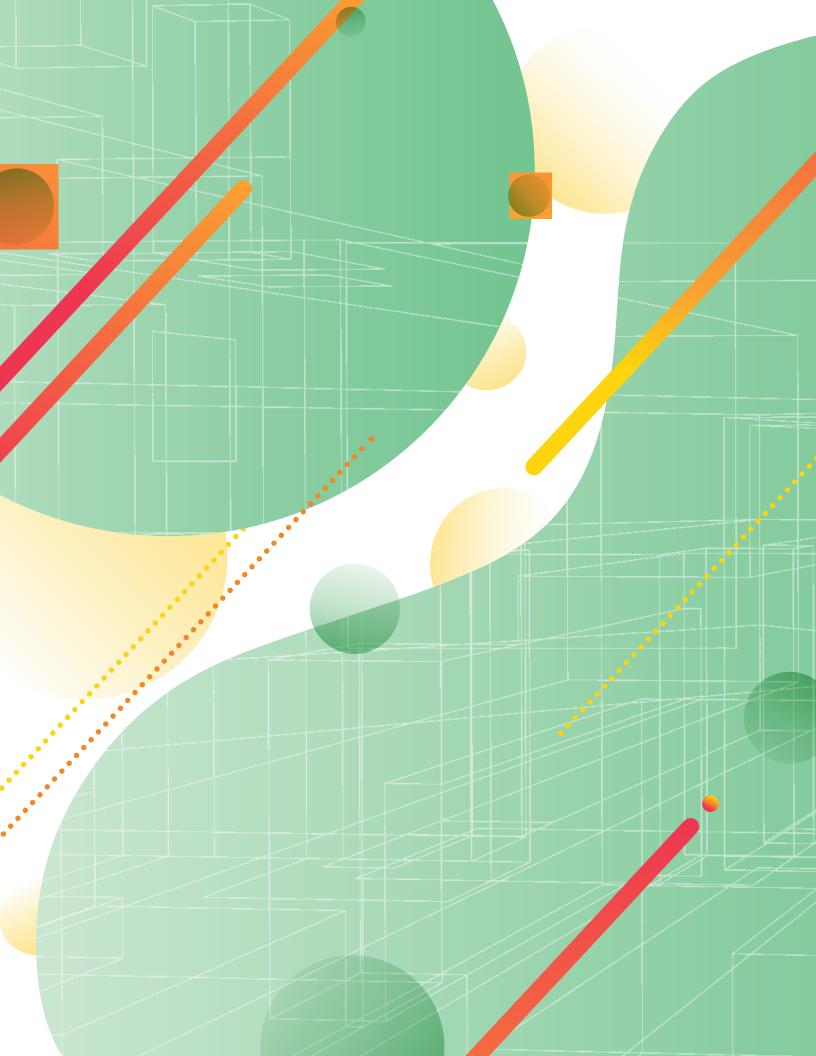
B C MASONRY INNOVATION COMPETITION

BRIEF

INTERNATIONAL MASONRY INSTITUTE





TIMELINE

REGISTRATION OPENS: July 15, 2021 SUBMISSION OPENS: August 1, 2021 SUBMISSION DEADLINE: December 15, 2021 (11:59 p.m. EST) WINNERS NOTIFIED: February 2022 WINNERS ANNOUNCED: March 2022

KEY INFORMATION

LANGUAGE: English LOCATION: United States and Canada PRIZES: See Details (page 7) COMPETITION WEBSITE: imiweb.org/jbcaward SUBMISSION WEBSITE: jbc.awardsplatform.com OFFICIAL RULES: 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 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 craft 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 in Maryland that has educated thousands of craftworkers and design professionals since its opening in 2007.

During Joan's tenure, IMI helped curate Masonry Variations 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 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 nationallyrecognized 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.





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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 (IMI's) JBC Masonry Innovation Competition wants your ideas for transformative masonry design. We're challenging practicing and aspiring architects and engineers to advance the future of masonry design and construction.

Designers have the power to help create resilient, healthy, just, and equitable communities. But solving global challenges to improve our world demands innovation. We want to see your bold new concepts that show how masonry can better our built environment. We also want to see new ideas that have the potential to change the way we design and build with masonry and create growth opportunities for our industry.

Whether you have a great idea that addresses how infrastructure like schools and healthcare facilities will change in a post-pandemic world, thoughts on how to address the climate crisis, insights on improving equity, or another innovative plan, we want to hear from you. Solutions can also explore innovations in materials, the construction process, new business models, or simply show a unique aesthetic and functional use of masonry.

Whatever direction you decide to take, your innovative solution should add value, usefulness, appreciation, and relevance to masonry design and construction. It can be either an improvement of an existing system or a groundbreaking proposal.

Imagined, proposed, and completed structures and systems are welcomed. The scale, size, program, and location are left up to your imagination, but your concepts should be both clear and constructible. We encourage you to model your solution in BIM and use BIM for Masonry (BIM-M) plugins and tools to make the most of your design.

At the end of the day, IMI wants to see more masonry structures built by highly skilled, trained, and qualified union craftworkers and contractors. As a labor-management partnership, we've always fought for economic and social justice by bringing workers and employers together to negotiate fair pay, good benefits, and safer jobsites for all. Not only that, but IMI and the International Masonry Training and Education Foundation's state-of-the-art training programs for contractors and craftworkers help prepare them to tackle complex construction projects and build high-performance structures.

Together with innovative architects and engineers, we can create a better built world for everyone. Show us your innovative solutions!

MASONRY MATERIALS:

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



WHO CAN ENTER

ARCHITECTS ENGINEERS UNIVERSITY STUDENTS

ARCHITECTURAL/ ENGINEERING FIRMS





ENTRY CATEGORIES

There are three (3) entry categories:

STUDENT

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



SPATIAL MASONRY 2020 Young Architect/Engineer Winner

YOUNG ARCHITECT/ENGINEER

Any architects or engineers under the age of 40.

A/E FIRM, INDIVIDUAL ARCHITECT/ ENGINEER, & 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.

PRIZES

Monetary awards will be provided to 1st place winners in each of the three entry categories. In addition to monetary prizes, winners will receive special publicity opportunities, including the opportunity to present their designs on IMI's popular webinar series, which regularly draws hundreds of attendees across the country. Winners will also be highlighted in digital publications and honored during an awards ceremony.

STUDENT CATEGORY

\$5,000 awarded to student(s). An additional **\$5,000** 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 ARCHITECT/ ENGINEER CATEGORY (UNDER 40)

\$10,000

A/E FIRM, INDIVIDUAL ARCHITECT/ENGINEER, & 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.





Inaugural winners with Joan B. Calambokidis, from left: Anh Nguyen, Shawn Chinudomsub, Joan B. Calambokidis, Erin Hunt, and Leslie Forehand.



HOW TO ENTER

REGISTRATION

To enter the competition, participants must register an account at <u>jbc.awardsplatform.com</u>.

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, 2021 and is accessible at <u>jbc.awardsplatform.com</u>. 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, 2021 (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 <u>jbc.awardsplatform.com</u>.

- 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:

and RFA).

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

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

 Compatible with multiple BIM and CAD software platforms, including

Autodesk Revit and Bentley RAM

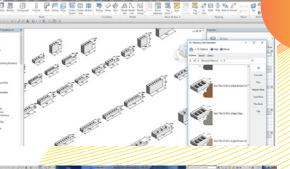
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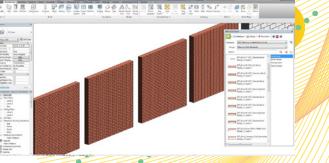
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 Intuitive interface and search capabilities make it easy to model with masonry in Revit

Download the Masonry Unit Generator for Revit.

Read the Online User Guide





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HIVE: MASONRY CONTENT MANAGEMENT SYSTEM – IMI MASONRY LIBRARY

- Free IMI public library for HIVE subscribers
- Enterprise wide solution and cloud-based solution for Revit
- Find Revit, AutoCAD, PDF, images, and other file types quickly using libraries, tags, favorites, and file metadata.
- Desktop application and Revit add in
- All the content from the Masonry Content Pack for Revit and more!
- Virtual Revit mockups of various masonry assemblies

Find out more about HIVE & Download Free 14-day Trial of HIVE

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

Download the Masonry Content Pack

- Wall types
- Generic unit profiles
- Wall hatches for bonding patterns
- Flashing details

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

View properly bonded corners

Generate sweeps

Explore masonry patterns

Connect with 3DiQ

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.



ABOUT IMI

TThe 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:

- In-house continuing education
- Job site troubleshooting
- Plan and specification review
- Design and detailing assistance
- 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:

- Constructability
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Fire safety

- Seismic design
- Impact resistance and storm shelter design
- Codes and standards
- New and emerging products







WORKING WITH QUALIFIED INSTALLERS

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

The International Masonry Training and Education Foundation (IMTEF) – IMI's partner organization – 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 walls 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
 Cement
 - Plaster
- Mosaic

Terrazzo

Rainscreen

BlockStone

Marble

- Terra cotta
- Tile
- 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.

IMI is a strategic partnership of the International Union of Bricklayers and Allied Craftworkers (BAC) and its signatory contractors.

CONTACT

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