2021 Framework for Design Excellence

In response to AIA’s commitment to climate action, AIA Baltimore, AIA Chesapeake Bay, AIA Potomac Valley, and AIA Maryland are each introducing new sustainability questions to Design Awards Submissions.

Following the lead of AIA National, the Maryland Chapters of AIA will include measures from the AIA Framework for Design Excellence. When you submit a project, you will be given open-ended prompts to describe in a few sentences how your design achieves outcomes for each measure.

Projects are not required to address every measure; you should only address those measures that are relevant to your project. Add N/A when not applicable or when information is not available, where relevant explain why this is the case. Submitters are expected to provide as much accurate data as possible. The goal is to promote the sustainable design work of our members and to support AIA’s Resolution for Urgent and Sustained Climate Action.

Framework for Design Excellence Summary

In the space below, provide an overview of the submission as it relates to the Framework for Design Excellence.

Word Limit: 500

Designing for Integration

Focus topics

• central design concept
• beauty and delight
• integrated process

What is the big idea behind this project—and how did the approach toward sustainability inform the design concept? Provide an overview of the project, program, and any unique challenges and opportunities.

Word Limit: 200

Designing for Community

Focus topics

• walkability/human scale/alternative transportation (walk score)
• community engagement and buy-in
• social equity

Indicate the overall character of the community engagement in the design process:

• No community engagement practices were applied for this project
• Inform: Potential Stakeholders were informed about the project
• Consult: Stakeholders were provided with opportunities to provide input at pre-designed points in the process
• Involve: Stakeholders were involved throughout most of the process
• Collaborate: A partnership is formed with stakeholders to share in the decision-making process including development of alternatives and identification of the preferred solution

How community members, inside and outside the building, benefit from the project. How does this project contribute to creating a walkable, human-scaled community inside and outside the property lines? How were community members engaged during the design and development process? How does the project promote social equity at local, regional, and global scales?

Word Limit: 200

**Designing for Ecology**

Focus topics

• landscaping/habitat/biodiversity
• dark skies
• bird-friendly design
• site acoustics

Vegetation

What percent of total site area supported vegetation predevelopment? (Express as a %)

What percent of total site area supports vegetation (landscape or green roof) post-development? (Express as a %)

What percent of landscaped area is covered by native or climate-appropriate plants supporting native or migratory animals? (Express as a %)

Describe the larger or regional ecosystem (climate, soils, plant and animal systems) in which the project is sited. In what ways does the design respond to the ecology of this place? How does the design help users become more aware of or connected with place and regional ecosystems? How does the design minimize negative impacts on birds and other animals (e.g., design to prevent bird collisions, dark-sky compliant lighting)? How does the project contribute to biodiversity and the preservation or restoration of habitats and ecosystem services?

Word Limit: 200
Designing for Water

Focus topics

- indoor water efficiency
- outdoor water use reduction
- process water reuse
- capture/reuse of greywater and/or blackwater
- rainwater/stormwater use and management
- Net Zero Water Building (nzwb)

Stormwater management

What percent of stormwater is managed on-site? (Express as a %)

How does the project use water wisely and handle rainfall responsibly? Sustainable design conserves and improves the quality of water as a precious resource. Illustrate how various water streams flow through the building and site, including major water conservation and stormwater management strategies. How does the project relate to the regional watershed? Describe strategies to reduce reliance on municipal water sources. Does the project recapture or reuse water?

Word Limit: 200

Designing for Economy

Focus topics

- building size
- material use
- operational requirements
- financing and incentives
- community links

Provide examples of how first cost and life cycle cost information influenced design choices. Identify any additional first-cost investments and how they are anticipated to improve life cycle costs and longer-term economic performance.

Word Limit: 200

Designing for Energy

Focus topics

- energy benchmarking and goal setting
- passive design features/climate responsive design
- energy modeling • onsite renewables (solar, wind)
• Net Zero Energy/Net Zero Carbon Building
• Commissioning

Energy Use Intensity:

What was the predicted net energy use intensity (kBtu/sf/yr) of the project, including on-site renewables (carbon offsets will not be counted)? What is the actual net energy use intensity (kBtu/sf/yr) of the project, including on-site renewables (based on 1 year utility records)? How much energy does the project use? Is any of that energy generated on-site from renewable sources, and what is the net carbon impact? How did analysis of local climate inform the design challenges and opportunities? Describe any energy challenges associated with the building type, intensity of use, or hours of operation, and how the design responds to these challenges.

Describe energy-efficient design intent, including passive design strategies and active systems and technologies. How are these strategies evident in the design, not just the systems?

Word Limit: 200

Designing for Wellness

Focus topics

• natural and artificial lighting
• thermal comfort
• indoor air quality
• happiness
• biophilia/connection to nature
• acoustics
• food/movement/exercise

Quality views

What percent of regularly occupied floor area have direct views of the outdoors? (Express as a %)

Describe strategies for optimizing daylight; indoor air quality; connections to the outdoors; and thermal, visual, and acoustical comfort for occupants and others inside and outside the building. How does the design promote the health of the occupants? Describe design elements intended to promote activity or exercise, access to healthy food choices, etc. Outline any material health strategies, including any materials selection criteria based on third-party chemicals of concern lists, such as Living Building Challenge Red List, EPA chemicals of concern, etc. Include key results on occupant comfort from occupant satisfaction surveys.

Word Limit: 200

Designing for Resources

Focus topics
• safer material selection
• material sourcing
• embodied carbon
• construction waste diversion

What is the estimated carbon emissions (metric ton CO2) associated with building construction, including the extraction and manufacturing of materials used in construction? (Express as MT CO2)

Sustainable design includes the informed selection of materials and products to reduce product-cycle environmental impacts while enhancing building performance. Describe efforts to optimize the amount of material used on the project. Outline materials selection criteria and considerations, such as enhancing durability and maintenance and reducing the environmental impacts of extraction, manufacturing, and transportation. Identify any special steps taken during design to make disassembly or reuse easier at the building's end of life. What other factors helped drive decision-making around material selection on this project?

Word Limit: 200

**Designing for Change**

Focus topics

• flexibility and future adaptability
• risk assessment
• resilience
• passive survivability

Existing buildings/adaptive reuse

What percentage of floor area, if any, represents adapting existing buildings? (Express as a %)

Service life

What is the estimated service life of the project? (Express as years)

Survivability

Which of the following best describes the projects’ ability to survive without utility power? (select one)

• Not habitable without power
• Passive survivability
• Partial back-up power
• Full back-up power
Reuse, adaptability, and resilience are essential to sustainable design, which seeks to maintain and enhance usability, functionality, and value over time. Describe how the project is designed to facilitate adaptation for other uses and/or how an existing building was repurposed. What other uses could this building easily accommodate in 50 to 100 years? In what ways did the design process consider climate action over the life of the building? Describe the project’s resilience measures: How does the design anticipate restoring or adapting function in the face of stress or shock, such as natural disasters, blackouts, etc.? How does the project address passive survivability (providing habitable conditions in case of the loss of utility power)?

Word Limit: 200

**Designing for Discovery**

Focus topics

- post-occupancy evaluation and engagement
- relationships/graphic signage/training
- knowledge sharing and lessons learned
- discovery that influences behavior

Has a post-occupancy evaluation been conducted?

- Yes
- No, but a POE will be conducted
- No, and a POE will not be conducted

Has the building performed in ways that matched expectations during design? Post-occupancy evaluation can include monitoring thermal and daylight conditions, and energy and water consumption; surveys of occupant comfort; and studies of how the building is actually occupied and used. What lessons for better design have been learned through the process of project design, construction, and occupancy, and how have these been incorporated in subsequent projects? Describe ways the lessons have been shared with a larger audience (publications, lectures, etc.) and how the project may have influenced industry practices. Describe the processes used to maintain long-term relationships between the design team and those occupying and operating the building; identify how both the users and designers benefited.

Word Limit: 200