



JBC MASONRY INNOVATION COMPETITION

2020 BRIEF



INTERNATIONAL
MASONRY
INSTITUTE





TIMELINE

REGISTRATION OPENS: July 15, 2019

SUBMISSION OPENS: August 1, 2019

SUBMISSION DEADLINE: December 15, 2019 (11:59 p.m. EST)

WINNERS NOTIFIED: February 2020

**AWARD CEREMONY/
WINNERS ANNOUNCED:** March 2020

KEY INFORMATION

LANGUAGE: English

LOCATION: United States and Canada

PRIZES: See Details (page 7)

COMPETITION WEBSITE: www.imiweb.org/jbcaward

SUBMISSION WEBSITE: www.jbc.awardsplatform.com

OFFICIAL RULES: www.imiweb.org/jbc-competition-official-rules

QUESTIONS: jbcaward@imiweb.org

ABOUT JOAN B. CALAMBOKIDIS

Joan B. Calambokidis served as President of the International Masonry Institute (IMI) from 1995-2017.

The JBC Masonry Innovation Competition was founded in 2018 to honor Joan's legacy of masonry innovation, including groundbreaking advancements in training, education, research, and technical development.

Joan's leadership was instrumental in creating IMI's renowned training programs for craftworkers, contractors, and design professionals. Her vision for training has helped to bring an unprecedented level of skill, quality, and craftsmanship to masonry construction projects across the U.S. and Canada. Joan also led the development of IMI's International Training Center, a multi-building, state-of-the-art facility outside Washington, D.C. that has educated thousands of craftworkers and design professionals since its opening in 2007.

During Joan's tenure, IMI helped curate *Masonry Variations* (right) in 2003, a National Building Museum exhibit co-sponsored by the International Union of Bricklayers and Allied Craftworkers (BAC) and IMI. The exhibit featured innovative works by four prominent architects, demonstrating the versatility of stone, terrazzo, brick, and autoclaved aerated concrete. The installations explored the relationship between material, technology, and collaboration.

Joan was also responsible for the creation of *Masonry Camp*, a nationally-recognized IMI program dedicated to building collaboration between designers and craftworkers.

Through the JBC Masonry Innovation Competition, IMI honors and carries on the tradition of innovation that Joan established in the masonry industry.



OVERVIEW

INNOVATION IN MASONRY:

Any solution that adds value, usefulness, appreciation, and relevance to masonry design and construction, whether an improvement of an existing system or a groundbreaking proposal.

The International Masonry Institute's JBC Masonry Innovation Competition celebrates game-changing creativity and new ideas that have the power to propel growth within the industry. The competition challenges current and budding designers to answer the question: what will masonry's design and construction delivery experience look like in the future?

For IMI, innovation is key to positioning masonry as a valued building system in design and construction. Innovation includes any solution that adds value, usefulness, appreciation, and relevance to masonry design and construction, and can be either an improvement of an existing system or a groundbreaking proposal. In other words, solutions should progress current masonry thinking or create new opportunities for growth through a scalable, repeatable model.

Solutions can explore innovation through masonry materials, the process of construction, or new business models related to construction efficiencies, and may also address issues such as energy efficiency, resiliency, sustainability, constructability, and customization. In all cases, however, the innovative ideas or projects should be clear and constructible.

To encourage freedom to innovate, the scale, size, program, and location, if applicable, are left open to the participant. Participants should model their solutions using BIM technology, and are encouraged to make use of BIM for Masonry (BIM-M) software plugins and tools.

The final solution can be an imagined, proposed, or completed structure or system. Submissions should clearly illustrate how masonry can transform or enhance its role in the building industry, and how this process advances design and construction opportunities in the future.

MASONRY MATERIALS:

- Brick
- Block
- Stone
- Tile
- Marble
- Terrazzo
- Rainscreen
- Concrete
- Plaster

WHO CAN ENTER

ARCHITECTS

ENGINEERS

UNIVERSITY STUDENTS

**ARCHITECTURAL/
ENGINEERING FIRMS**



ALTERABLE BRICK WALL
Past Inaugural Student Winner



ENTRY CATEGORIES

There are three entry categories:

STUDENTS

Undergraduate or graduate students enrolled in an accredited design, architecture, or engineering school.

YOUNG ARCHITECTS/ENGINEERS

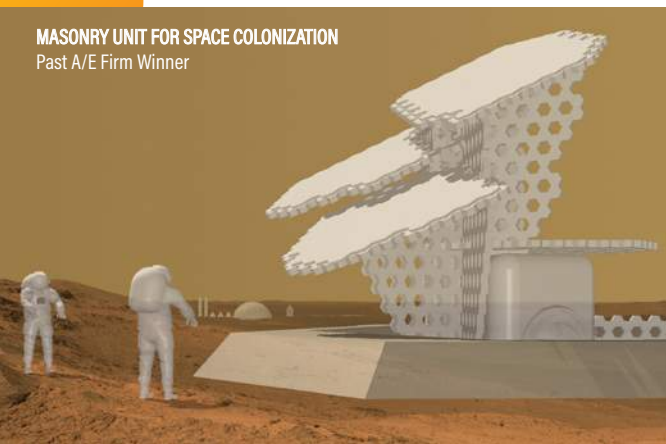
Any architects or engineers under the age of 40.

A/E FIRMS, INDIVIDUAL ARCHITECTS/ ENGINEERS, & CROSS-CATEGORY

Architecture/engineering firms, architects and engineers age 40 and over, and cross-category teams.

Multidisciplinary teams are encouraged in all categories to help facilitate a well-conceived solution, but individual entries are also permitted. There are no restrictions on team size.

Each team or individual may only submit one entry.



MASONRY UNIT FOR SPACE COLONIZATION
Past A/E Firm Winner



MASHRABIYA 2.0

Past Young Architect/Engineer Winner

PRIZES

Monetary awards will be provided to 1st place winners in each of the three entry categories: Students; Young Architects/Engineers; and A/E Firms, Individual Architects/Engineers, and Cross-Category entries. In addition to monetary prizes, winners may receive special publication and promotion opportunities, and will be honored in March 2020 during an awards ceremony held in Miami, Florida. Travel and accommodations to Miami will be provided by IMI for up to 2 individuals from each winning category. IMI may choose to build or replicate a small mock-up of the winning design in each category at a location of its choosing.

STUDENTS

\$5,000 awarded to student(s). An additional \$5,000 will be awarded to the specific school program in which the student(s) is enrolled. If student team members are from different programs, colleges or universities, the \$5,000 award will be split among the different programs, colleges, or universities.

YOUNG ARCHITECTS/ ENGINEERS (UNDER 40)

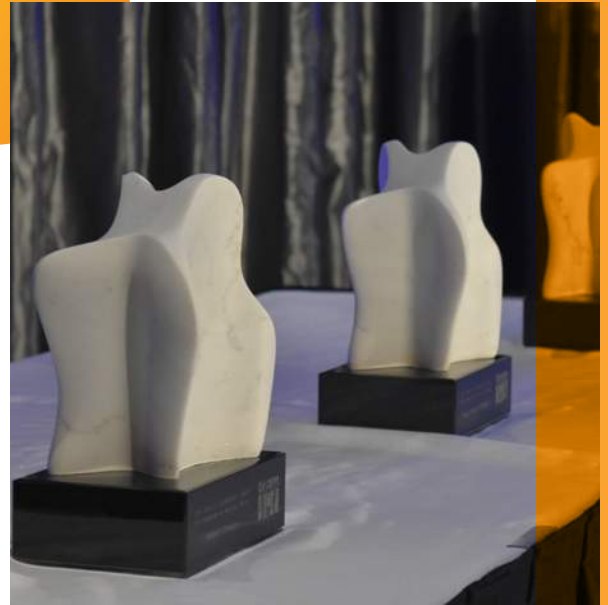
\$10,000

A/E FIRMS, INDIVIDUAL ARCHITECTS/ENGINEERS, & CROSS-CATEGORY

\$10,000

HONORABLE MENTION

Honorable mentions may also be awarded in each of the three categories, with recognition to include special publication and promotion opportunities.



1st place winners with Joan B. Calambokidis, from left: Anh Nguyen, Shawn Chinudomsab, Joan B. Calambokidis, Erin Hunt, and Leslie Forehand.

HOW TO ENTER

REGISTRATION

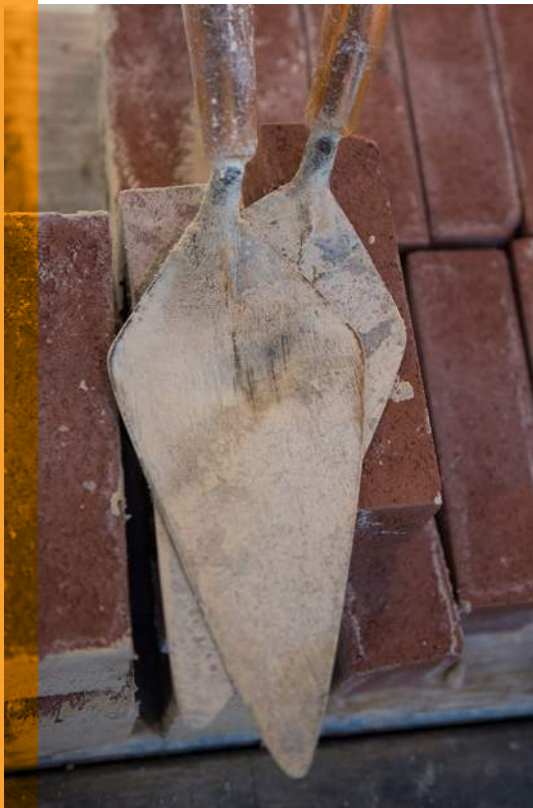
To enter the competition, participants must register an account at www.jbc.awardsplatform.com.

The process is quick and easy: only basic contact information is collected and there is no cost to register. If entering as a team, please choose a team lead to register an account.

After registering, participants will receive an email asking to confirm their account by clicking the provided link. Participants must confirm their account to complete registration.

SUBMISSION

The online entry and submission system will open on August 1, 2019 and is accessible at www.jbc.awardsplatform.com. Through the system, participants can start and save their entries in-progress and return at any time using the login created during registration.



DEADLINE

Completed entries must be submitted by December 15, 2019 (11:59 p.m. EST). The submission system will automatically stop accepting entries after this time, and no extensions will be granted.

DELIVERABLES

Participants should submit the following deliverables through the online submission system at www.jbc.awardsplatform.com.

- Two digital presentation boards depicting your project. Include plans, sections, details, BIM images, 3D images, and any other information needed to explain your design solution. Digital boards should be landscape-oriented at 24" (h) X 36" (w) and saved as JPEGs at 150 dpi resolution in RGB mode.
- A project statement (1200 words max.) that explains how your concept rethinks the innovative potential of masonry and addresses program requirements outlined in the competition brief.
- Technology used in your solution, as requested on the entry form. Participants are highly encouraged to use BIM for Masonry (BIM-M) tools to develop their concepts. Get detailed information and links to BIM-M plugins and resources in the "Designing Your Solution" section below.
- Contact information, as requested on the entry form.
- For Student Category Entrants Only: Proof of current enrollment in a design, architecture, or engineering program.

Participants are encouraged to submit all information they consider necessary to explain their solution above and beyond the required deliverables, including, but not limited to, video, images, written, or multimedia content.

All entries must be submitted in English.

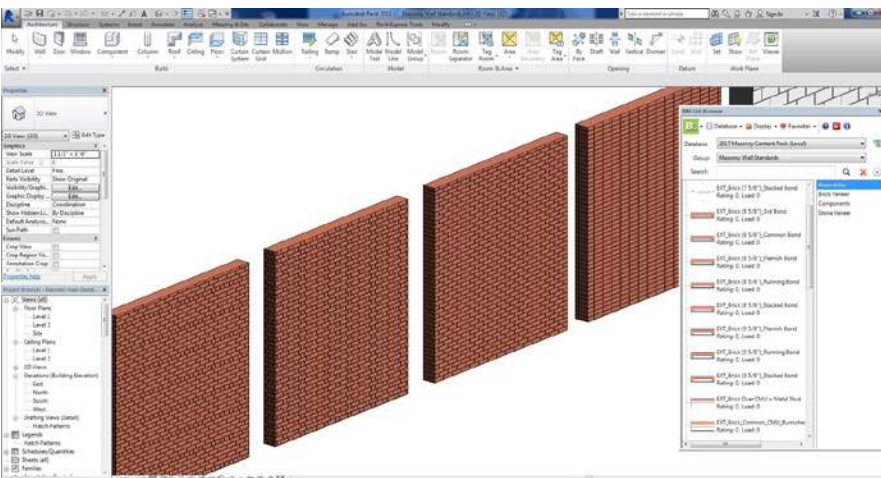
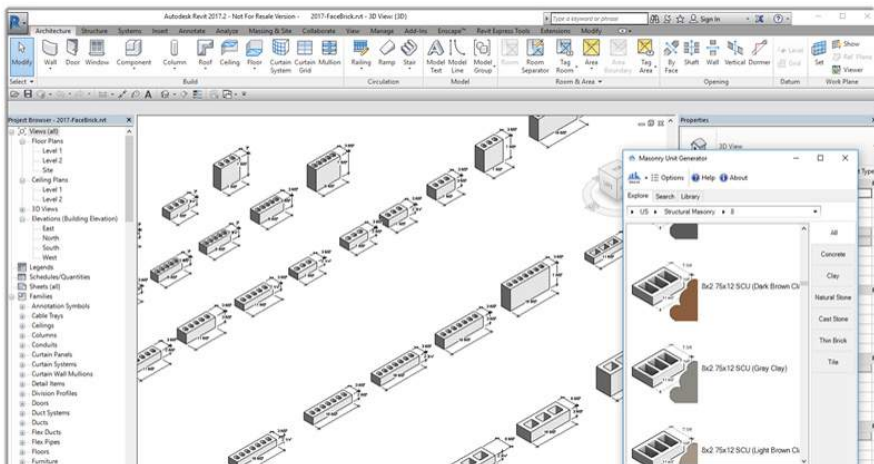
DESIGNING YOUR SOLUTION

BIM FOR MASONRY (BIM-M)

BIM for Masonry (BIM-M) brings masonry materials and systems to popular BIM software, making it easier for architects, engineers, and BIM users to incorporate masonry into their designs.

Competition participants are highly encouraged to download and use one or more of the following BIM-M tools to assist in modeling their solutions:

For additional information on BIM-M and the organizations involved with it, visit www.BIMformasonry.org.



MASONRY UNIT DATABASE (MUD)

- Free downloadable digital masonry units
- Captures geometric, aesthetic, and non-geometric information for masonry units
- Helps designers save time with standardized data for models
- Compatible with multiple BIM and CAD software platforms, including Autodesk Revit and Bentley RAM (file formats include DWG, DGN, DXF, and RFA).

[Access the Masonry Unit Database](#) to download units for your design.

MASONRY UNIT GENERATOR: REVIT PLUG-IN

- Free plug-in that connects MUD to Autodesk Revit
- Generates accurate models that can be used directly in Revit designs
- Allows users to save native Revit families to content libraries
- Intuitive interface and search capabilities make it easy to model with masonry in Revit

[Download the Masonry Unit Generator for Revit.](#)

[Read the Online User Guide](#)

MASONRY CONTENT PACK FOR REVIT

The Masonry Content Pack is a free resource for Autodesk Revit that includes masonry assemblies, such as:

- Structural bond beams
- Vertical reinforcement in grouted cells
- Movement joints
- Arches
- Wall types
- Generic unit profiles
- Wall hatches for bonding patterns
- Flashing details

[Download the Masonry Content Pack](#)

3DIQ'S MASONRY IQ SOFTWARE

Masonry IQ is a smart masonry tool inside Revit that improves modeling productivity with features that allow users to:

- Study modularity
- Generate coursed wall sections
- See cuts at openings
- Place bond beams
- Generate sweeps
- View properly bonded corners
- Explore masonry patterns

[Get more Information and Download a Free Trial of Masonry IQ](#)

BIM-M has created smoother workflows and collaboration across the AEC industry. Read more about how [BIM-M benefits](#) architects, engineers, construction managers, contractors, and other industry professionals.

EVALUATION CRITERIA

The following criteria will be used to judge submissions:

- **INNOVATION (45%):** The idea provides a groundbreaking proposal for positioning masonry. The idea generates added value or usefulness, improvement, or increases masonry's relevance.
- **EXECUTION OF IDEA (30%):** The idea is clearly communicated and understood.
- **CREATIVITY (25%):** The solution shows original thinking.

JURY

Entries will be evaluated by a prestigious panel of renowned architects and leaders in the masonry design and construction industry. Check the [competition website](#) for an up-to-date listing of jurors.





ABOUT IMI

The International Masonry Institute (IMI) works to promote and advance the union masonry industry. As the labor-management partnership of the International Union of Bricklayers and Allied Craftworkers (BAC) and its signatory contractors, IMI is committed to growing the market share of work for union contracting companies and their employees.

Above all, we stand for quality construction, safety, and skilled labor. That's why IMI facilitates state-of-the-art training for BAC signatory contractors and their employees. We also offer free education and assistance to architecture, engineering, and construction (AEC) professionals to help them design and build effectively with masonry. Together, these services uniquely position IMI, BAC, and its signatory contractors to contribute to beautiful, long-lasting structures in communities across the U.S. and Canada.

OUR SERVICES FOR THE AEC COMMUNITY

IMI's team of experts provides free technical support for masonry design and construction projects, including:

- Design Assistance
 - Plan and specification review
 - Masonry detailing
 - Cost analysis
 - Software guidance
- Project Support
 - Qualified union contractors and installers
 - Job site troubleshooting
- Education
 - On-site seminars
 - Hands-on material workshops

ADVANCING THE INDUSTRY

To advance the understanding and practical application of masonry materials, systems, and construction, IMI partners with leading universities and research institutions to examine important issues, such as:

- Energy and resiliency
- Fire safety
- Constructability
- Codes and standards
- Seismic design
- BIM for Masonry
- Impact resistance and storm shelter design
- New and emerging products





WORKING WITH QUALIFIED INSTALLERS

IMI also represents qualified masonry contractors and installers who stay up-to-date on industry standards and techniques through rigorous training and education programs.

The International Masonry Training and Education Foundation (IMTEF) provides lifelong learning to BAC members through a grant from IMI. All BAC installers go through a multi-year registered apprenticeship program that combines classroom and hands-on learning with real-world experience, totaling over 8,500 hours of training. That translates to expert, quality installations on projects.

Additionally, we offer certifications that advance and verify installers' knowledge and ability in specialized skill areas. In fact, designers and specifiers can include IMI certifications in project specifications to guarantee a skilled workforce.

IMI is also the leading source of professional education for BAC signatory contractors, equipping them with the skills and knowledge to bid and build complete wall systems, from interior to exterior. BAC signatory contractors have expertise in new building construction and restoration, focusing on an array of materials and systems:

- Brick
- Block
- Stone
- Marble
- Cement
- Plaster
- Terra cotta
- Tile
- Terrazzo
- Mosaic
- Rainscreen
- Air and Vapor Barrier



THE UNION DIFFERENCE

Our contractors design and build with communities – and the people who live and work in them – in mind. BAC signatory contractors are committed to providing middle class jobs, paying fair wages, and providing excellent healthcare, retirement benefits, and paid leave.

Plus, organized workplaces are proven to be safer than their non-union counterparts. In fact, the labor movement has a long history of leading the way in protecting workers from injury, illness, and death on the job. Not only that, but construction unions like BAC are known for their innovation in safety, quality, and training. We take pride in what we do: building projects and landmarks that shape our communities.

THAT'S THE UNION DIFFERENCE.



CONTACT

Questions should be submitted via email to jbcaward@imiweb.org.