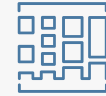


**MISSING
MIDDLE
HOUSING**[About](#)[Market](#)[Characteristics](#)[Assembly](#)[How to Regulate](#)

What's the best way to regulate Missing Middle Housing?

Hint: Conventional Zoning Doesn't Work

Conventional (Euclidean) zoning practice regulates primarily by land use or allowed activities, dividing neighborhoods into single-family residential, multifamily residential, commercial, office, etc. This separation of uses is the antithesis of mixed-use walkable neighborhoods. Along with use, the zones are often defined and controlled by unpredictable numeric values, such as floor area ratio (FAR) and density, which create all sorts of barriers to Missing Middle Housing.

For starters, Missing Middle Housing (MMH) is intended to be part of low-rise residential neighborhoods, which are typically zoned as “single-family residential”

in conventional zoning. However, because MMH contains multiple units, it is, by definition, not allowed in single-family zones. On the other hand, most multifamily zones in conventional codes allow much bigger buildings (taller and wider) and also typically encourage lot aggregation and large suburban garden apartment buildings. The environments created by these zones are not what Missing Middle Housing is intended for.

In addition, density-based zoning doesn't work with the blended densities that are typical in neighborhoods where Missing Middle Housing thrives. MMH are similar in form and scale to detached single-family homes, but because they include more units, they often vary dramatically in their densities, making them impossible to regulate with a density-based system. For example, a bungalow court can have densities of up to 35 dwelling units per acre even though the buildings are only one story tall, because the size of each cottage is only 25 feet by 30 feet. So if a zoning district sets a maximum density of 20 dwelling units per acre, it would not allow the bungalow court type. On the other hand, if the zoning district has a maximum density of 35 dwelling units per acre with few or no additional form standards, every builder/developer will max out a lot with a large, out-of-scale apartment building, rather than building the bungalow court the neighborhood would prefer.

And one more thing: density-based zoning treats all units the same regardless of size. This means that a 3,500-square-foot unit is considered the same as a 600-square-foot unit for calculations such as density, parking and open space, thus discouraging much-needed smaller units. For example, a fourplex with four 600sf units would require four times the parking and open space as a 2,400sf detached single-family home, even though the size of the building is the same, typically making the fourplex infeasible to fit on a typical lot.





This Alameda, CA neighborhood has several Missing Middle housing types on each block.

The Alternative: Form-Based Coding

Form-Based Coding is a proven alternative to conventional zoning that effectively regulates Missing Middle Housing. Form-Based Codes (FBCs) remove barriers and incentivize Missing Middle Housing in appropriate locations in a community.

FBCs represent a paradigm shift in the way that we regulate the built environment, using physical form rather than a separation of uses as the organizing principal, to create predictable, built results and a high-quality public realm.

The Form-Based Approach to Regulating Missing Middle Housing

Regulating Missing Middle Housing starts by defining a range of housing types

appropriate for the community based on the community’s existing physical patterns, climate, and other considerations, as part of the early Community Character Analysis phase of a planning and Form-Based Coding project.






Specific to Building Types

1703-3.30

1703-3.30

Specific to Building Types

Table 1703-3.30.A: Building Types General

Building Type	Transect Zones
 <p>Carriage House. This Building Type is an accessory structure typically located at the rear of a lot. It typically provides either a small residential unit, home office space, or other small commercial or service use that may be above a garage or at ground level. This Type is important for providing affordable housing opportunities and incubating small businesses within walkable neighborhoods.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Detached House: Medium. This Building Type is a medium-sized detached structure on a medium-sized lot that incorporates one unit. It is typically located within a primarily single-family residential neighborhood in a walkable urban setting, potentially near a neighborhood main street.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Detached House: Compact. This Building Type is a small detached structure on a small lot that incorporates one unit. It is typically located within a primarily single-family residential neighborhood in a walkable urban setting, potentially near a neighborhood main street. This Type enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Cottage Court. This Building Type consists of a series of small, detached structures, providing multiple units arranged to define a shared court that is typically perpendicular to the street. The shared court takes the place of a private rear yard and becomes an important community-enhancing element of this Type. This Type is appropriately-scaled to fit within primarily single-family or medium-density neighborhoods. It enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Duplex. This Building Type is a small- to medium-sized structure that consists of two side-by-side or stacked dwelling units, both facing the street and within a single building massing. This Type has the appearance of a medium to large single-family home and is appropriately scaled to fit within primarily single-family neighborhoods or medium-density neighborhoods. It enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>






Key  Allowed  Not Allowed

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Table 1703-3.30.A: Building Types General (continued)

Building Type	Transect Zones
 <p>Rowhouse. This Building Type is a small- to medium-sized typically attached structure that consists of 2–8 Rowhouses placed side-by-side. In a feature unique to Cincinnati, this Type may also occasionally be detached with minimal separations between the buildings. This Type is typically located within medium-density neighborhoods or in a location that transitions from a primarily single-family neighborhood into a neighborhood main street. This Type enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability. Syn: Townhouse</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Multi-plex: Small. This Building Type is a medium structure that consists of 3–6 side-by-side and/or stacked dwelling units, typically with one shared entry or individual entries along the front. This Type has the appearance of a medium-sized family home and is appropriately scaled to fit sparingly within primarily single-family neighborhoods or into medium-density neighborhoods. This Type enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Multi-plex: Large. This Building Type is a medium- to large-sized structure that consists of 7–18 side-by-side and/or stacked dwelling units, typically with one shared entry. This Type is appropriately scaled to fit within medium-density neighborhoods or sparingly within large lot predominantly single-family neighborhoods. This Type enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Stacked Flats. This Building Type is a medium- to large-sized structure that consists of multiple dwelling units accessed from a courtyard or series of courtyards. Each unit may have its own individual entry, or may share a common entry. This Type is appropriately scaled to fit adjacent to neighborhood serving main streets and walkable urban neighborhoods. It enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability. This building type may include a courtyard.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>
 <p>Live/Work. This Building Type is a small to medium-sized attached or detached structure that consists of one dwelling unit above and/or behind a flexible ground floor space that can be used for residential, service, or retail uses. Both the ground-floor flex space and the unit above are owned by one entity. This Type is typically located within medium-density neighborhoods or in a location that transitions from a neighborhood into a neighborhood main street. It is especially appropriate for incubating neighborhood-serving retail and service uses and allowing neighborhood main streets to expand as the market demands.</p>	<div>T3E T3N</div> <div>T4N.MF T4N.SF</div> <div>T5MS T5N.LS</div> <div>T5N.SS T5F</div> <div>T6C</div>

Key  Allowed  Not Allowed

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City of Cincinnati Form-Based Code

A building types page from Cincinnati’s Form-Based Code

Then for each form-based zone, a specific range of housing types is allowed based on the intention for the neighborhood. For example, in a walkable neighborhood, single-family-detached homes, bungalow courts, and side-by-side duplexes may be allowed, or in a slightly more urban walkable neighborhood, bungalow courts, side-by-side duplexes, stacked duplexes, fourplexes, and small multiplexes might be allowed.

T4 Neighborhood Small Footprint (T4N.SF)

1703-2.70 T4 Neighborhood Small Footprint (T4N.SF)



A. Intent

To provide variety of urban housing choices, in small-to-medium footprint, medium-to-high density building types, which reinforce the walkable nature of the neighborhood, support neighborhood-serving retail and service uses adjacent to this Zone, and support public transportation alternatives. The following are generally appropriate form elements in this Zone:

Detached or Attached
Narrow-to-Medium Lot Width
Small-to-Medium Footprint
Building at or Close to ROW
Small to No Side Setbacks
Up to 2½ Stories
Elevated Ground Floor
Primarily with Stoops and Porches

B. Sub-Zone(s)

T4N.SF-Open Zone (T4N.SF-O)

The open sub-zone provides the same building form but allows for a more diverse mix of uses.

General note: The drawing above is intended to provide a brief overview of this Transect Zone and is illustrative only.

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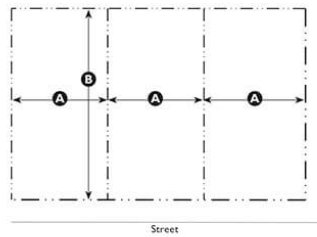
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City of Cincinnati Form-Based Code

A zone from the Cincinnati's Form-Based Code

In addition for each type, there are typically supplemental form standards that are regulated to allow some of the individual aspects of certain MMH types while preventing overbuilding in terms of height and bulk. For example, a bungalow court type typically allows for more units, but has a maximum height of 1–1.5 stories, a maximum building footprint/unit size of around 800 square feet and a minimum size of courtyard. A Form-Based Code can regulate these fine-grained details, such that on a 100' by 100' lot, two fourplexes or a bungalow court with eight small, one-story units could be allowed, but not a single, larger eight-unit apartment building.

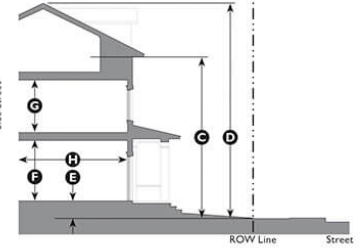


Key

--- ROW / Lot Line

C. Allowed Building Types

Building Type	Lot		Standards
	Width A	Depth B	
Carriage House	n/a	n/a	1703-3.40
Detached House:	30' min.;	75' min.	1703-3.60
Compact	50' max.		
Cottage Court	75' min.;	100' min.	1703-3.70
	100' max.		
Duplex	40' min.;	100' min.	1703-3.80
	75' max.		
Rowhouse	18' min.;	80' min.	1703-3.90
	35' max.		
Multi-Plex: Small	50' min.;	100' min.	1703-3.100
	100' max.		
Live/Work	18' min.;	80' min.	1703-3.130
	35' max.		



Key

--- ROW Line

D. Building Form

Height	
Main Building	
Stories	2½ stories max.
To Eave/Parapet	24' max. C
Overall	35' max. D
Accessory Structure(s)	
Accessory Dwellings	2 stories max.
Other	1 story max.
Ground Floor Finish Level above Sidewalk	18" min. E
Ground Floor Ceiling	F
Service or Retail	12' min.
Upper Floor(s) Ceiling	8' min. G
Ground floor lobbies and common areas in multi-unit buildings may have a 0" to 6" ground floor finish level.	
Footprint	
Depth, Ground-Floor Space	24' min. H
Accessory Structure(s)	
Width	24' max.
Depth	32' max.
Miscellaneous	
Loading docks, overhead doors, and other service entries shall be screened and not be located on primary street facades.	

For these reasons and more, Form-Based Coding is the most effective way to enable Missing Middle Housing.


Next: The Types of Missing Middle Housing...

1703-3.100

Specific to Building Types

1703-3.100

Multi-plex: Small



A Multi-plex, scaled to a medium-density neighborhood, with all units accessed from a central entry

A. Description

The Multi-plex: Small Building Type is a medium structure that consists of 3–6 side-by-side and/or stacked dwelling units, typically with one shared entry or individual entries along the front. This Type has the appearance of a medium-sized family home and is appropriately scaled to fit sparingly within primarily single-family neighborhoods or into medium-density neighborhoods. This Type enables appropriately-scaled, well-designed higher densities and is important for providing a broad choice of housing types and promoting walkability.

T3E

T3N

T4N.MF

T4N.SF

T5MS

T5N.LS

T5N.SS

T5F

T6C

Key

T# Allowed

T# Not Allowed

General Note: Photos on this page are illustrative, not regulatory.

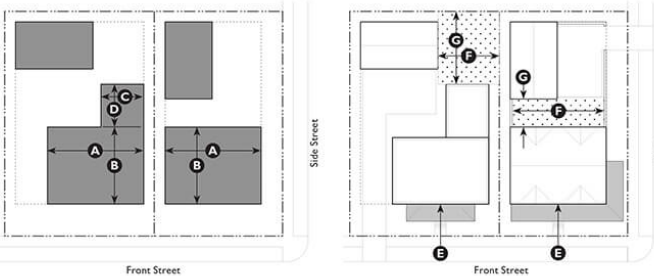
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1703-3.100

Multi-plex: Small



Key

ROW / Lot Line

Building

Setback Line

B. Number of Units

Units per Building

3 min.; 6 max.

Small Multi-plexes per Lot

1 max.

C. Building Size and Massing

Height

Per transect zone standards in Section 1703-2 (Specific to Transect Zones).

Main Body

Width

48' max.

Depth

48' max.

Secondary Wing(s)

Width

30' max.

Depth

30' max.

The footprint area of an accessory structure may not exceed the footprint area of the main body of the building.

D. Allowed Frontage Types

Porch: Engaged

1703-4.60

Porch: Projecting

1703-4.50

Stoop

1703-4.70

E. Pedestrian Access

Main Entrance Location

Front street

Each unit may have an individual entry.

F. Private Open Space

Width

8' min.

Depth

8' min.

Area

100 sf min.

Required street setbacks and driveways shall not be included in the private open space area calculation.

Required private open space shall be located behind the main body of the building.

Key

ROW / Lot Line

Frontage

Setback Line

Private Open Space

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The small multiplex building type from Cincinnati's Form-Based Code

“I want to thank you for your great work on Missing Middle Housing! It has been useful in my current research on policy reforms to support more affordable infill development in Victoria, B.C., and informing my report ‘Affordable Accessible Housing in a Dynamic City.’”

— Todd Litman, Victoria Transport Policy Institute

For more information about Form-Based Codes, see:

- *Form-Based Codes: A Guide to Planners, Urban Designers, Municipalities, and Developers*,
by Daniel Parolek, Karen Parolek, and Paul C. Crawford
- [Form-Based Codes Institute](#)

Form-Based Codes with Building Types to Reference:

- [Cincinnati, OH](#) (And read this [blog post](#) about the project)
- [Mesa, AZ](#) (Article 6: Form-Based Code)
- [Livermore, CA](#)

Or find out about our [Form-Based Coding services](#)

