COMcheck or the prescriptive method.

ii. Cost

Since the seminars will be hosted virtually, there will be no cost to MIM for hosting the quarterly seminars other than the *Executive Director's* time and the hosting software (Zoom or others).

The individual cost for the seminars will be as follows:

MIM Members Free

At an expected attendance rate or 20 per seminar, these webinars will generate approximately \$8,000 - \$10,000 annually.

iii. Credits

MIM will apply for 4.0 AIA credits and offer professional development credits for this seminar.

2. Bi-Monthly Webinars

i. Description

The *Executive Director* and *Office Manager* will schedule (2) 1-hour presentations per month (bi-weekly) that will target specific, relevant topics in the masonry industry. As a follow-up from 2020, the seminars will likely include (but not be limited to) the following:

- a. Meeting the Energy Code with Single Wythe Masonry
- b. Movement Control in Masonry
- c. Flashing Multi-Wythe Walls
- d. Moisture Management for Single Wythe Walls
- e. Direct Design Software/EleMasonry
- f. Masonry iQ



ii. Cost

Since the webinars will be hosted virtually, there will be no cost to MIM for hosting the bi-monthly webinars other than the *Executive Director's* time and the hosting software (Zoom or others).

The webinars will be offered free to members and non-members. To generate revenue, MIM <u>may</u> consider requesting sponsorship of the webinars as follows:

Sponsors will be given 5 minutes at the beginning of each presentation to discuss their company or product. In the event that the annual budget does not require sponsorship of webinars, MIM will randomly choose members to spotlight at the beginning of each webinar as a member benefit.

The expected revenue generated from the bi-monthly presentations is \$0 - \$4000.

iii. Credits

MIM will apply for 1.0 AIA credits and offer professional development credits for these webinars.

3. Specialized Webinars

i. Description

Upon request from an architecture/engineering firm, MIM will develop and present on a specific topic. Topics can include, but are not limited to:

- a. Review of firm standard/generic details
- b. Review of firm specification
- c. Review placing movement joints on a specific project
- d. Review energy compliance on a specific project

ii. Cost

Since the webinars will be hosted virtually, there will be no cost to MIM for hosting the quarterly webinars other than the *Executive Director's* time and the hosting software (Zoom or others). If the presentation requires extensive time to develop, additional fees may be invoiced.

The webinars will be offered to members and non-members, at the following rate:

The expected revenue generated is unknown.

iii. Credits

MIM will apply for 1.0 AIA credits and offer professional development credits for these webinars.



4. On-Demand Webinars

i. Description

The *Executive Director* will record generic presentations to post on YouTube, Vimeo, or the MIM website that will target specific, relevant topics in the masonry industry. Potential topics may include:

- a. Meeting the Energy Code with Single Wythe Masonry
- b. Movement Control in Masonry
- c. Flashing Multi-Wythe Walls
- d. Moisture Management for Single Wythe Walls
- e. Direct Design Software/EleMasonry
- f. Masonry iQ
- g. Masonry iQ Build

ii. Cost

Since the webinars will be recorded once and posted, there will be no cost to host these webinars.

The webinars will be offered to members and non-members, at the following rate:

The expected revenue generated is unknown.

iii. Credits

MIM will apply for 1.0 AIA credits and offer professional development credits for these on-demand webinars.



II. Individual Certifications

1. Contractor Programs

i. Description

The objective of the *Individual Certification Programs* is to assist tradespersons (bricklayers and laborers) in continuously fine-tuning their skills, remaining at the top of their trade, and allowing the industry customers to experience and value the difference.

The programs will be hosted virtually to allow tradespersons from all over the State of Michigan to participate. Traditional delivery programs (seminars and workshops) will be reduced and eventually phased out, except for upon special request from MIM members. To promote inclusiveness, MIM will evaluate ways for Hispanic members to participate. MIM will contact local bi-lingual resources to find the best way to make sure that all members are included.

MIM members are expected to encourage their bricklayers and laborers to get their certification (or ensure that they stay current). Mason contractors are expected to give ample opportunities for tradespersons to pass the test(s) on specific topic(s).

Individual Certification Programs include, but are not limited to the following:

- a. Masonry 101 Seminar An in-depth discussion of materials (concrete masonry units, clay masonry units, mortar, grout) will be covered.
 Grouting requirements in the TMS 602 will be discussed to develop an understanding of applicable code requirements.
- b. *Grouting Workshop* Current minimum grouting requirements presented in the *TMS 602* will be discussed to demonstrate best practices for grouting reinforced masonry construction.
- c. Mortar and Grout Sampling and Testing Workshop Current ASTM and TMS requirements will be discussed to ensure that quality assurance/quality control personnel, special inspectors, and mason contractors understand current sampling and testing provisions.
- d. Wall Bracing Construction safety will be evaluated through the Standard Practice for Bracing Masonry Walls Under Construction, OSHA (Subpart Q of 29 CFR 1926), and MIOSHA (Construction Safety and Health Standard Part 2. Masonry Wall Bracing). A discussion covering Initial Period and Intermediate Period will be discussed, along with an in-depth discussion of wall bracing reports and requirements.
- e. Masonry iQ Build Workshop -



ii. Cost

Since the seminars and workshops will be hosted virtually, there will be no cost to MIM other than the *Executive Director's* time and the hosting software (Zoom or others).

The seminars and workshops will be offered to members and non-members, at the following rate:

The expected revenue generated \$8000 - \$10,000.

iii. Credits

Individual Certification Programs require bricklayers and laborers to complete a minimum of 4 hours of continuing education during a 1-year period. Every bricklayer and laborer who is renewing certification is expected to retain records documenting their completion of continuing education. MIM will examine how tradespersons who were formally certified can be *grandfathered* into the new system.

The seminars and workshops will have the following credit hours:

Masonry 101 8 hours

Grouting 4 hours

Flashing 3 hours

Sampling and Testing 6 to 8 hours

Wall Bracing 3 hours



2. Designer/Special Inspector Programs

i. Description

The objective of the *Individual Certification Programs* is to assist Special Inspectors and entry-level designers in staying current with code updates. The goal is to develop a deeper level of understanding of code provisions to promote masonry design and construction.

The programs will be hosted virtually to allow Special Inspectors and entry-level designers from all over the State of Michigan to participate. Traditional delivery programs (seminars and workshops) will be reduced and eventually phased out, except for upon special request from MIM members.

MIM members are expected to encourage Special Inspectors and designers to get their certification (or ensure that they stay current).

Individual Certification Programs include, but are not limited to the following:

- a. Masonry 101 Seminar An in-depth discussion of materials (concrete masonry units, clay masonry units, mortar, grout) will be covered. Since this seminar is for designers, the second half of the course will cover specific topics such as movement control, energy code compliance, flashing and moisture management, and other topics.
- b. Special Inspectors Workshop Current requirements in Chapter 17 of the Michigan Building Code will be covered along with references to the TMS 602 Specifications.

ii. Cost

Since the seminars and workshops will be hosted virtually, there will be no cost to MIM other than the *Executive Director's* time and the hosting software (Zoom or others).

The seminars and workshops will be offered to members and non-members, at the following rate:

The expected revenue generated is unknown.



iii. Credits

The seminars and workshops will have the following credit hours:

Masonry 101 8 hours

Special Inspectors Workshop 12 hours



III. Masonry First Promotion

1. Target Audience

The target audience for this promotion will include construction managers and general contractors. Especially with newer contract delivery methods (e.g., design-build, public-private-partnership), many times the construction manager or general contractor is responsible for providing a guaranteed maximum price (GMP).

MIM will educate estimators, managers, and other team members to familiarize them with masonry design practices.

2. Strategy

i. Schematic Design

As part of the quarterly seminars identified in *Part I* of this business plan, MIM will develop generic building models (e.g., warehouse, hotel, school, mixed use) and request pricing from MIM contractor members. MIM will provide these general project costs to construction managers and general contractors to use as a basis for these types of projects and to promote masonry usage. These numbers will be used to develop preliminary estimates and compare masonry to other building materials evaluated for the projects.

MIM will provide a preliminary structural design based upon schematic plans using *Direct Design Software* for the purposes of developing a GMP for the project.

ii. Design Development

MIM will assist the design team with evaluating the energy code compliance of the masonry building. MIM may use COMcheck, the NCMA Thermal Calculator, and the MIM Energy Guide to evaluate the energy performance. On single wythe projects, MIM will discuss potential options for complying with current energy code provisions.

MIM will work with Dow-Dupont to perform a condensation analysis on the proposed wall sections.

MIM will work with the architect using Revit and Masonry iQ to demonstrate modular dimensioning and eliminate potential waste on the project.

iii. Construction Documents

MIM will review drawings, details, and specifications and meet either in-person or virtually with the design team and offer suggestions.

MIM will engage the design team and review masonry elevations to educate designers on best practices for movement control.



IV. Political Advocacy

1. Strategy

i. Description

The *Executive Director* will identify the trade association best suited to represent the masonry industry and exercise clout on its behalf in Lansing, MI and potentially Washington, D.C. This disposition does not preclude MIM members from engaging local authorities to stress the benefits of masonry when code issues and local ordinances are issued.

To promote masonry construction (specific to K-12 education), MIM will advocate for *ICC 500* storm shelter provisions in conjunction with the *Michigan Masonry Coalition*. In addition, and working with Todd Dailey, MIM will advocate for language regarding semi-heated buildings (specifically press box type structures). Promotion efforts will include meeting with the Joint Committee on Administrative Rules (JCAR) and the Michigan Department of Licensing and Regulatory Affairs (LARA) as part of the *Michigan Building Code* adoption process.

Like the annual *DC Fly-In* where trade associations, state and local legislators, and corporate executives fly into Washington, D.C. to lobby the federal government, MIM may request members to voluntarily contact their local state legislators to advocate issues in the masonry industry. These efforts may include a *Lansing Drive-In* where MIM members meet with state legislators. An *ad hoc* committee may be formed to coordinate such local actions.



V. University Outreach

MIM will identify universities in the Michigan and Toledo area to promote masonry as part of the core class curriculum. The expected benefit is to ensure that future engineers, architects, and construction managers are aware of the advantages of masonry and are supportive of integrating it into their building projects. MIM will track which universities are offering masonry courses and the time spent with deans and professors lobbying them to integrate such classes.

MIM will work with the *Michigan Masonry Coalition* and encourage their support of masonry courses. The *Michigan Masonry Coalition* may also support the courses by providing codes and standards for professors and students.

Additionally, MIM will continue to support the *MIM Scholarship Foundation* and the *Toledo Masonry Industry Scholarship Foundation* by reviewing student applications and assisting with selecting scholarship recipients.

1. Civil Engineering Programs

i. Description

MIM will advocate to have a structural masonry class as part of the *civil engineering* programs at the following universities:

- 1) Lawrence Technological University
- 2) University of Michigan
- 3) University of Detroit Mercy
- 4) Wayne State University
- 5) Calvin College
- 6) University of Toledo

MIM will advocate for professors to teach the *Strength Design* approach outlined in the *TMS 402 Building Code Requirements for Masonry Structures*. The *Executive Director* will support professors by providing lecture notes, class examples, and offering to guest lecture on structural masonry topics. MIM will place a special emphasis on masonry lintels, unreinforced masonry, and maximizing vertical reinforcement spacing.

MIM will be involved on the Industry Advisory Board at Lawrence Technological University and advocate for senior design projects to incorporate masonry as a design component. In this endeavor, the *Executive Director* will attend senior design poster presentations and advisory board meetings.



2. Architectural/Architectural Engineering Programs

i. Description

MIM will advocate to have a masonry class as part of the *architectural engineering and architectural* programs at the following universities:

- 1) Lawrence Technological University
- 2) University of Michigan
- 3) University of Detroit Mercy

MIM will advocate for professors to teach the *Strength Design* approach outlined in the *TMS 402 Building Code Requirements for Masonry Structures*. The *Executive Director* will support professors by providing lecture notes, class examples, and offering to guest lecture on structural masonry topics. MIM will place a special emphasis on energy code compliance with single wythe masonry structures, flashing and moisture management, and masonry materials.

MIM will be involved on the Industry Advisory Board at Lawrence Technological University and advocate for senior design projects to incorporate masonry as a design component. In this endeavor, the *Executive Director* will attend senior design poster presentations and advisory board meetings.

3. Construction Engineering Technology Programs

i. Description

MIM will advocate to have a split masonry and concrete course (Advanced Structural Design) as part of the *construction engineering technology* program at the following universities:

1) University of Toledo

The *Executive Director* will teach the course which is offered yearly and required to graduate. MIM will focus on *Strength Design* of masonry, energy code compliance, and construction issues such as masonry wall bracing.



VI. Inquiries and Verbal Reviews

1. Inquiries

To promote efficient masonry design, a priority of MIM is to respond to inquiries from both members and non-members. To better help with inquiries, MIM will request drawings, photographs, and any information relevant to the subject matter.

MIM's response to inquiries will be solely based on published technical industry information, and <u>not</u> personal thoughts or opinions. MIM will <u>not</u> take liability for any design decisions and will simply provide data and recommendations.

To give inquirers the best possible experience, MIM may set up virtual meetings to evaluate project drawings, photographs, and other information so that the inquirer and MIM can discuss issues in real-time.

Every effort will be made to respond to inquiries within 24-hours, and response will be through email or phone call and recorded.

2. Verbal Reviews

To limit potential conflicts of interest, MIM staff will follow a specific protocol for addressing verbal reviews. The party requesting an MIM verbal review shall be responsible for providing MIM with sufficient information including photographs, design documents, email correspondence, and any other information that pertains to the issue at hand.

MIM verbal reviews will be provided as follows:

	Member	Informational Member	Non- Members
Review plans/specifications*	No Charge	No Charge	No Charge
Construction review service**	\$85/hour***	\$125/hour	-

^{*}Review of plans and specifications will be done either in-person or through a virtual meeting with the party requesting the verbal review.

MIM staff are authorized <u>only</u> to review the consultant's report (see *Step 6* below) and/or provide an opinion to an MIM member on a one-on-one basis. Additionally, time allocation for verbal reviews shall be limited to 2 hours. If the verbal review process exceeds 2 hours, service will be provided based on the hourly rates noted above.

i. Verbal Review Protocol

- 1) Respond to phone calls and email messages for a verbal review request.
- 2) Review reasonable quantity of photographs and design documents when provided.
- 3) Provide applicable published documents (e.g., BIA Technical Notes, NCMA TEK Notes, CSI Technical Bulletins, etc.)
- 4) Provide guidance questions to be answered and evaluated by member.
- 5) Provide contact information for MIM member consultant for forensic review.

^{**}Construction review service is limited to the time constraints noted in this section.

^{***}Fee for members may be modified or waived by the Board of Trustees



VII. Market Share Base Line and Measurements

1. Strategy

The *first task* for MIM to regain market share is to *establish the base line* and a procedure to *measure its progress*. An estimated market share will be based annually on the total number of lineal feet of horizontal joint reinforcement (wire) sold in the State of Michigan.

From this quantity, the following will be calculated with assumptions made:

- a. Number of 8-inch CMUs
- b. Wall square footage
- c. Wall cost
- d. Bricklayer hours
- e. Laborer hours
- f. Cubic feet of grout
- g. Cubic feet of mortar

Knowing the **base line** will help MIM determine its market share. From year to year, MIM should then evaluate its promotional, marketing, and educational strategies and adjust accordingly to the data compiled.

VIII. Member Outreach

1. Strategy

To promote the financial wellbeing and inclusiveness of MIM, MIM will strive to increase membership across all sectors, including:

- a. Mason Contractor Members
- b. Masonry Supplier Members (brick producers/suppliers, block producers/suppliers, and cement producers)
- c. Accessory Suppliers
- d. Stone Producers/Suppliers
- e. Associate Members
- f. Informational Members [non-voting]
- g. Craftsperson Members [non-voting]

To promote membership amongst the voting members, MIM will develop a *member benefits* document to outline the advantages of becoming a member. This document will include information on our *Masonry First Promotion*, as well as information on reduced rates for workshops and seminars. To promote the inclusiveness of MIM, we will work towards a goal of offering our resources in both English and Spanish formats.

To promote membership amongst the non-voting members, MIM will specifically target A/E/C firms in Michigan and offer reduced rates for seminars and workshops, free access to Revit details, and other tools to help on their projects.



IX. Professional Organizations

To promote and advocate for the masonry industry, MIM will be actively involved int eh following organizations:

- a. The Masonry Society (TMS) The *Executive Director* will serve as a voting member on several subcommittees and a commenter for the Main Committee. The *Executive Director* will attend bi-annual meetings and represent the masonry industry in Michigan.
- b. National Concrete Masonry Association (NCMA) The Executive Director will assist NCMA in offering webinars on software (EleMasonry and Direct Design) to other regions throughout the country. In addition, the Executive Director will participate in NCMA's Regional Executives meetings to keep abreast of issues throughout the country.
- c. American Society for Testing and Materials (ASTM) The *Executive Director* will be a voting member on committees C12 and C15 and advocate for our members.
- d. Structural Engineering Association of Michigan (SEAMI) The *Executive Director* will offer webinars or presentations and may participate in the SEAMI annual conference to present on the benefits of structural masonry.
- e. Masonry Alliance for Codes and Standards (MACS) The *Executive Director* will actively participate in MACS meetings to keep abreast of code changes and upcoming issue. In addition, they may serve as an at-large member for MACS.
- f. Michigan Masonry Coalition (MMC) MIM will assist the MMC with their mission. In this role, MIM will focus on reaching architects and construction managers throughout Michigan and will assist Scott Walkowicz in education opportunities for structural engineers.