

Cape Cod Regional Housing Strategy Design Guidelines Visual Glossary



CAPE COD
COMMISSION

utile



ACKNOWLEDGEMENTS

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INTRODUCTION

This Visual Glossary serves as a reference for understanding terminology specific to Cape Cod's unique context. It is intended to aid towns, homeowners, architects, developers, members of the community, and others who are referring to the Cape Cod Multifamily Housing Design Guidelines and Retrofit Guidelines. These are resources intended to inform decision-making processes related to housing production in Cape Cod.

The Cape Cod Multifamily Housing Design Guidelines are meant to extend the unique cultural landscape of Cape Cod into the future, ensure healthy and vibrant spaces, make the Cape more resilient and a contributor to the State's carbon emissions reduction goals, and inspire more predictable built-form outcomes, helping to build support for new housing.

The Retrofit Guidelines include energy efficiency and electrification recommendations for existing residential buildings in Barnstable County. The measures align with the decarbonization goals of the Cape Cod Climate Action Plan and the Commonwealth's Next Generation Roadmap for Climate Policy, which sets a goal of carbon neutral emissions by 2050.

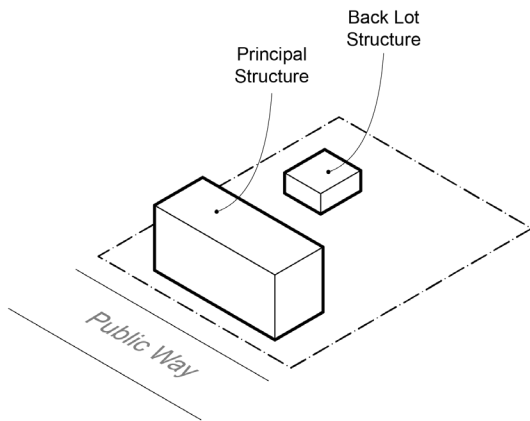
VISUAL GLOSSARY

1. AIR SEALING ↓

A seal that prevents the passage of air or vapor.

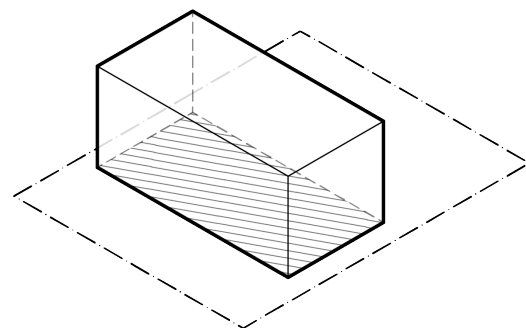
2. BACK LOT STRUCTURE ↓

Any building that does not front a public way or public open space and which is not the most visually prominent building on a parcel when viewed from the primary public way or public open space adjacent to that parcel.



3. BUILDING FOOTPRINT ↓

Area of the largest above grade floor of the building as measured to the exterior faces of the walls, including decks that extend more than 8' from the building face.

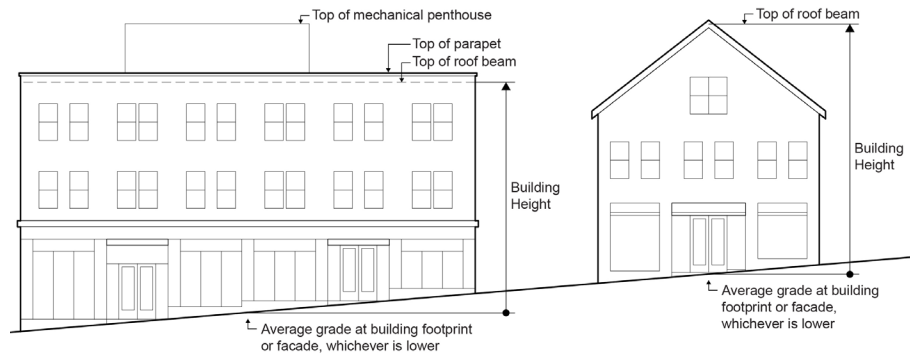


 Building Footprint

4. BUILDING HEIGHT ↓

The vertical distance from the lower of:

- The average grade of the footprint of the building; or
- The average grade at the front of the building to the top of the highest roof beams of a flat or pitched roof.



5. BUILDING ENVELOPE

The physical separator between the conditioned and unconditioned environment of a building including the resistance to air, water, heat, light, and noise transfer.

6. CASEMENT WINDOWS ↓

A window that is attached to its frame by one or more hinges at the side. They are used singly or in pairs within a common frame, in which case they are hinged on the outside.



7. DOUBLE-HUNG WINDOWS ↓

A double-hung window, also commonly referred to as a double-sash window, is a type of window that has two operable sashes that slide up and down.



8. FENESTRATION →

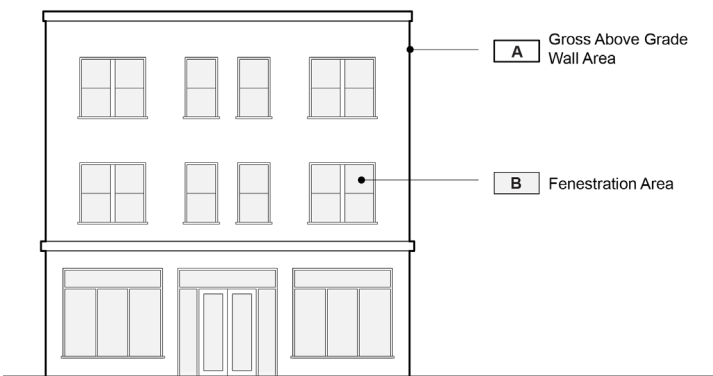
The openings in the facade of a building, including windows and doors.

9. FRONT FACADE →

The exterior wall of a building oriented in whole or in part toward a front lot line.

10. FRONT FACADE WINDOW TO WALL RATIO ↓

The fraction of the above grade wall area that is covered by fenestration, calculated as the ratio of the wall fenestration area to the gross above grade wall area.



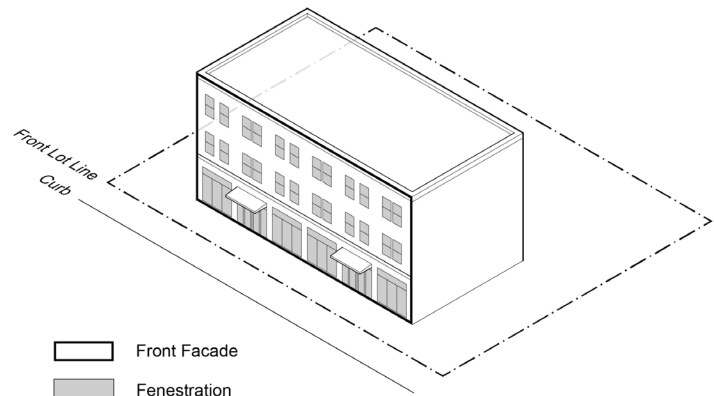
Front Facade Window to Wall Ratio = $\frac{B}{A}$

11. GREENHOUSE GAS EMISSIONS

Gas emissions such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) from burning fossil fuels (coal, oil, and natural gas) that are widely acknowledged to contribute to climate change.

12. INSULATION

Material used in a building to reduce the flow of thermal energy. While the majority of insulation in buildings is for thermal purposes, the term also applies to acoustic insulation, fire insulation, and impact insulation.

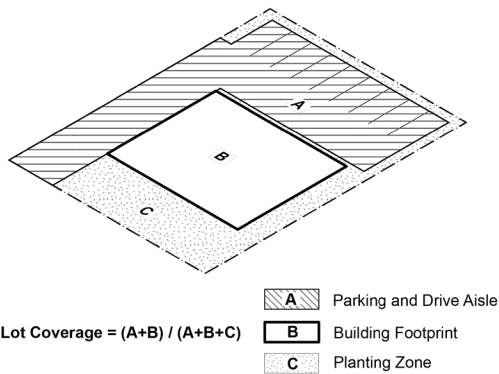


13. LANDSCAPE AREA

The area of a lot covered by any combination of trees, shrubs, perennials, grass or the horticultural elements, decorative stonework, pavers, screening, or other landscape architectural elements, all of which are designed to absorb and filter stormwater runoff, enhance the visual amenity of a property, and/or to provide an amenity for common use by the occupants of a building.

14. LOT COVERAGE ↓

Portions of a development where the land is covered by an impervious surface, such as buildings, roads, driveways, or other paved or hardscaped areas.



15. LOT LINE

The boundary that legally and geometrically demarcates a lot.

16. LOT LINE, FRONT

Any lot line abutting a public way or public park or, in the case of a corner lot, the line abutting the more prominent public way, public park, or open space.

17. LOT LINE, SIDE

Any lot line other than a front or rear lot line.

18. LOT LINE, REAR

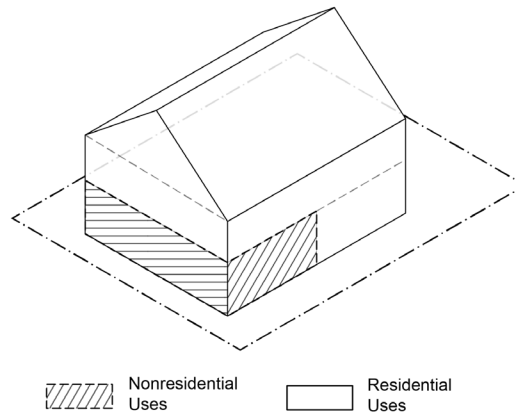
The lot line farthest from or opposite to the front lot line.

19. LOW-FLOW PLUMBING FIXTURES

A water saving plumbing fixture designed to achieve water savings by having a lower flow rate of water or a smaller quantity per flush. Some of these low-flow fixtures are faucets, showerheads, and toilets.

20. MIXED-USE DEVELOPMENT ↓

Development on a single parcel containing a mix of residential uses and nonresidential uses, including commercial, institutional, or other uses.



21. MUNTIN

A strip of wood or metal separating and holding panes of glass in a window. Muntins divide a single window sash or casement into a grid system of small panes of glass, called “lights” or “lites”.

22. PASSIVE HOUSE

A voluntary standard for energy efficiency in a building, which reduces the building’s ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. Passive House certification may be used as an energy code compliance pathway.

23. PRINCIPAL STRUCTURE

The structure which fronts a public way or public open space and that is the most visually prominent building on a parcel when viewed from the primary public way or public open space adjacent to that parcel (see diagram under BACK LOT STRUCTURE).

24. RENEWABLE ENERGY

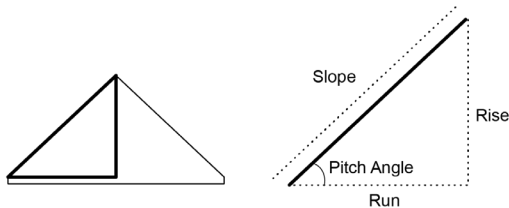
Energy from renewable resources that are naturally replenished on a human timescale. Renewable resources include sunlight, wind, the movement of water, and geothermal heat.

25. RIM JOIST

A structural component of a wood framing system where the exterior wall meets the top of the foundation. This is an area for potential heat loss and air leakage, and one that is often addressed in a comprehensive energy retrofit.

26. ROOF PITCH ↓

Roof pitch is the steepness of a roof expressed as a ratio of inch rise per horizontal 12 inches, or as the angle in degrees its surface deviates from the horizontal.



$$\text{Roof Pitch} = \text{Rise} : \text{Run}$$

27. ROOF DORMER

A roofed structure, often containing a window, that projects vertically beyond the plane of a pitched roof.

28. SCREENING

A visual barrier to conceal loading and parking areas from public view.

29. SETBACK

The distance from a property line to the point on a parcel where a building is located measured at a right angle from the property line to which it relates.

30. SIMULATED DIVIDED LITES (SDL'S)

Unlike a true divided-light window, which has multiple panes of glass that are separated by muntins or grilles, a simulated divided-light window has just one piece of glass with removable muntins attached to both the interior and exterior of the glass, usually with a strong adhesive.

31. SOLAR PV SYSTEM

An electric power system designed to supply usable solar power by means of photovoltaics. It consists of an arrangement of several components, including solar panels to absorb and convert sunlight into electricity, a solar inverter to convert the output from direct to alternating current, as well as mounting, cabling, and other electrical accessories to set up a working system.

32. STORY

The portion of a building located between the surface of a habitable floor and the surface of the habitable floor or roof next above.

33. STORY, GROUND

The lowest story of a building with a finished floor at or above the finished ground level next to a building at the facade.

34. STORY, HALF

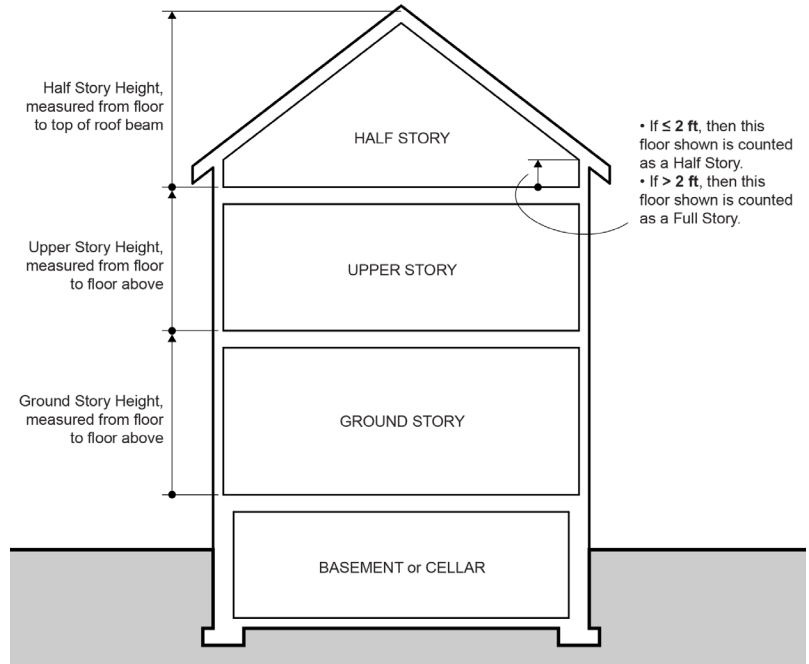
A partial story under a sloping roof, the wall plates of which, on two exterior walls, are not more than two feet above the floor of such partial story.

35. STORY, UPPER →

Any story above the ground story of a building.

36. STRETCH CODE STANDARDS

In Massachusetts, each municipality can adopt one of three levels of building energy code: the Base Code, the Stretch Code, and the Specialized Code. The Stretch Code includes more stringent energy efficiency requirements over the Base Code that focus on cost-effective construction. The Specialized Code requires additional measures to reduce greenhouse gas emissions and make buildings ready for a clean energy future. The Department of Energy Resources (DOER) has more information on these codes, including the code adoption by community, on their website.



37. TILT TURN WINDOWS →

A tilt and turn window can both tilt inwards at the top, or open inwards from hinges at the side. The tilt position provides draft-free ventilation and rain protection. In the turn position, tilt and windows act as casement windows, swinging their full glass area open.

38. WATERSENSE

A program sponsored by the U.S. Environmental Protection Agency, designed to encourage water efficiency in the United States through the use of a special label on consumer products. The goal of this program is to protect the future of the U.S. water supply.

