



HOUSING ETN

2025 SINGLE STAIR HOUSING DESIGN COMPETITION

MAY 16

COMPETITION KICK-OFF / HAPPY HOUR

SANDERS PACE ARCHITECTURE (5:30-6:30) 514 W. JACKSON AVE.

MAY 23

WEBSITE LIVE/SUBMISSION PORTAL OPENS

MAY 30

VIRTUAL Q/A

JULY 11

VIRTUAL Q/A

AUGUST 29

SUBMISSION DEADLINE

SEPTEMBER 19

FINALISTS ANNOUNCED

OCTOBER 2

FINALISTS RECOGNIZED AT 2025 DESIGN AWARDS GALA



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AIA East Tennessee have prepared this document to organize the Housing ETN 2025 Single Stair Housing Competition.

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INTRODUCTION

Late in 2024, Knoxville City Council adopted the IBC 2024 as the building code with local amendments. Knoxville, opting in to state law, legalized ‘Single Stair’ multifamily buildings, also known as ‘Point Access Blocks.’ These are apartment buildings that serve up to six stories with a single circulation stair. This typology is common in Europe and has been legal in Seattle since the 1970’s. Point Access Blocks support denser urban areas and promote walkable neighborhoods by allowing multifamily buildings to be built on smaller infill sites.

According to Stephen Smith from Center for Building in North America, this change makes Knoxville the first city in the country to legalize Point Access Blocks *this decade*. As we all know, building codes are complicated documents and rarely change drastically. This local code adoption represents a large shift from the status

quo of multifamily housing here in Knoxville. We have an opportunity to be on the cutting edge of design for not just Tennessee, but for the rest of the country.

This competition, building off the momentum of the 2024 ADU Design Competition organized by the East Tennessee Chapter of the AIA, seeks to experiment with what multifamily projects can become in East Tennessee. In our times of climate change, urbanization, lack of housing, and high demand for walkable neighborhoods, we have the chance to lead the way with design. By showing what is possible with these new codes, we hope to share with the public a vision of development that is more approachable, sustainable, accessible, and beautiful for all.

Please consider entering!



States and cities with Single Stair legislation or adoption

Source: Center for Building in North America

BACKGROUND

‘Single Stair’ or ‘Point Access Block’ buildings are a typology defined by the relationship of circulation to the apartment units. In Point Access Blocks, a single stair connects all units, as opposed to an extensive corridor running between two exit stairs. This allows Point Access Block buildings to have smaller footprints and fit on tighter, urban infill lots. There are also considerable cost savings and efficient apartment layouts possible with this arrangement. Additionally, forgoing the bifurcation of a typical exit hallway, units can have multiple faces for access to light and ventilation. This flexibility also allows for a wider variety of unit types with more bedrooms, allowing more types of families to have access to housing.

Under the typical IBC rules, multifamily buildings could only extend to 3 stories with a single exit

stair. With the newly adopted codes, multifamily buildings in Knoxville can extend up to 6 stories with 4 units per floor with a single exit per floor. There are some other stipulations such as maximum corridor length and overall path of travel length, all of which can be read here in [Sec. 6-6 of the Code of Ordinances.](#)

Last year, AIA Tennessee gave a webinar on the design and safety of this buildings that you can see [here](#). It is an amazing resource that walks through even more details and examples of this typology and how it could be implemented. The legislation and local amendments have already been adopted, it is now up to us to shape how this new type of building looks in our region.



2024 Single Stair Legislation July 17, 2024

*Please Note: Today's online session is being recorded.
All members must abide by AIA's Antitrust Compliance Guidelines found at aia.org*

THE COMPETITION

The AIA East Tennessee Housing ETN 2025 Single Stair Housing Competition is organized by AIA ETN. The goals are to consider the possibilities of newly adopted codes and how they could affect the design and urban integration of new multifamily buildings in East Tennessee as more communities opt in to the Single Stair codes that are allowed by the state. All are encouraged to enter, from architecture firms to individuals, to help us all imagine the possibilities of single stair multifamily buildings. Ultimately, we wish to provide beautiful and thoughtful examples of what could be built under our new codes and how that could change our urban fabric for the better.

THE CRITERIA

All entries will be judged based on how well they successfully engage the following criteria of this competition:

1. **Introduce and Expand:** The AIA ETN Chapter has the responsibility to share and expand the design potential of our region. This competition will help spread the word about the possibilities of Single Stair Design and what our shared future urban development could look like.
2. **Define Local Potential:** Though there are many examples of this type of multifamily building all over the world, it is new to this region. This competition seeks to discover what our version of what a point access block could be and how it can be rooted in the ecology, climate, material culture, and aesthetic traditions of East Tennessee.

3. **Sustainability in Practice:** Entrants should incorporate low-carbon materials, climate resiliency, passive heating and cooling, energy efficiency, and other methods of environmental thinking in their designs.

4. **Expand Knoxville's Urban Core:** Tying Point Access Blocks to their surrounding community is key to their adoption and use. Proposals should show thoughtful connection to their urban surroundings and demonstrate the possibilities of expanding the density and footprint of downtown.

5. **Provide Access and Inclusion:** Affordability and access for all is a top priority for this competition. Multi-generational housing, universal design, and affordable strategies all should be included in entrants' proposals.

THE RULES

Entrants to the competition are tasked with designing a mid-rise, single stair building on an open, underdeveloped site of their choosing within the competition boundary. The sites are near the intersection of Broadway and Central Ave. See ‘The Sites’ on page six for more information.

All [local codes and planning requirements](#) should be followed to maximize the impact of this competition and show potential of single stair multifamily design. This competition also allows for the testing of current codes to see if any additional changes need to be made to best suit the new typology. Successful entries will push their designs to integrate all the competition criteria throughout their project. Though no stated budget is given, the best entries will show practical and cost-effective designs that creatively achieve the criteria.

THE PROGRAM

Entries Must:

- All submissions must be 4-6 stories above grade.
- Four dwellings per floor maximum
- All dwelling entries must be within 20’ of the Exit.
- Overall travel distance to the exit is 125’ maximum.
- Dwellings cannot exit directly into interior Egress stairs.
- Keep in mind [construction type](#), [bulk standards for R-2 buildings](#), [fire separation distances](#), and [sprinkler requirements](#) per IBC 2024.
- A sprinkler riser room will be required on the ground floor of each building.
- One elevator and one Type A accessible unit are required within each building.
- Exterior egress stairs are allowed and units may open directly onto them.
- Residents’ egress path cannot pass through

ground floor program OR parking garage
 -Communal amenities are strongly encouraged. The building program is informed by the adopted codes of Knoxville and must conform to them to best show the realistic possibilities of this competition. Ground level public programs like grocery stores, restaurants, retail spaces, etc. may be incorporated as part of your proposal.

Requirements for parking must comply with city planning standards. Downtown Knoxville Zones have no minimum parking requirements, but do have parking maximums outlined in [table 11-2 in Article 11 of the Zoning Code](#). Entrants should be thoughtful about the use of their site and how much parking they provide. End user safety and comfort is a high priority and the final parking strategy will be contingent on which site is selected by the entrant and the access that can be provided.

PLANNING REQUIREMENTS

[Downtown Edge Zone \(DK-E\):](#)

- 85' maximum building height, no minimum. No stepbacks required below 85'.
- Build to Zone: 0'-20', Build To Percentage: 70%. This means that a minimum of 70% of the street facing facade must be within the 0'-20' range.
- No interior side setbacks
- No rear setbacks, unless abutting residential zoning, then 25'.
- 50' maximum between building entrances
- 35' linear feet maximum of blank wall facing streets
- 30% of wall area on ground floor to be transparent; 15% of wall area of upper floors to be transparent
- CMU, Metal Siding (excluding Architectural Wall Panels), Exposed Aggregate Concrete, Plywood Siding, Plastic, Vinyl, and EIFS are prohibited on street facing facades. Architectural metal panels are allowed.

ELIGIBILITY

Everyone is welcome to submit to this competition, not just chapter members. Proposals can be submitted as individuals or as teams of up to 4. It is strongly encouraged for firms to enter, especially those involved with the East Tennessee Chapter of the AIA. Firms may enter several entries, provided no more than 4 people are on each team.

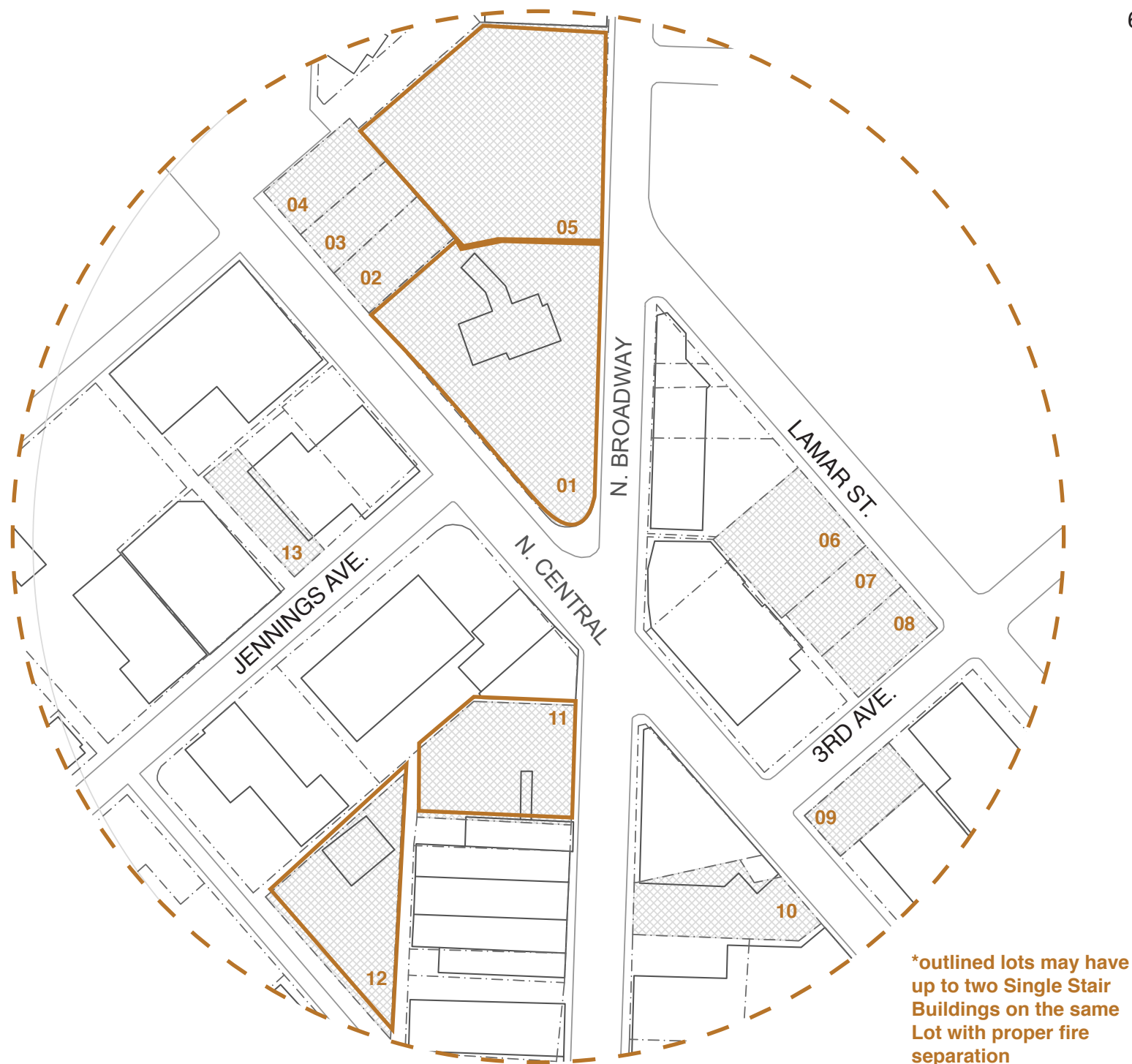
There is no entry fee for this competition.

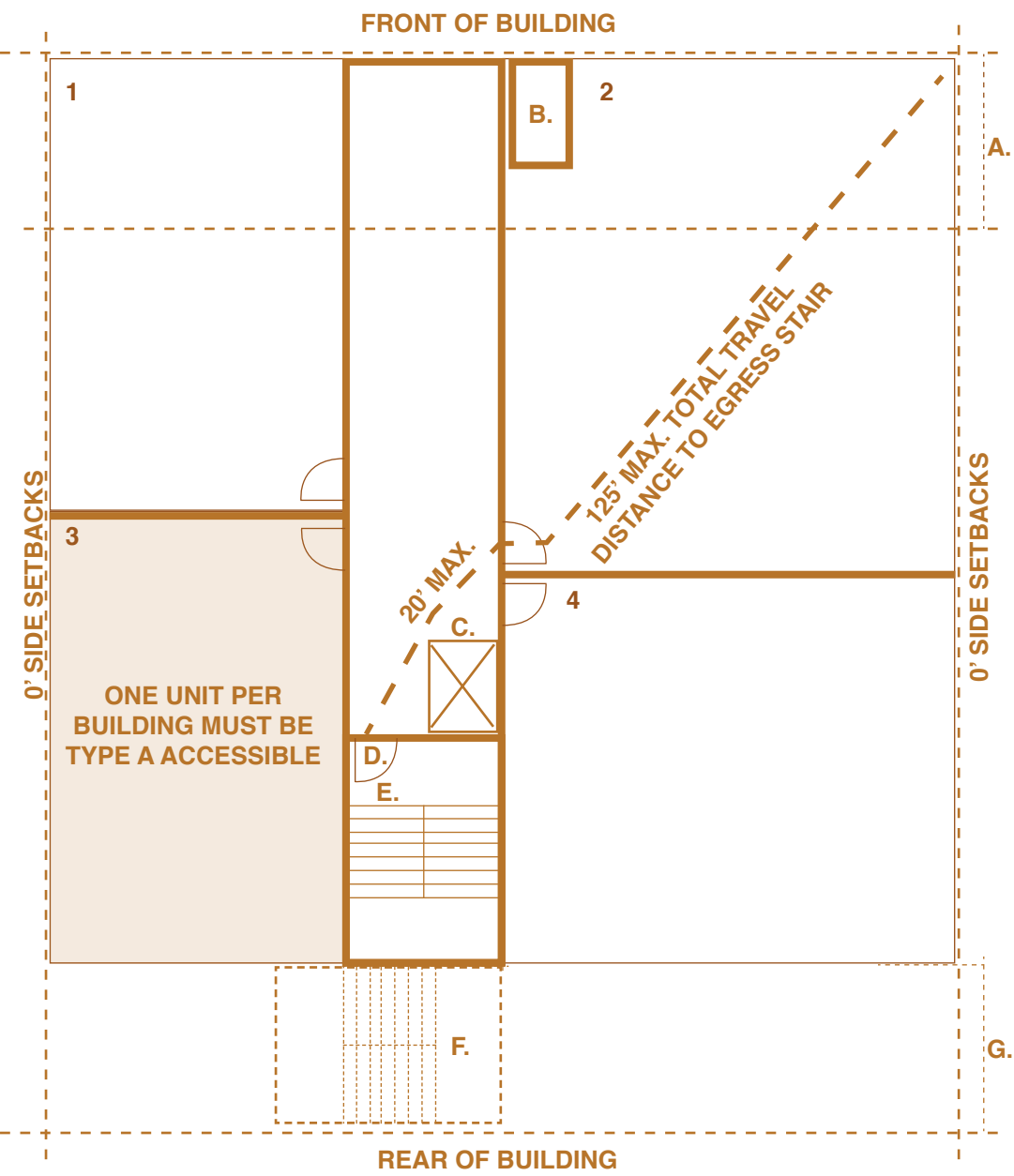
PROVIDED DOCUMENTATION

A PDF and CAD file of the site plan of the competition area are provided for download on the competition web page. A diagram of the design requirements on this project is provided for reference. This diagram is only to illustrate, not to prescribe design solutions and should not be seen as exhaustive or totalizing in all the considerations you will come across during the design process.

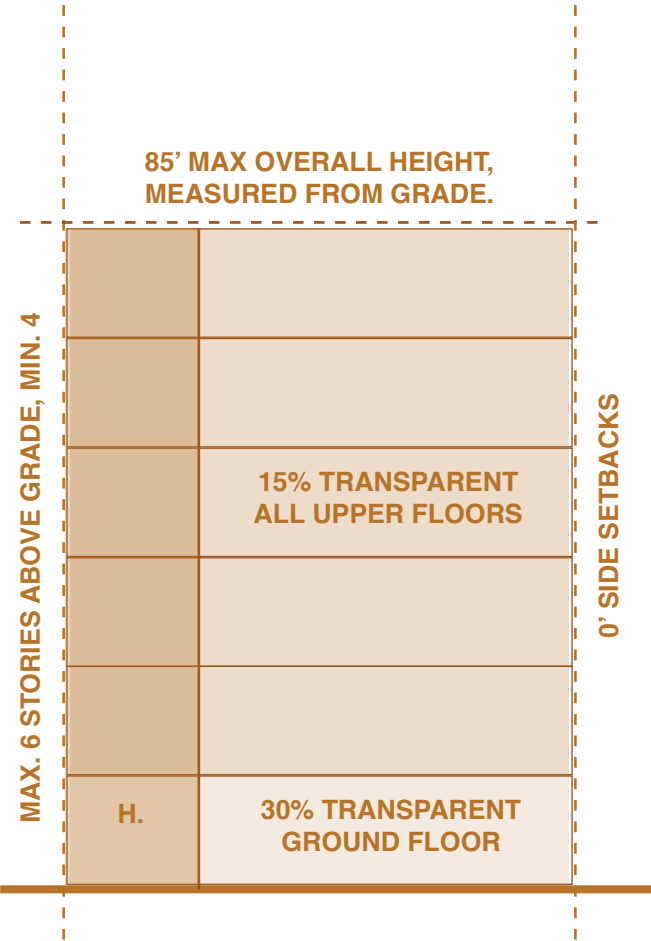
THE SITES

The competition sites are within the Downtown Knoxville Edge zone, with a focus on the intersection of Broadway and Central Ave. There are thirteen sites to choose from. To stay true to the goals of this project, sites are not allowed to be joined to create larger lots. The Downtown Knoxville Edge zone was selected due to its easy access to downtown, public transit, number of underutilized parcels, and amenable planning requirements that allow participants to maximize the height of their designs to 85' above grade. It has the potential to be a highly connected and vibrant community as Knoxville's urban core grows. This area has a Walk Score of 79, a Transit Score of 52, and a Bike Score of 87; all are much higher than Knoxville's average scores. Due to their large size, sites 01, 05, 11, and 12 may have up to *two* single stair buildings on the lot with proper fire separation.





- A. 0-20' BUILD TO LINE, BUILDING FACADE MAY BE ANYWHERE IN THIS ZONE. A MINIMUM 70% OF THE BUILDING FACADE MUST BE WITHIN THIS 0'-20' RANGE.
- B. A SPRINKLER RISER ROOM WILL BE REQUIRED ON THE GROUND FLOOR, APPROXIMATE SIZE 5'X5'.
- C. ONE ELEVATOR PER BUILDING IS REQUIRED
- D. UNITS MAY NOT OPEN DIRECTLY ONTO THE EGRESS STAIR
- E. 48" MIN. EGRESS STAIR WIDTH
- F. EGRESS STAIR MAY BE EXTERIOR, UNITS MAY OPEN DIRECTLY ONTO IT
- G. 0' REAR SETBACKS, UNLESS ABUTTING RESIDENTIAL, THEN 25'.
- H. CMU, METAL SIDING, EXPOSED AGGREGATE CONCRETE, PLYWOOD SIDING, PLASTIC, VINYL, AND EIFS ARE FORBIDDEN ON STREET-FACING FACADES. ARCHITECTURAL METAL PANELS ARE ALLOWED.



SUBMISSION FORMAT

Each entry requires two (2) 24" x 36" panels to display their ideas and building design. These panels shall be displayed in a landscape format, one above the other. Selected finalists are to be recognized and displayed at the 2025 East Tennessee Design Awards Gala and must fit this format. All entries must be in English and conform to Imperial Scale for scaled drawings.

Entrants can use whatever mix of drawings, sketches, diagrams, details, urban plans, elevations, sections, renderings, model photos, or other representations as needed to best share their proposal. Entries will also include a project description that describes your approach, design, key features, issues with the current building code, and challenges you faced while working on your submission. See the AIA East Tennessee website for the upload link that will go live in July. Entries will be given the competition

logo that must be featured on both of their boards. Names, team names, or any identifying information of participants should *not* be included on the boards. Doing so is cause for immediate disqualification.

No video files will be accepted. Artificial Intelligence (AI) of *any kind, whatsoever* is forbidden and your entry will be disqualified if it is found to utilize AI. The use of outside consultants for visualization or documentation of entries is also forbidden. All work for the project should be completed by the members of the assembled team.

A computer cannot know the joy of design, but you can.



24" X 36"

24" X 36"

THE JURY



Brian Phillips, FAIA
ISA

*Creative Director and
Founding Principal*

Philadelphia, PA



Amanda Loper, AIA
David Baker Architects

Founding Principal

Birmingham, AL



Amy Brooks, CPM, AICP
*Knoxville, Knox-County
Planning*

Executive Director

Knoxville, TN



Ted Shelton, FAIA
UTK CoAD and curb

Professor and Co-founder

Knoxville, TN



Tricia Stuth, FAIA
UTK CoAD and curb

Professor and Co-founder

Knoxville, TN

COMPETITION SCHEDULE

Informational Happy Hour and Kickoff
Sanders Pace Architecture
 5:30-6:30

514 W. Jackson Ave.

May 16th

Webpage Goes Live and Submission
 Portal Opens on www.aiaetn.org

May 23th

Virtual Q&A and Check In
May 30th

Virtual Q&A and Check In
July 11th

Submissions Due Online
August 29th

Finalists Announced
September 19th

Finalists Recognized at the 2025 Awards
 Gala
October 2nd

Of the entries, 6 will be selected as finalists
 based on the criteria of the competition.

Finalists will be announced in September,
 before the Awards Gala on October 2nd,
 where the finalists will be displayed publicly.
 Gala Attendees will then vote for the Peoples'
 Choice Winner Entry!

The six finalists boards will be displayed at the
 Awards Gala and People's Choice winner will
 all receive certificates of achievement from
 AIA East Tennessee. All entries' boards will
 be displayed on the AIA ETN Housing ETN's
 webpage for the public to view.



From the 2024 Awards Gala

Source: www.aiaetn.org

HELPFUL READING/VIEWING

<https://www.thenation.com/article/society/single-stair-building-codes-housing/>

<https://www.centerforbuilding.org/blog/nfpas-single-stair-symposium>

<https://www.archpaper.com/2024/04/vancouver-public-architecture-single-stair/>

<https://www.jchs.harvard.edu/blog/how-could-legalizing-mid-rise-single-stair-housing-expand-and-improve-housing-supply>

<https://www.huduser.gov/portal/periodicals/city-scape/vol26num1/ch25.pdf>

<https://www.centerforbuilding.org/>

<https://www.youtube.com/watch?v=r9cp29fBAwg>

Thank you for reading through the competition brief and considering entering.

We're very much looking forward to seeing what everyone creates. Your ingenuity and passion make organizing this competition worth every moment. Together, we can help visualize and make the most of this code change. There's still so much to do to create a better building culture and housing for everyone and this competition is a small step on that path.

Happy Designing!