How is height of residential structures measured?

**Issue Overview**
Most towns specify that building height should be calculated from the finished (post-construction) grade, averaged across all sides of the building. Some municipalities measure the finished grade from the front side only. Some municipalities use the pre-construction or natural grade as a starting point for measuring the height of residential structures. A few municipalities include no specific definition or instructions for measuring height.

**Research Coding**
The researcher usually found the answer in the definition of “height.”

**Abington**
**How is height of residential structures measured?**

According to the Abington Zoning Bylaw, Article II, Section 175-4 (adopted 1962):

"HEIGHT - The vertical distance from the average finished grade of the adjacent ground to the top of the structure or the highest roof beams of a flat roof or the mean level of the highest gable or the slope of a hip roof."

**Acton**
**How is height of residential structures measured?**

From the Code of The Town of Acton
MIDDLESEX COUNTY, MASSACHUSETTS
ZONING BY-LAW
Amended through January 2001

SECTION 5 DIMENSIONAL REGULATIONS
5.2 Methods for Calculating Dimensional Requirements
5.2.7 Height in Feet

5.2.7.1 Height in Feet, STRUCTURES - Height in feet shall be the vertical distance measured from the mean of the finished ground level adjoining the entire STRUCTURE to the highest extension of any part of the STRUCTURE.

5.2.7.2 Height in Feet, BUILDINGS - Height in feet Height In feet shall be the vertical distance measured from (BUILDINGS) the mean of the finished ground level adjoining the entire BUILDING at each exterior wall to the top of the highest roof beams of a flat roof or to the mean level of the highest gable or slope of a hip roof.

**Amesbury**
**How is height of residential structures measured?**

"Height: The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest root beams of a flat roof, or the mean level or the highest gable or slope of a hip roof." - Definitions

Also, in V.I.F. Other General Dimensional and Density Provisions:
"6: The provisions of this Bylaw governing the height of buildings shall not apply to chimneys, elevator bulkheads, skylights, ventilators, electronic equipment, elevator shafts, and other necessary appurtenances usually carried above roof, nor to domes, towers, stacks, or spires, if not used for human occupancy and which occupy not more than 20 percent of the ground floor area of the building; nor to ornamental towers, observation towers, licensed..."
amateur radio station, and other like structures, which do not occupy more than 20 percent of the lot area; nor to churches or public, agricultural, or institutional buildings or buildings or private schools not conducted for profit that are primarily used for school purposes, provided the excepted appurtenances are not located within the flight paths of an airport as defined by F.A.A. regulations."


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**Andover**

*How is height of residential structures measured?*

Code of the Town of Andover Massachusetts, Part II, Article VIII, Section 10 (as amended 2003):

BUILDING HEIGHT: The vertical distance from the grade to the highest point of the roof. When a building faces more than one street, the height shall be measured from the average of the grade at the center line of each street front. See Section 4.1.3.3 for specific exemptions from this definition.

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**Arlington**

*How is height of residential structures measured?*

Zoning Bylaw Town of Arlington, Article II (on Arlington website as of August, 2004) - Definitions

ART. 15, ATM 5/91

Height of Building:

The vertical distance of the highest point of the roof above the average grade of the curb line abutting the property. In the R0, R1 and R2 zoning districts where the lot has a slope in excess of five (5) percent, the height is the vertical distance of the highest point of the roof above the average finished grade of the ground adjoining the building as computed before the building is actually erected. This definition excludes penthouses, bulkheads, and other allowable superstructures above the roof line.

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**Ashland**

*How is height of residential structures measured?*

Ashland Town Bylaws, Chapter 282, Zoning Bylaw, Section 282-99 for building height definition.

The definition of "grade plane" from Ashland Town Bylaws, Chapter 282, Zoning Bylaw, Section 282-99:

"GRADE PLANE A reference plane representing the average of finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than six (6) feet from the building, between the building and a point six (6) feet from the building."

BUILDING HEIGHT The vertical distance from the grade plane to the average height of the highest roof surface.

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**Attleboro**

*How is height of residential structures measured?*

City of Attleboro Zoning Ordinance §17–11.2 DEFINITIONS Height: The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest beams of a flat roof, the deck of a mansard roof or the mean level of the highest gable or slope of a hip roof, or to the highest part of a sign.

[City of Attleboro Zoning Ordinance, last amended November 2002]

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**Auburn**

*How is height of residential structures measured?*
"5.2.7.2 Height in Feet, Buildings – The vertical distance measured from the average elevation of the finished lot grade at the front of the building, to the highest point of the ceiling of the top story in the case of a flat roof; to the deck of a mansard roof; and to the eaves of a gable, hip or gambrel roof."


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**Avon**

*How is height of residential structures measured?*

Section II - Definitions

HEIGHT : The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof, or the beam level of the highest gable or the slope of a hip roof.

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**Ayer**

*How is height of residential structures measured?*


HEIGHT : The vertical dimension measured from the average elevation of the finished lot grade at the front of the building to the highest point of the ceiling of the top story in the case of a flat roof, to the deck of a mansard roof, and to the average height between plate and ridge of a gable, hip or gambrel roof.

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**Bedford**

*How is height of residential structures measured?*

Town of Bedford Zoning Bylaw, Section 6.2.10 (from ordinance.com, updated 2002)

6.2.10 Height

In all Districts, except the Limited Business, Industrial and Industrial Park Districts, no building shall be altered or erected to exceed three (3) stories or thirty-seven (37) feet in height. In the Limited Business District, where the front yard minimum is thirty-five (35) feet, the height shall not exceed three (3) stories or thirty-seven (37) feet; and where the front yard minimum is ten (10) feet, the height shall not exceed two (2) stories or twenty-five (25) feet. In the Industrial and Industrial Park Districts height shall not exceed three (3) stories or forty-two (42) feet. Height is to be measured as the vertical distance from the average ground elevation around the perimeter of the structure to the highest point of a roof or parapet in the case of a flat roof, or to the mean average finished grade between the plate and the ridge in the case of a pitched roof, plus not more than eight (8) feet additional for mechanicals to service the building. (Amended ATM 3/27/00, approved 6/20/00)

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**Bellingham**

*How is height of residential structures measured?*

Section V - Definitions

Building Height

The vertical distance from the mean finished grade of the ground adjoining the building to the highest point of the roof for flat or shed roofs, to the deck line for mansard roofs, and to the mean height between eaves and ridge for gable, hip, and gambrel roofs.

Code of By-Laws, Division II Zoning
http://www.bellinghamma.org/townclerkbylzo.htm
(Revised by Town Clerk 09/2002)
Belmont

How is height of residential structures measured?

Town of Belmont Zoning Bylaws, Section 1.4 (January 20, 2004)

Height, Building - The vertical distance from the average finished grade within 20 feet of the structure on the street side(s) of a building to: - the highest point of the roof or parapet for flat or shed roofs; - the midpoint between the lowest and highest points of the roof for gable, hip and gambrel roofs (upper roof pitch 4” per foot or greater); or - the point of change in roof slope for mansard roofs (upper roof pitch under 4” per foot), provided that no part of a garage shall exceed 15 feet in height and no part of a tool shed, noncommercial greenhouse or similar accessory structure shall exceed 10 feet in height.

Berkley

How is height of residential structures measured?

This town's by-laws do not have any definition of building height.

Berlin

How is height of residential structures measured?

HEIGHT: The vertical dimension measured from the average elevation of the finished lot grade at the front of the building to the highest point of the ceiling of the top story in the case of a flat roof; to the deck of a mansard roof; and to the average height between plate and ridge of a gable, hip, or gambrel roof.

[Town of Berlin Zoning Bylaws - revised through 2004] bylaws obtained from ordinance.com

Beverly

How is height of residential structures measured?

Section 29-2(B)(28) height is defined:

"The vertical distance from the lower of a)the average grade of the footprint of the building, or b)the average grade to the front of the building, to the top of the highest roof beams of a flat or pitched roof."

Note that the building height shall not include, belfries, chimneys, cupolas, domes, flagpoles, flues, monuments, spires, water towers and tanks, air conditioning units, nor to similar structures and mechanical appurtenances placed on roofs, except where such structures are located within an airport approach zone; and provided that no such structures shall be used for human occupancy.

Billerica

How is height of residential structures measured?

GRADE PLANE : A reference plane representing the average of finished ground level adjoining the building or structure at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than six feet from the building, between the building and a point six feet from the building.

HEIGHT : See the definition in the most recent edition of the State Building Code.

**Webmasters Note: The previous definition has been amended as per an update approved at a town meeting held on 10/7/03.
**Blackstone**  
*How is height of residential structures measured?*

ARTICLE V Definitions and Word Usage  
Section 123-24. Definitions and word usage.  
BUILDING HEIGHT: The vertical distance from the mean finished grade of the ground adjoining the building to the highest point of the roof for flat or shed roofs, to the deck line for mansard roofs, and to the mean height between eaves and ridge for gable, hip, and gambrel roofs. [Amended by 11-8-99 STM, Art 19]

Zoning Bylaw for Town of Blackstone, MA (last updated 5/28/2002) at: www.ordinance.com

**Bolton**  
*How is height of residential structures measured?*

2.3.5.6 Building Height  
This bylaw is intended to limit new commercial, business or industrial buildings to a maximum of two stories, plus a basement, with either a flat or a pitched roof.  
All buildings, except residential and agricultural uses, shall meet the following height limitations:  
(a) The surface of the top occupiable floor, including mezzanines and balconies, shall be no more than fifteen (15) feet above the average ground elevation. Occupiable space as defined and as set forth in the State Building Code shall be the definitive standard of this bylaw.  
(b) The highest portion of the roof, excluding spires, steeples, chimneys and antenna, shall be no more than thirty-two (32) feet above the average ground elevation.  
The average ground elevation to be used in the above calculations shall be the lower of the average ground elevation on the street side of the building, or the average ground elevation on all sides of the building. In the case of built-up land, the ground elevations prior to such change in contour shall be used.  

(Town of Bolton Bylaws, May 2004)

**Boxborough**  
*How is height of residential structures measured?*

Boxborough Zoning Bylaw (Adopted 1965, Amended 2004)  
Article VI, 6200  
Building Height shall mean the vertical distance measured from the average finished grade at its point of intersection with the front wall of the building to the point specified below for the particular roof type; provided, however, that no measurement to said point below, taken vertically from any point at finished grade along the foundation wall, shall exceed the building height by greater than ten (10) feet. Building height shall be measured to the:  
a. Highest point of the roof of a flat roof;  
b. Point one-half way between the junction of the top of the roof and the extension of the exterior wall, and the top of the ridge line of a gable or hip roof; provided that when the roof slope is greater than a ratio of one foot vertical to one foot horizontal, the measurement shall be taken at a point two-thirds of the way up;  
c. Point one-half way between the intersection of the lower slope with the upper slope and the ridge line or top of a mansard or gambrel roof; or  
d. Point two-thirds of the distance up from the sill, plate or exterior wall extended to the top of the roof at that point, and the top of the ridge of a french roof or an A-frame roof.

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*Information collected in 2004*  
Pioneer Institute for Public Policy Research  
www.pioneerinstitute.org
**Boxford**

*How is height of residential structures measured?*

ARTICLE VI Development Regulations
Building height shall be measured as the vertical distance from the average elevations of the finished lot grade at the front of the building to the highest point of the top story in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof.

**Boylston**

*How is height of residential structures measured?*

Zoning Bylaws Town of Boylston Section 1.04.8 Definitions: BUILDING HEIGHT
The vertical distance measured from the point of average ground elevation on the foundation to the point of the horizontal projection of the highest point of the building or structure.

[Zoning Bylaws Town of Boylston - October 2004]

**Braintree**

*How is height of residential structures measured?*

Zoning Bylaw Town of Braintree, Section 135-102 DEFINITIONS, (From Ordinance.com, Last updated 2003)
HEIGHT OF BUILDING OR STRUCTURE For buildings, the vertical distance above the mean finished grade ten feet out from each face of the building to the highest point of the roof beams or trusses of a flat roof or to the top of the rafters at the ridge of a sloping roof; for other structures, the vertical distance above the mean finished grade ten feet out from each face of the structure to the topmost part of the structure.

**Bridgewater**

*How is height of residential structures measured?*

Bridgewater Zoning Bylaw
Maximum Building heights across districts (8.40 Land Space Requirements Table):
3 Story (35 feet) for Residential Districts A/B, C, and D, Central Business District, and Business District B. 40 feet for South Business District, and Industrial Districts A and B.

2.44 STORY - That portion of a building contained between any floor and the floor or roof next above it, but not including any portion so contained if more than one-half of such portion vertically is below the average finished grade of the ground adjoining such building.

2.45 HALF-STORY - That portion of a building next beneath a sloping roof and in which there are less than four feet vertically between the top of the floor and the intersection of the bottoms of the rafters with the interior faces of the walls.

Section 8
4. These height restrictions shall not apply to chimneys, water towers, skylights and other necessary features appurtenant to buildings which are usually carried above roofs and are not used for human occupancy nor to wireless or broadcasting towers and other like unenclosed structures, may also be of greater height if so authorized by special permit from the Planning Board and provided said greater height, including any features attached thereto, will be less than two hundred (200) feet. Amended 12/9/95, Amended 11/12/96

10. Height restrictions for apartment usage may be varied by special permit.

**Brockton**

*How is height of residential structures measured?*

*Information collected in 2004*
**Brookline**

**How is height of residential structures measured?**

2. HEIGHT OF BUILDING—The vertical distance of the highest point of the roof beams in the case of a flat roof, or of the top of the rafters at the ridge in the case of a sloping roof, above the level specified in Article V, §5.30.

Town of Brookline Zoning Bylaw HEIGHT OF BUILDING REGULATIONS, Section §5.30 - MAXIMUM HEIGHT OF BUILDINGS

Where a maximum height of buildings is specified in Table 5.01 no building or part of a building shall exceed the number of feet in height, except as permitted in §§ 5.31 and 5.32. Height shall be measured as follows:

1. Where the lot abuts other lots to the rear which are subject to the same or less restrictive height limitations:
   a. Height shall be measured from the record grade of the street opposite the midpoint of the street frontage of the lot, or, if a corner lot, of the street frontage having the lower record grade.
   b. Where the grade of the natural ground contiguous to the building is higher than said record grade, height may be measured from the mean grade of said natural grade, except if said mean grade is higher than the mean natural grade of any abutting lot at the lot line.

addock

3. WHERE THE LOT ABUTS OTHER LOTS TO THE REAR WHICH ARE SUBJECT TO MORE RESTRICTIVE HEIGHT LIMITATIONS:

   a. For a building or buildings on a lot not more than 160 feet in any dimension:
      1) Height shall be measured from the record grade of the street opposite the midpoint of the street frontage of the lot, or, if a corner lot, of the street frontage having the lower record grade.

**Burlington**

**How is height of residential structures measured?**

The Zoning Bylaws of the Town of Burlington, Section 2.13 (Adopted 1977, Amended 2003)

2.13 Building Height

The vertical distance measured from the mean finished grade of the ground adjoining the building to the highest point of the roof for flat roofs, to the deck line of mansard roofs, and to the mean height between eaves and ridges, for gable, hip and gambrel roofs. This definition excludes penthouses, bulkheads and other allowable super-structures above the roof line.

**Cambridge**

**How is height of residential structures measured?**

From Section 2.00 of the City of Cambridge's Zoning Ordinance:

"HEIGHT OF BUILDING: The vertical distance of the highest point of the roof above the mean grade of the ground adjoining the building."
Canton

**How is height of residential structures measured?**


4.42 Height Determination of Structures and Buildings 97

4.42.1 When located on the ground, the maximum height of structure other than buildings, shall be the highest point on the structure and shall not exceed the maximum height for buildings in feet as set forth in Section 4.41. Structures may be located in a required front, rear or side yard provided the height of the structure is not greater than its horizontal distance from the lot line, except that a fence or wall not greater than seven (7) feet in height may be located on, or closer to a lot line than seven (7) feet.

4.42.2 Structures erected on a building and not used for human occupancy, such as chimneys, heating, ventilating or air conditioning equipment, solar or photo-voltaic panels, elevator housings, antennas, skylights, cupolas, spires and the like may exceed the maximum height of building in feet provided that no part of the structure is more than fifteen (15) feet higher than the upper elevation of the building and the total horizontal coverage of such structures on the building does not exceed twenty-five (25) percent.

4.42.3 Maximum building height shall be measured as set forth in the Building Code of the Town of Canton.

Carlisle

**How is height of residential structures measured?**

From the Town of Carlisle Zoning Bylaw, Section 4.6.

In all districts, no building shall be erected or altered so as to contain more than two and one-half (2 1/2) stories or to exceed more than forty (40) feet in height.

However, where the setback of the building from the street and the minimum distance of the building from each lot line all exceed the minimum distances required above by at least ten (10) feet, said building may be erected or altered to contain three (3) stories and to have a height of not over forty-five (45) feet.

The height in each case shall be measured vertically from the average finished grade of the ground adjoining such building to the highest point of the roof thereof.

Carver

**How is height of residential structures measured?**


ARTICLE VI. DEFINITIONS.

Building Height – shall mean the vertical distance from the mean finish grade of the ground adjoining the building at the street side to the highest point of the ridge.

Chelmsfor

**How is height of residential structures measured?**
ARTICLE XX Terminology
Section 195-108. Word usage and definitions.

BUILDING HEIGHT - The vertical distance measured from the mean finished grade of all sides of the building or structures to the highest point of the roof for flat roofs, to the deck line for mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs. Not included are spires, cupolas, antennas or similar parts of structures that do not enclose potentially habitable floor space. (Amended 10-21-1999 ATM by Art 29]

Chelsea

How is height of residential structures measured?

BUILDING HEIGHT: For the purpose of this ordinance, the height of any building shall be the vertical distance from the mean finished grade of the building to the highest point of the top story (in the case of a flat roof) or to the mean distance between the plate and the ridge (in the case of a pitched roof). (See Section 4.3.10 for special permits from height regulations.)

Clinton

How is height of residential structures measured?

Town of Clinton Zoning Bylaws (Amended 2001)

BUILDING HEIGHT The height of the building shall be the vertical distance measured from the mean level of the established grade at the building to the highest point of the roof When a building faces more than one street, the height shall be measured from the average of the grade at the center line of each street front Not included are spires, cupolas, antennae, or similar parts of structures which do not enclose potentially habitable floor space

HEIGHT, BUILDING Height shall be measured as the vertical distance from the average ground elevation around the exterior walls of the structure to the highest point of the top story in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof provided that the ridge of a pitched roof shall not be higher than 130% of the stipulated height for the district

Cohasset

How is height of residential structures measured?

As listed in the Town of Cohasset Zoning Bylaw, Section 2.1 (Adopted 1978, Last Amended 2003).

HEIGHT The vertical distance above the mean level of the ground within ten (10) feet of the outside walls of the structure to the top of the parapet or to the top of the mainroof surface, whichever is higher, on a flat roof; or for a sloped roof, to the midpoint of the main and/or other roofs, including without limitation, those of additions, ells, sheds, and dormers. The midpoint shall be half the distance from the plateline to the ridgeline measured over the outer surface of the roof boarding. The limitations of this clause shall not apply to projections not used for human habitation where the greatest section of which does not exceed five percent (5%) of the roof area, including without limitation chimneys, antennas, or cupolas.

Concord

How is height of residential structures measured?

Town of Concord Zoning Bylaw, Section 6.2.11 (Adopted 1977, Amended 2003).

Height: The height of a building shall be measured as the vertical distance from the mean ground level of each side of the building to either the highest point of the exterior in the case of a flat roof or to the mean average finished grade between the plate and the ridge in the case of a pitched roof. Chimneys, spires, towers, and other projections not used for human
occupancy or storage may extend above the height limits herein fixed.

**Danvers**

*How is height of residential structures measured?*

According to the definitions in the Town of Danvers Zoning By-laws, Section 40 (Adopted 1987, Amended 2003):

"Height of a Building: A vertical distance measured from the existing base elevation, at the time of the building permit application, to the top of the highest roof beams of a flat roof or to the mean level of the highest gable or slope of a hip roof. The grade plane is a reference plane representing the average of the finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest point within the area between the building and the lot line or, where a lot line is more than six (6) feet from the building, between the building and a point six (6) feet from the building. For the purpose of the Bylaw, the following shall be exempt from height limitations: church spires, chimneys, radio and television antennae, wireless communication link (except as regulated in specific districts in the Zoning Bylaw), flagpoles, water tanks, mechanical equipment, stairwells, and structures which are strictly ornamental in nature."

**Dedham**

*How is height of residential structures measured?*

According to the Town of Dedham Bylaw, SECTION V HEIGHT AND DIMENSIONAL REQUIREMENTS  V-1 HEIGHT OF BUILDINGS AND STRUCTURES

A. Buildings Permitted in Residence Districts

Dwellings shall not exceed the height of 38 feet to the high point of a hip, gable, or gambrel roof, or 30 feet to the high point on a flat or mansard roof, measured from the average finished grade of the lot between the frontage street and the rear building line. Other buildings permitted as of right or by special permit in residence districts shall not exceed the height of 38 feet, measured in the same manner.

**Dighton**

*How is height of residential structures measured?*

"BUILDING HEIGHT : The vertical distance from the grade to the highest point of the roof. When a building faces more than one street, the height shall be measured from the average of the grade at the centerline of each street front. Not included are spires, cupolas, antennae, or similar parts of structures, which do not enclose potentially habitable floor space."

From the Town of Dighton's Zoning Bylaw, Section VI

**Douglas**

*How is height of residential structures measured?*

The town's old by-laws, which are posted on ordinance.com define building height as:

N. BUILDING HEIGHT : The vertical distance measured from the mean finished grade of the ground adjoining the building, or the lowest finished grade under sloping conditions as outlined in Section 3, "Sloping Conditions", hereof to the highest point of the roof for flat roofs, to the deck line on mansard roofs, and to the mean height between eaves and ridge for gable, hip, and gambrel roofs.

**Dover**

*How is height of residential structures measured?*

Note to the Code of the Town of Dover, Part III, Chapter 185, Table of Dimensional Regulations.
Dracut  

**How is height of residential structures measured?**

Dracut Zoning Bylaw

2.12.48 Height in Feet, Buildings Height in feet shall be the vertical distance measured from the mean of the finished ground level adjoining the entire building at each exterior wall to the top of the highest roof beams of a flat roof or to the mean level of the highest gable or slope of a hip roof. In all district's appurtenant structures located upon the roof of a building may extend above the height limit but in no case shall they exceed 100 feet in height when combined with the height of the building nor in the aggregate occupy more than 20% of the roof plan area unless authorized by special permit from the special Permit Granting Authority as designated for the principal use as per section 2.11.30 of this By-law or by the Planning Board if the principal use does not require a special permit. (See Figure 6)

2.11.20

Figure 6 Measuring Buildings
A drawing explains how height is calculated using mean finished ground level and finished ground level.

Maximum building height (lin. feet) is 36 in R-1, R-2, R-3, B-1, B-2 (all not to exceed 2 1/2 stories) and 40 in B-3, B-5 (not to exceed 3 stories) and 45 in B4 (not to exceed 3 1/2 stories) and 65 in I1, I2 (not to exceed 5 stories).

Dunstable  

**How is height of residential structures measured?**

“11.2. Height.
11.2.1. Height shall be measured as the vertical distance from the average ground elevation around the exterior walls of the structure to the highest point of the top story in the case of flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof, provided that the ridge of a pitched roof shall not be higher than one hundred thirty (130%) percent of the stipulated height for the district.
11.2.2. In determining the height of a building, any floor level shall be counted as a story if it is to be used in part for sleeping rooms, or if it is higher than three (3’) feet below the average ground level around the exterior walls of the structure. Limitations of height relative to buildings shall not apply to radio and television towers, nor to chimneys, ventilators, skylights, spires, tanks, antennas, solar panels, or other features of such building usually carried above roofs; provided that in a residential district such features are in no way used for living purposes; and provided further that in no case shall the height of any such feature be greater than the distance between its base and any lot boundary.”


Duxbury  

**How is height of residential structures measured?**

Town of Duxbury, MA Zoning ByLaws, March 2003

302 Definitions

Building Height
The vertical distance from the average finished grade within twenty feet of the structure on the street (frontage) side of a building to:
1. the highest point of the roof or parapet for flat or shed roofs, or
2. the midpoint between the lowest and highest points of the roof for gable, hip and gambrel roofs, or
3. the deck line for mansard roofs (with upper slope under four inches per foot), and provided that at no point shall an exterior wall exceed the permitted heights by more than twelve feet. See Drawing in Section 300
**East Bridge**  
*How is height of residential structures measured?*

According to Robert Lundberg, building inspector in East Bridgewater, (7/20/04) building height is calculated from the ground to the ridge. Researcher did not locate any further definition in the bylaw.

**Easton**  
*How is height of residential structures measured?*

Easton Zoning Bylaw, Section II Definitions (adopted 1967).

HEIGHT The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof, or the mean level of the highest gable or the slope of a hip roof.

**Essex**  
*How is height of residential structures measured?*

The Land Use Ordinance of Essex  
ESSEX COUNTY, MASSACHUSETTS  
Zoning by-laws of the Town of Essex  

6-3 DEFINITIONS.  
6-3.1 GENERAL.

6-3.10 BUILDING HEIGHT. The vertical height from the sidewalk or finished grade at the center of the front of the building to the highest point of the roof surface, if a flat roof; to the deck line for mansard roofs; and to the mean height between eaves and ridges for gables, hip, and gambrel roofs.

**Everett**  
*How is height of residential structures measured?*

The Land Use Ordinance of Everett  
MIDDLESEX COUNTY, MASSACHUSETTS  
ZONING ORDINANCE  
Section 2. Definitions.

The HEIGHT OF A BUILDING OR STRUCTURE shall be measured from the curb level the center of the front of the building, or where not adjoining the street, from the average natural ground level adjoining the building, up to the highest level of the highest main roof thereon. No story shall be deemed a first story if its floor level is more than nine (9) feet above the ground.

**Foxborough**  
*How is height of residential structures measured?*

HEIGHT, BUILDING : The vertical distance from either the sill elevation of a structure without a basement or cellar, or from the finished basement or cellar floor level of a structure with a basement or cellar to, the highest point of the top story in the case of a flat roof, or to the mean height between the top plate and the highest peak in the case of a building with a pitched roof, such highest point of the top story or mean height between the top plate and the highest peak hereinafter being referred to as the "High Point" of the structure. (Art. 3, 12/6/99 STM)
**Framingham**

*How is height of residential structures measured?*

Town of Framingham  
IV. SPECIAL REGULATIONS  
G. Dimensional Regulations  
7. Building Height and Bulk Regulations  

a. Maximum Height Requirement  
Where a maximum height of buildings is specified in Section IV.G.2., no building or part of a building shall exceed the specified number of stories and furthermore, no building or part of a building shall exceed the specified feet above average finished grade, except as permitted hereinafter.

b. Exceptions to Maximum Height Requirement  
1. The maximum height requirement specified in Section IV.G.2. shall not apply to accessory structures or appurtenances normally built above the roof level and necessary for the operation of the building or use. Such structures shall not be intended for human occupancy, and shall be erected only to serve the purpose for which they are intended. Except for chimneys and penthouses for stairways and mechanical installations, no such accessory structure or appurtenance shall exceed a height of 80 feet from the average grade.

2. Steeples, monuments and towers not used for communication purposes and not intended for occupancy may be erected to a greater height than specified by Section IV.G.2 if a special permit is granted by the Zoning Board of Appeals after a public hearing.

**Franklin**

*How is height of residential structures measured?*

BUILDING HEIGHT - The vertical distance, in feet, from the average finished exterior grade on the street side of a building to the highest point of the roof or parapet for flat or shed roofs, to the deckline for mansard roofs and to the mean height between the eaves and ridge for gable, hip and gambrel roofs, provided that at no point shall an exterior wall exceed the permitted height by more than 10 feet. Height limitations shall not apply to chimneys, spires, cupolas, television antennas or other parts of structures which do not enclose potentially habitable floor space.

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§185-32. Foundation grading.  
[Amended 4-20-1994 by Bylaw Amendment 94-254]  
A. The street side portion of the top of any foundation wall within 125 feet of a street right-of-way shall be 12 inches or more above the higher of the top of the curb or the crown of the road at its nearest point of the foundation unless the Building Commissioner certifies, either by a separate certificate or by issuance of a building permit, that, in his professional opinion, the grading and/or drainage for the site as proposed on the certified site plan submitted with the building permit application is designed to minimize the potential for flooding of the space(s) inside the foundation. The "street side portion," as used in this subsection, shall mean the portion of the foundation wall which supports the portion of the building where the front entrance thereto is located, provided that said portion of the foundation and front entrance faces a street right-of-way."

**Freetown**

*How is height of residential structures measured?*

No reference to how height is measured in the zoning bylaw.

**Georgetown**

*How is height of residential structures measured?*

Georgetown Zoning Bylaw, Chapter 165, last revised 2002
Gloucester  

*How is height of residential structures measured?*

City of Gloucester Zoning Ordinance (Adopted 1950, Amended 2002)

Section 6: Definitions

Building Height: The vertical distance measured from the average grade prior to building construction to the highest point of the roof assembly (including parapets) in the case of a flat roof, or to the highest point of the peak or ridge in the case of a sloping roof. The average grade prior to building construction is established by determining the evaluation of the building at all of its corners and deriving the average thereof. Included in the determination of height are widow walks and any towers or cupolas that are more than 4 feet wide and 4 feet tall. The average grade prior to building construction is established by determining the elevation of the building at all its corners and deriving the average thereof. Not included in the limitation are accessory features such as chimneys, skylights, television antennae and building mechanicals in commercial construction. (Amended 10/12/99)

Grafton  

*How is height of residential structures measured?*

Town of Grafton Zoning Bylaw, Amended 2003

Section 2.1: Definitions - Uses and Structures

Height of Building: The vertical distance from grade, which is the average finished ground level, to the top of the highest roof beams of a flat roof or to the mean level of the highest gables or highest point of a hip, pitch, or sloped roof. When a building faces on more than one street, the height shall be measured from the average of the grades at the center of each street front.

Groton  

*How is height of residential structures measured?*

Town of Groton Zoning Bylaw, Chapter 218 (Adopted and Amended 1987)

~ 218-4. Definitions.

BUILDING HEIGHT -- Measured at the vertical distance from the average elevation of the finished lot grade at the front of the building to the highest point of the top story in the case of a roof and to the ridge in the case of a pitched roof.

Groveland  

*How is height of residential structures measured?*

Groveland Zoning Bylaw (Adopted 1996)

APPENDIX B. DEFINITIONS

BUILDING HEIGHT. The vertical distance measured from the mean finished grade of the ground adjoining the building to the highest point of the roof for flat roofs, to the deck line of mansard roofs, and to the mean height between eaves and ridge, for gable, hip and gambrel roofs.
Halifax  

**How is height of residential structures measured?**

HEIGHT: The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof or the elevation of the highest gable.

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Hamilton  

**How is height of residential structures measured?**

SECTION VI. DEVELOPMENT REGULATION  
(See also Sec. I, "Purposes", Items A and B)

A. Height Regulations,

1. The height of any structure shall not exceed thirty-five (36) feet or not in excess of three stories.

2. Building height shall be measured as the vertical distance from the average elevation of the finished lot grade at the front of the building to the highest point of the top story in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof.

3. Each story shall be deemed to be the portion of a building being between the upper surface of any floor and the upper surface of the floor next above, having more than one-half of its height above the average elevation of the finished grade adjoining the building, provided that any part of a building between the topmost floor and the roof shall be deemed a half-story.

4. Limitation of height shall not apply to such structures as churches, belfries, flagpoles, chimneys, radio and television antennae, windmills, silos, water tanks and similar non-habitable structures. See Section V1.1 for height regulations for windmills.

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Hanover  

**How is height of residential structures measured?**

The Land Use Ordinance of Hanover (Town of)  
PLYMOUTH COUNTY, MASSACHUSETTS  
ZONING BY-LAW

SECTION 7 DIMENSIONAL REGULATIONS

7.100 Height Regulations:

7.110 The height of any building or structure shall not exceed thirty-five (35) feet at any face measured from the average grade for each such face, and shall not exceed three (3) stories above the average grade at the foundation lines.

7.120 Limitations of height shall not apply to spires, domes, steeples, radio towers, chimneys, broadcasting and television antennae, bulkheads, cooling towers, ventilators and other appurtenances usually carried above the roof, or to farm buildings, churches and municipal or institutional buildings, provided that for uses which require a Special Permit and/or Site Plan Approval, such has been so granted in accordance with the provisions of this By-Law.

7.130 Heights defined in Sections 7.110 and 7.120 shall not exceed the limits defined by Chapter 756 of the Massachusetts General Laws of 1960 and any more restrictive amendments thereto.

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Hanson  

**How is height of residential structures measured?**

Town of Hanson Zoning Bylaw  
SECTION II Definitions

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*Information collected in 2004*  
Pioneer Institute for Public Policy Research  
www.pioneerinstitute.org
E.1. BUILDING HEIGHT: The vertical distance from the mean finish grade of the ground adjoining the building to the highest point of the roof or parapet for flat or shed roofs, to the deck line for mansard roofs, and to the mean height between eaves and ridge for gable, hip, and gambrel roofs. Not included are spires, cupolas, TV antennae, or other parts of structures which do not enclose potentially habitable floor space.

Harvard

How is height of residential structures measured?

CODE OF THE TOWN OF HARVARD v2 (Updated 2004)

§ 125-30. Land-structure relations.
C. Height. The height of a building, other than a church, above average grade shall be less than three stories and less than 35 feet. For purposes of this provision, silos, and chimneys, ventilators, antennas (except for wireless communications towers and antennas), spires, and similar unoccupied projections above the roof are not included in building height. [Amended 6-19-1997 STM by Art. 6]

STORY A building level for human occupancy. The volume of a level directly below a sloping roof, or the above-grade volume of a level partly below grade, counts as a fractional story. Such fraction is the ratio of said volume to the volume of the adjacent story. "For human occupancy" includes usable for, designed for, or intended for such occupancy. [Added 3-4-1972 ATM by Art. 46]

Haverhill

How is height of residential structures measured?

City of Haverhill Zoning Ordinance

255-5 Definitions
HEIGHT - The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beam of a flat roof, the deck of a mansard roof or the mean level of a roof style such as a gable, hip, shed, gambrel, pyramid or similar roof.

Hingham

How is height of residential structures measured?

Mary Jean Shultz said (6/23/04) that height is based on attic and basement requirements in the Town of Hingham Zoning Bylaw, Definitions (Revised 2003).

"Attic, Habitable
an attic in which the ceiling area at a height of 7 1/3 feet above the attic floor is not less than one-third the area of the floor next
attic constitutes a story for the purposes of this By-Law."

"Basement
the lowest portion of the building, any part of which lies below the natural
grade. A basement shall constitute a story when more than 60% of the wall
surfaces enclosing it lie above the natural grade."

Holbrook

How is height of residential structures measured?

The height requirement in section 9.4 LAND SPACE REQUIREMENTS TABLE is specified in terms of stories.
Definitions:

STORY. That portion of a building contained between any floor and the floor or roof next above it, but not including any portion so contained if more than one-half of such portion vertically is below the average finished grade of the ground adjoining such building.

HALF STORY. That portion of a building next beneath a sloping roof and in which there are less than four feet vertically between the top of the floor and the intersection of the bottoms of the rafters with the interior faces of the walls.

Holden

_How is height of residential structures measured?_


Definitions Section II.

HEIGHT: The vertical distance from the adjacent ground to the top of the structure of the highest roof beams of a flat roof, the mean level of the highest gable or slope of a hip roof, or the mean level of the top plate and the peak of a gambrel, mansard, or A-frame roof. In determining the height of a building, the mean finished grade contiguous to the building shall be used. In no case shall the height of the peak exceed forty (40) feet as measured from the mean finished grade contiguous to the building.

Holliston

_How is height of residential structures measured?_

Town of Holliston Zoning By-law, Section V-G (as amended 2004).

In the Apartment District, building height is measured as follows: Building Height - The vertical distance measured from the mean finished grade of the ground adjoining the building; or the lowest finished grade under sloping conditions described in sub-section 4.p. hereof; to the highest point of the roof for flat roofs, to the deck line of mansard roofs and to the mean height between the eaves and ridge, for gable, hip and gambrel roofs.

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For all structures other than apartments, height is calculated from the average, mean grade.

Hopedale

_How is height of residential structures measured?_

Hopedale Zoning Bylaw

2.8 BUILDING HEIGHT: The vertical distance as measured from the average finished grade along the front foundation of a building to its intersection with an imaginary plane passing through the highest point of the roof of the building and parallel to the ground floor of the building.

Hopkinton

_How is height of residential structures measured?_

TOWN OF HOPKINTON
ZONING BYLAW
ARTICLE I General Provisions
Section 210-4. Definitions.

MAXIMUM HEIGHT -- Vertical distance measured from the mean finished grade of all sides of the building or structure to the highest point of the roof for flat roofs, to the deck line for mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs. The mean finished grade shall not be raised or lowered more than five feet above the mean center-line grade of the frontage street for the proposed building unless the building will be located more than 50 feet from the front property line. [Amended 5-2-1994 ATM, Art. 21]
Hudson

How is height of residential structures measured?

Town of Hudson Protective Zoning Bylaw (Amended 2003)

Section 2.0 - Definitions

Height: The vertical dimension measured from the average elevation of the finished lot grade at the front of the building to the highest point of the ceiling of the top story in the case of a flat roof; to the deck of a mansard roof; and to the average height between plate and ridge of a gable, hip or gambrel roof.

Hull

How is height of residential structures measured?

Town of Hull Zoning Bylaws, Section 22 (2003)

HEIGHT OF BUILDING : The vertical distance above the curb grade to the highest point of the roof beams of a flat roof or to the top of the rafters at a ridge of a sloping roof. However, if the natural grade of the ground contiguous to the building is not at the curb grade, the height shall be measured from the mean finished grade at the foundation of the building.

Ipswich

How is height of residential structures measured?

Town of Ipswich Protective Zoning Bylaw (Adopted 1977, Amended 2004)

Section 3, Definitions

BUILDING HEIGHT : The vertical distance measured from the average existing grade to the highest point of the roof excluding standpipes, spires, domes, steeples, radio and radar towers, chimneys, broadcasting and television antennae, bulkheads, cooling towers, ventilators, and other appurtenances usually carried above the roof if not for human occupancy. (Amended 10/17/92 Special Town Meeting; approved Attorney General 1/11/93) If a building is being constructed on a lot upon which a building previously stood, the average existing grade shall be measured at the location of the previous building. (Amended 10/18/99 Special Town Meeting; approved Attorney General 1/5/00). If a building is being constructed on a lot upon which a building previously stood, the average existing grade shall be measured at the location of the previous building. (Added 10/18/99 Special Town Meeting; approved Attorney General 1/5/00)

Kingston

How is height of residential structures measured?

Town of Kingston Zoning Bylaw (Adopted 1955, Amended 2004)

Section 2.0. DEFINITIONS (Amended 4/27/96 ATM, Article 20)

HEIGHT: The vertical dimension measured from the average elevation of the finished lot grade at the front of the building to the highest point of the ceiling of the top story in the case of a flat roof; to the deck of a mansard roof, and to the average height between plate and ridge of a gable, hip or gambrel roof.

Lakeville

How is height of residential structures measured?

BUILDING, HEIGHT : The vertical distance measured from the average ground level adjacent to the building to the highest point of the building. Maximum Building Height shall not apply in any district to chimneys; ventilators, spires or other ornamental features of buildings, which features are in no way used for living purposes.
Lancaster

*How is height of residential structures measured?*

Town of Lancaster Zoning Bylaw (Adopted 1950, Amended 2004)

BUILDING OR STRUCTURE HEIGHT - The vertical distance from the mean finished grade of the ground adjoining a building or structure to the highest point of the roof (or parapet), for flat or shed roofs, to the deck line for mansard roofs, and to the mean height between eaves and ridge for gable, hip, and gambrel roofs. [Added 10/24/00]

Lawrence

*How is height of residential structures measured?*

HEIGHT OF BUILDING . The vertical distance from the grade to the top of the highest roof beams of a flat roof, or to the mean level of the highest gable or slope of a hip roof. When a building faces on more than one (1) street, the height shall be measured from the average of the grades at the center of each street frontage.

City of Lawrence Zoning Ordinance, Section 29-14(Adopted 1943, Last Amended 2002).

(e) Height.

Unless otherwise regulated in this ordinance, in any district, a monument; shaft; spire; dome; tower for ornamental purposes; observation tower; water and wireless towers; flag and radio poles; stacks; grain elevators; cooling towers; stage towers; and scenery lofts shall not be permitted above the roofline of the building or structure on which it is located, except by special permit from the planning board subject to the provisions of Section 29-23 (pp). If a separate but accessory use, the above shall be allowed by special permit from the planning board subject to the provisions of Section 29-23 (pp).

(1) Height restrictions on antennas and like structures.

Radio, television, transmission antennas, and like structures for private or commercial radio or television transmission or reception to be erected on the roof of buildings shall not exceed twelve (12) feet in height and must comply with Section 29-23 (pp) of the zoning ordinance. Free-standing antennas and like structures located in residential neighborhoods shall not be higher than twenty (20) feet above ground level at its site or above any natural object or existing manmade structure. In any case, such structures shall only be installed in rear or side yards and they shall not be erected nearer to any rear or side lot line than at least the total height of the free-standing antenna or like structure. Furthermore, the said structures shall comply with Section 29-23 (pp) of the zoning ordinance and meet all required zoning district setbacks. Satellite antennas shall not exceed twelve (12) feet in height and diameter in residential districts. Satellite antennas as well as other antennas and like structures shall be installed and maintained in compliance with the applicable requirements of the Building Code, the National Electrical Code and the FCC where applicable. Any such structure exceeding twelve (12) feet or twenty (20) feet in height must receive a variance from the zoning board of appeals, and approval from the building inspector.

Leicester

*How is height of residential structures measured?*

Leicester Zoning Bylaw

1.3 Definitions

BUILDING HEIGHT . The vertical distance from the established lowest point of elevation of the finished surface of the ground, paving, or sidewalk within the area between the building and the property line adjoining the building to the highest point of the roof (or Parapet) for flat or shed roofs to the deck line for mansard roofs and to the mean height between eaves and ridge for gable, top and gambrel roofs. Not included are spires, cupolas, television antennae, or other similar structures.

Leominster

*How is height of residential structures measured?*
Lexington  

How is height of residential structures measured?

§ 135-39. Height of buildings and structures. [Added 4-16-1986 ATM by Art. 45; amended 5-4-1987 ATM by Art. 42]

A. The maximum height of a building shall not exceed either the distance in feet or the number of stories, whichever is less, set forth in Table 2 for the district in which the building is located. The maximum height of a building in feet shall be the vertical distance between the lower elevation and the upper elevation, as described below. For purposes of determining the number of stories in a building or structure, measurement at the lower elevation shall be from the average natural grade, as described in Subsection A(1) below.[Amended 4-4-1990 ATM by Art. 36; 4-8-2002 ATM by Art. 20]

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The Land Use Ordinance of Lexington (Town of)
MIDDLESEX COUNTY, MASSACHUSETTS
ZONING BY-LAW
SECTION 7. DIMENSIONAL CONTROLS
7.5 HEIGHT OF BUILDINGS, STRUCTURES

(1) The lower elevation shall be the natural grade of the land at the point of measurement prior to disturbance for construction. The elevation of the natural grade prior to disturbance for construction shall be certified by a registered land surveyor, or may be such elevation as the Building Commissioner or designee may determine from Town maps or records. An average natural grade may be used, which shall be determined by computing the average of the elevations of the natural grade of the four extreme corners of the building or, in the case of a nonrectangular building, of such equivalent locations as the Building Commissioner or designee may determine. In a case where the lower elevation, thus determined, is lower than the average of the elevations of the natural grades of the four extreme corners of the lot, the average of the elevations of the corners of the lot may be used. In a case where the finished grade is lower than the natural grade, the finished grade shall be the lower elevation.

(2) The upper elevation shall be the highest point of any ridge, gable, other roof surface, or parapet.

B. Structures other than buildings.

(1) When located on the ground, the maximum height of structures, other than buildings, shall be the highest point on the structure and shall not exceed the maximum height for buildings in feet as set forth in Table 2. Structures other than buildings, such as antennas, wireless communication facilities that are permitted as provided in Article XV, recreational apparatus, fences and the like may be located in a required front, rear or side yard provided the height of the structure is not greater than its horizontal distance from the lot line. Notwithstanding this provision: [Amended 4-1-1998 ATM by Art. 32; 3-25-1998 ATM by Art. 20]

(a) A fence or wall not greater than six feet in height (except that a supporting post may be more than six feet, six inches in height) may be located on, or closer to a lot line than six feet; and

(b) A sign permitted under § 135-76 may be located in a front yard without regard to the lot line.

(2) Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, solar or photovoltaic panels, elevator housings, antennas, wireless communication facilities that are permitted as provided in Article XV, skylights, cupolas, spires and the like may exceed the maximum height of a building in feet provided no part of the structure is more than 20 feet higher than the upper elevation of the building and the total horizontal coverage of such structures on the building does not exceed 25%. [Amended 4-1-1998 ATM by Art. 32]

(3) The Board of Appeals may grant a special permit for structures, but not buildings, to exceed the maximum height in feet allowed by Table 2 for the district in which the structure is located, or the percentage of horizontal coverage of structures erected on a building, specified above, provided it makes a determination that the structure is compatible with the scale of the neighborhood and does not intrude on the solar access of any adjoining lot. [Amended 4-10-1989 ATM by Art. 41]
Town of Lincoln Zoning Bylaws, SECTION 13 GENERAL RULES FOR APPLYING DEVELOPMENT REGULATIONS IN ALL DISTRICTS. (2003.)

13.1 Height.
13.1.1 For any structure constructed on or before April 5, 2003 height shall be measured as the vertical distance from the average ground elevation around the exterior walls of the structure to the highest point of the top story in the case of flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof provided that the ridge of a pitched roof shall not be higher than 130% of the stipulated height for the district.

13.1.1.b For any structure constructed after April 5, 2003, the height shall be measured from the lowest exposed point on the structure, or, because of topographical conditions affecting the site (such as slope), the height shall be measured from average natural grade if the Planning Board determines that additional height would not adversely affect the neighborhood.

13.1.2 Limitations of height shall not apply to radio and television towers, permits for which have been granted under Section 6.2(f) above, or to features of buildings such as chimneys, ventilators, skylights, spires, tanks, antennae, and solar panels, which are carried above roofs, provided that features are in no way used for living purposes.

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From definitions in ordinance.com:

23.11 GRADE PLANE A reference plane representing the average of finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line, or where the lot line is more than six feet (1829 mm) from the building, between the building and a point six feet (1829 mm) from the building.

23.34 AVERAGE NATURAL GRADE The average of the elevations of the natural Grades around the perimeter of a proposed building, as determined by the formula:

\[ \frac{E_s(e_1 + e_2)}{2} \times \frac{L}{P} \]

where S is a segment of the building perimeter, e1 and e2 are the natural Grades at the respective ends of the segment; L is the corresponding length of the segment; and P is the length of the total building perimeter. In the case of a rectangular building, average grade may be determined by taking the average of the natural grades at the four extreme corners of the building.

23.37 FINISHED GRADE : The final grade of the land at any point along the perimeter of a building at the completion of construction. The elevation of the finished grade shall be determined by a site plan satisfactory to the Planning Board showing proposed contours at completion of construction.

23.39 NATURAL GRADE : is the natural grade of the land at any point along the perimeter of a proposed building prior to disturbance for construction. The elevation of the natural grade prior to disturbance for construction shall be certified by a registered land surveyor, or may be such elevation as may be determined from maps or records satisfactory to the Planning Board.

Littleton  
How is height of residential structures measured?

From the Code of the Town of Littleton, Part II, Chapter 173, Article II, Section 173-2 (as amended 2003).

BUILDING HEIGHT -- The vertical distance from the mean finish grade of the ground adjoining the building to the highest point of the roof (or parapet) for flat or shed roofs, to the deckline for mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roof. Not included are spires, cupolas, television antennas or other parts of structures which do not enclose potentially habitable floor space.

Lowell  
How is height of residential structures measured?
BUILDING HEIGHT: The vertical distance of the highest point of the roof beam in the case of a flat roof and of the mean level of the highest gable of a sloping roof as measured from the mean ground level all elevations of a building.

### Lunenburg

**How is height of residential structures measured?**

Town of Lunenburg Protective Zoning Bylaw (Amended 2004)

5.3. Building Height

5.3. Purpose: Building Height

The purpose of Section 5.3. is to provide specific regulations for building heights in all districts.

**Webmasters Note: The previous section has been added as per an update approved at a town meeting held on 5/1/04.**

5.3.1. Building

5.3.1.1. In a Residence A, Residence B, Outlying or Recreation District the maximum height of a building or structure shall be thirty-eight (38) feet measured from the highest level abutting the building to the highest point of the building.

5.3.1.2. In Residence A, Residence B or Outlying District, the vertical distance between any point on the roof of a building (whether main or accessory) and any point on the side or rear lines of its lot shall not exceed the horizontal distance between the same two points by more than five (5) feet.

5.3.1.3. In all other districts, the maximum height, as measured in Section 5.3.1.1., shall not exceed fifty-five (55) feet unless approved with Development Plan Review and the approval of the Fire Chief or in case of Cellular and Telecommunication Towers approved by Special Permit. Irrespective of the preceding two paragraphs, the Planning Board may approve a Special Permit for telecommunication and cellular towers in any District, where they are permitted by this Bylaw subject to the provisions of Section 6.6.13.1.

5.3.2. Projections

5.3.2.1. Nothing herein shall prevent the projection into any required setback area or yard of cornices, eaves, sills or ornamental features not over three (3) feet in width or of terraces, steps or uncovered porches not over three (3) feet high above average finished grade and nothing herein shall prevent the projection above a roof of chimneys or antenna or of steeples, domes, towers or similar projections not used for human occupancy.

### Lynn

**How is height of residential structures measured?**

HEIGHT The height of a building shall be the vertical distance measured from the mean level of the grade of the street to the mean height of the roof, except that a parapet exceeding three feet in height shall be considered a part of the height.

The Lynn City Ordinance on Zoning, Section 8.1, includes the following in the Table of Dimensional Regulations:

2. If the height of the building on the lot exceeds 3 stories, then for each additional story of the building height, there shall be an additional three (3) feet added to the front yard.

3. For each building less than four (4) stories or forty (40) feet, the lot shall have two (2) side yards, the minimum width of either shall never be less that ten (10) feet. Each corner lot shall have a side building line at least fifteen (15) feet from a parallel to the side street line to provide a side yard along the street side. If the height of the building on the lot exceeds three (3) stories, then for each additional story of the building height, there shall be an additional four (4) feet added to each side yard. (AS AMENDED MARCH 8, 1971)

"4. For each building less than four (4) stories or forty (40) feet, the lot shall have a rear yard of at least twenty (20) feet in average depth with a minimum depth of fifteen (15) feet. If the height of the building on the lot exceeds three (3) stories, then for each additional story of the building height, there

6. All buildings over the 60 foot height maximum require a special permit from the City Council. See Section 12 for procedures."

### Lynnfield

**How is height of residential structures measured?**

*Information collected in  2004*
10.1 Building Heights

In all districts, no building shall be constructed to exceed more than three (3) stories or forty (40) feet in height, the height in each case to be measured vertically from the average finished grade of the ground adjoining such building to the highest point of the roof for flat roofs, to the deck line for mansard roofs, and to the average height between eaves and ridge for gable, hip, and gambrel roofs. Provided, however, in a Commercial District and in a Limited Industrial District, the height of a building may exceed forty (40) feet by one foot for each additional foot by which:

1. the front yard depth exceeds the depth hereinafter required, or
2. the narrower side yard exceeds the side yard width hereinafter required, or
3. the rear yard exceeds the rear yard depth hereinafter required, whichever of the three additional distances is the smallest.

A building thus permitted to exceed forty (40) feet in height may be constructed to contain more than three (3) stories, but no such building shall in any case have a height greater than fifty (50) feet. A.T.M. 3/12/62

Malden  

How is height of residential structures measured?

HEIGHT : The vertical dimension of a building as measured from the mean level of the established grade at the building to the mean height of the roof, provided that for residential developments in excess of 6 stories, height shall mean the vertical dimension of a building measured from the lowest elevation of the lot to the maximum height roof.

City of Malden Zoning Ordinance, Section 400.11 (Last Amended 2003).

400.11 Height Requirements

"1 For all districts the maximum building height shall be an elevation of one hundred and fifty (150) feet above the Malden city base, except where the Inspector of Plumbing certifies that adequate water service is available at a higher elevation or where the Inspector of Plumbing approves the use of pump(s) to maintain adequate water service, and where the City Engineer certifies that the proposed building will not reduce the water service of other users in the general area to less than existing levels.

.2 Parapets less than five (5) feet high, chimneys, flag poles, ventilators, water tanks, antennas, penthouses, solar panels, wind generators and associated towers, or other protections used for or intended to be used exclusively for utility services or access to the roof may exceed the height limitations of this ordinance by not more than twenty (20) feet.

.3 The height limitations of this ordinance shall not apply to church spires, belfries, cupolas, and domes not used for human occupancy.

.4 Buildings accessory to single and two family uses shall be limited to no more than 15' in height. All other accessory buildings shall comply in all respects with the height requirements of the ordinance for the principal building.”

Manchester  

How is height of residential structures measured?

Town of Manchester-By-The-Sea, Zoning Bylaw, Section 5.5 (Adopted 1978, Last Amended 2003).

5.5 Height Regulations

No structure shall be erected or altered so that it exceeds 2-1/2 stories or so that the vertical distance measured from the highest point of the roof to the mean pre-construction grade exceeds thirty-five (35) feet, whichever is the lesser. Chimneys, spires or towers not used for human occupancy may extend ten (10) feet above these height limits. Mean preconstruction grade is defined as a reference plane representing the average elevation of preconstruction ground adjoining the building at all exterior walls. A half story is defined as a story with a sloping roof, the area of which story at a height of four (4) feet above the floor does not exceed two-thirds of the floor area of the story immediately below it.” (Amended 2001)
Mansfield  

How is height of residential structures measured?

Town of Mansfield Zoning Bylaw

1.5.8 BUILDING, HEIGHT: The vertical distance measured from the level of the curb or established center line of the street opposite the middle of the front elevation of the main entrance of the building to the highest point of the roof surface, if a flat roof, to the deck line of a mansard roof, and to the mean height level between eaves and a ridge of a gable, hip or gambrel roof. If built on a terrace or five (5) feet, whichever is smaller.

1.5.21 STORY : That portion of a building included between the surface of any floor and the surface of the next floor above it, or if there be no floor above it, then the space between such floor and the ceiling next above it. Any portion of a story exceeding fourteen (14) feet in height shall be considered as an additional story for each fourteen (14) feet or fraction thereof One-half (1/2) story means any story or space situated, wholly or partly in the roof, so designated, arranged or built to be used for storage or habitation.

Marblehead  

How is height of residential structures measured?

Town of Marblehead Zoning Bylaws, Article I, Section 200-7

“HEIGHT OF BUILDING - Building height shall be measured from the highest point of any roof or parapet to the lowest point of the original grade or the lowest point of the finished grade of the ground adjoining the building, whichever makes the building height greater. Height limitations shall not apply to chimneys, receiving TV antennas, or steeples on places of worship and municipal buildings. (See illustrative sketch and § 200-16G for application.) [Amended 5-1-1995 ATM by Art. 38; 5-3-1999 ATM by Art. 38]”

Marlborough  

How is height of residential structures measured?

City of Marlborough Zoning Ordinance

Article II, Section 200-05: Definitions; Word Usage

HEIGHT: The vertical dimension measured from the average elevation of the finished lot grade at the front of the building the highest point of the ceiling of the top story in the case of a flat roof; to the deck of a mansard roof; and to the average height between plate and ridge of a gable, hip or gambrel roof.

Marshfield  

How is height of residential structures measured?

Town of Marshfield Zoning Bylaw (Amended 2004)

Article II, Definitions

HEIGHT : The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof, or the mean level of the highest gable or slope of a hip, pitch or sloped roof.

Maynard  

How is height of residential structures measured?

According to the Town of Maynard Zoning Bylaws, Section 8.1(B).

Height in Feet (Structures) - Height in feet shall be the vertical distance measured from the mean of the finished ground level adjoining the entire structure to the highest extension of any part of the structure.
Height in Feet (Buildings) - Height in feet shall be the vertical distance measured from the mean of the finished ground level adjoining the entire building at each exterior wall to the ridge or highest point in the roof.

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**Medfield**

*How is height of residential structures measured?*

2.1.25 HEIGHT: The vertical distance from the adjacent ground to the top of the structure.

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The building height is calculated by taking the average of every side of the building post-construction.

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**Medford**

*How is height of residential structures measured?*

Definition of "height" from Medford Zoning Ordinance on municode.com.

Height means the vertical distance between the mean level of the established grade and the mean of the vertical distance between the ceiling joists and ridge of the roof, or the highest point of the roof in the case of a flat roof. The mean level of the established grade is the arithmetic average of the lowest and highest curb grades between the points where the side lot lines extended intersect the line of the nearest curb on streets where the lot has frontage. If a lot has discontinuous frontage on two streets so that different established grades might be determined, the higher grade may only be used within 100 feet of the street line abutting the higher street. The mean level of the established grade of courts may be taken as the elevation of the lowest floor facing on the court.

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**Medway**

*How is height of residential structures measured?*

THE MASSACHUSETTS STATE BUILDING CODE
CHAPTER 5
GENERAL BUILDING LIMITATIONS
780 CMR 502.0 DEFINITIONS
502.1 General: The following words and terms shall, for the purposes of 780 CMR 5 and as used elsewhere in 780 CMR, have the meanings shown herein.

Height
Building: The vertical distance from grade plane to the average height of the highest roof surface.

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7/26/04 Phone conversation with Bob Speroni, Medway Building and Zoning Inspector: He said that Medway uses the finished grade rather than preconstruction grade.

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**Melrose**

*How is height of residential structures measured?*

The Zoning Ordinance of the City of Melrose, Massachusetts, Section 2.1

Height: The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof, the deck of a mansard roof or the mean level of the highest gable or slope of a hip roof.
Mendon

*How is height of residential structures measured?*

Town of Mendon Zoning Bylaw (Amended 2002)

Section V

"Item 7 In all districts, no building shall be erected or altered so as to contain more than two and one-half (2 1/2%) stories or to exceed more than thirty-five (35) feet in height. The height in each case shall be measured vertically from the sill plate of the foundation to the mid-point of the attic."

Merrimac

*How is height of residential structures measured?*

Merrimac Zoning Bylaw 2004

MAXIMUM HEIGHT : Vertical distance measured from the mean finished grade of all sides of the building or STRUCTURE to the highest point of the roof for flat roofs, to the deckline for mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs. The mean finished grade shall not be raised or lowered more than five feet above the mean center-line grade of the FRONTAGE street for the proposed building unless the building will be located more than 50 feet from the front property line.

Methuen

*How is height of residential structures measured?*

Methuen Zoning Ordinance

Section II - Definitions

HEIGHT OF BUILDING : The vertical distance of the highest point of the roof above the average grade of the curb line abutting the property. However, in residential zoning districts where the lot has a slope in excess of five (5) percent, the height is the vertical distance of the highest point of the roof above the average finished grade of the ground adjoining the building, as computed before the building is actually erected. This definition excludes penthouses, bulkheads, and other allowable superstructures above the roof line.

Middlebor

*How is height of residential structures measured?*

Middleborough Zoning Bylaw

"BUILDING HEIGHT" shall mean the distance between the average grade of the ground at the front of the building and the roof of the building, excluding roof structures (such as heating, ventilating and air conditioning equipment) normally located on or built above the roof and not devoted to human occupancy.

Middleton

*How is height of residential structures measured?*

Building height shall be measured as the vertical distance from the average elevation of the finished lot grade adjoining such building to the highest point of the roof in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof.

Town of Middleton Zoning Bylaw, Section 5.05 (Last Amended 2003).

" B. Each story shall be deemed to be the portion of a building between the upper surface of any floor and the upper surface of the floor next above. A
basement having more than one half of its height above the average elevation of the finished grade adjoining the building shall be considered a story. Any part of a building between the top floor and the roof shall be deemed a half-story.

C. Limitations of height shall not apply to such structures as belfries, flagpoles, chimneys, radio and television antennas, windmills, silos, water tanks and similar non-habitable structures."

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**Milford**  
*How is height of residential structures measured?*

Town of Milford Zoning Bylaw (Amended 2003)

Article IV Definitions:
Height - The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beam of a flat roof, the deck of a mansard roof, or the mean level of the highest gable or slope of a hip roof.

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**Millbury**  
*How is height of residential structures measured?*

Town of Millbury Zoning Bylaws (Updated 2003)

Section 5. Definitions:
Building Height. The vertical distances from the mean finished grade of the ground adjoining the building to the highest point of the roof (or parapet) for flat or shed roofs, to the deck line for mansard roofs, and to the mean height between eaves and ridge for gable, hip and gambrel roofs. Not included are spires, cupolas, TV antennae, or other parts of structures which do not enclose potentially habitable floor space.

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**Millis**  
*How is height of residential structures measured?*

HEIGHT : The vertical distance from the average of all sides of the adjacent ground measured at the foundation to the top of the structure of highest roof beams of a flat roof, or to the mean level of the highest gable or slope of a hip roof.

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**Millville**  
*How is height of residential structures measured?*

Height requirements are in terms of stories, not feet. "Stories" are not defined.

OR: 2.5 stories  
VR: 2.5 stories  
VC: 3-4 stories

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**Milton**  
*How is height of residential structures measured?*

Building Heights in Residence AA, A, B and C Districts: The height of any building shall be measured from the mean grade of the natural ground contiguous to the building, as such ground exists prior to construction, provided that, if alterations in grades may have been approved by the Board of Appeals pursuant to Section IV.A., the height of a building shall be measured from the mean grade of the ground contiguous to the building as so altered and approved by the Board of Appeals.
Building Heights in Residence D Districts. The height of any building shall be measured from the mean finished grade of the ground contiguous to the building, as such ground will exist subsequent to construction.

Building Heights in Residence D-1 Districts. The height of any building shall be measured from the mean finished grade of the ground contiguous to the building, as such ground will exist subsequent to construction.

Building Heights in Residence D-2 Districts. Mean finished grade shall be the grade of the ground contiguous to the building as such ground will exist subsequent to construction.

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Zoning Bylaws Town of Milton, Section V (Current Electronic Draft as of July 1, 2004)

SECTION V.
Height Regulations.
A. 1. Building Heights in Residence AA, A, B and C Districts
In a Residence AA, A, B or C district, no building, including dwellings, accessory buildings, buildings for educational or religious use, and any other structures of whatever sort shall be erected or altered to exceed two and one-half (2½) stories or thirty-five (35) feet in height, whichever is less, provided that if the building is set back from each street and lot line fifteen (15) feet or more farther than is required by section VI, it may have three (3) stories but shall not exceed thirty-five (35) feet in height. The Board of Appeals, upon a finding that additional height is reasonably necessary for use of a building and will not be detrimental to the neighborhood in which the building is located, may authorize by special permit a building for religious or educational use not to exceed fifty (50) feet in height with no more than two (2) stories. The term "story", as used in this paragraph, shall not include a basement so long as the finished floor height of the first story is no more than four (4) feet above the mean grade of the ground contiguous to the building. The term "half-story," as used herein, means a story in a sloping roof, the area of which story at a height four (4) feet above the floor does not exceed two-thirds the floor area of the story immediately below it. The height of any building shall be measured from the mean grade of the natural ground contiguous to the building, as such ground exists prior to construction, provided that, if alterations in grades may have been approved by the Board of Appeals pursuant to Section IV.A., the height of a building shall be measured from the mean grade of the ground contiguous to the building as so altered and approved by the Board of Appeals. Height shall be measured to the highest part of the building excluding those chimneys, lightning rods, solar energy systems, domes, spires, cupolas, towers and antennas for which a different height limit is herein established, but including weather vanes, elevator housings, satellite dishes, solar energy systems, and any other projections.

2. Additional Height Limits and Exceptions in Residence AA, A, B and C Districts. In a Residence AA, A, B or C district, the following additional height limits and exceptions shall apply. Chimneys and solar energy systems shall not exceed the height of a building by more than eight (8) feet. Lightning rods shall not exceed the highest point of a structure by more than three (3) feet. Towers which are part of any building not used for religious or educational purposes shall not exceed forty (40) feet in height. One or more spires, domes, cupolas, and/or towers in excess of thirty-five (35) feet in height may be a part of a building which is used for religious or educational purposes, provided that no such spire or tower may be in excess of twice the height of the building as determined for Paragraph 1 and that the portion of any spire, dome, cupola or tower in excess of thirty-five (35) feet in height reasonably requires an exterior perimeter measurement of more than sixty-four (64) feet. Upon a finding that the portion of a spire, tower, or dome in excess of thirty-five (35) feet in height reasonably requires an exterior perimeter measurement of more than sixty-four (64) feet, the Board of Appeals shall authorize, by special permit, such a spire, tower or dome as part of a building used for religious or educational purposes, provided that in no event shall such a larger spire, tower or dome exceed seventy (70) feet in height. No spire, dome, cupola or tower shall have a height above the ground in excess of the distance from any contiguous lot under separate ownership. Height of a spire, dome, cupola or tower shall be measured from the mean grade of the natural ground contiguous to the building of which the spire, dome, cupola or tower is part, as such natural ground exists prior to construction, provided that, if alterations in grades may have been approved by the Board of Appeals pursuant to Section IV.A., the height of a spire, dome, cupola or tower shall be measured from the mean grade of the ground contiguous to the building as so altered and approved by the Board of Appeals.

3. Existing Nonconforming Buildings with an Educational or Religious Use. In a Residence AA, A, B or C district, buildings in excess of thirty-five (35) feet in height, lawfully existing on May 31, 1991 with an educational or religious use may be maintained and/or altered for educational or
religious use so long as any alteration does not increase the extent of the building's nonconformity with the applicable height, setback, and building coverage provisions in Sections V and VI.

Section V - Height Regulations

B. Building Heights in Residence D Districts. In a residence D district, no building shall be erected or altered to exceed three (3) stories or thirty-five (35) feet in height, whichever is less. The term "story," as used in this paragraph, shall not include a basement as long as the finished floor height of the first story is no more than two-and-one-half (2½) stories or thirty-five (35) feet in height, whichever is less. The term "half-story," as used herein, means a story in a sloping roof, the area of which story at a height four (4) feet above the floor does not exceed two-thirds (2/3) of the floor area of the story immediately below it. The height of any building shall be measured from the mean finished grade of the ground contiguous to the building, as such ground will exist subsequent to construction. Height shall be measured to the highest part of the building excluding chimneys, lighting rods and one cupola. Chimneys and solar energy systems shall not exceed the height of a building by more than eight (8) feet. Lightning rods shall not exceed the highest point of a structure by more than three (3) feet. A cupola shall not exceed the height of a building by more than ten (10) feet.

C. Building Heights in Residence D-1 Districts. In a residence D-1 district, no building shall be erected or altered to exceed two and one-half (2½) stories or thirty-five (35) feet in height, whichever is less. The term "story," as used in this paragraph, shall not include a basement as long as the finished floor height of the first story is no more than four (4) feet above the mean finished grade of the ground contiguous to the building. The term "half-story," as used herein, means a story in a sloping roof, the area of which story at a height four (4) feet above the floor does not exceed two-thirds (2/3) of the floor area of the story immediately below it. The height of any building shall be measured from the mean finished grade of the ground contiguous to the building, as such ground will exist subsequent to construction. Height shall be measured to the highest part of the building excluding chimneys, lightning rods and one cupola. Chimneys and solar energy systems shall not exceed the height of a building by more than eight (8) feet. Lightning rods shall not exceed the highest point of a structure by more than three (3) feet. A cupola shall not exceed the height of a building by more than eighteen (18) feet.

D. Building Heights in Residence D-2 Districts. In a Residence D-2 district, no building shall be erected or altered to exceed forty-five (45) feet in height above the mean finished grade of the ground contiguous to the building. Mean finished grade shall be the grade of the ground contiguous to the building as such ground will exist subsequent to construction. Height of a building shall be measured to the highest part of the building excluding chimneys, lightning rods, and one cupola. Chimneys and solar energy systems shall not exceed the height of a building by more than eight (8) feet. Lightning rods shall not exceed the highest point of a structure by more than three (3) feet. A cupola shall not exceed the height of a building by more than eighteen (18) feet.

E. 1. Building Heights in Business Districts. In a business district, no building shall be erected or altered to exceed three (3) stories or forty-five (45) feet in height, whichever is less. The Board of Appeals, upon a finding that additional stories and/or additional height are reasonably necessary for use of a building and will not be detrimental to the neighborhood in which the building is located, may authorize by special permit a building not to exceed five (5) stories or sixty-five (65) feet in height, whichever is less. The term "story," as used in this paragraph, shall not include a basement so long as the finished floor height of the first story is no more than four (4) feet above the mean finished grade of the ground contiguous to the building. The height of any building shall be measured from the mean finished grade of the ground contiguous to the building, as such ground will exist subsequent to construction. Height shall be measured to the highest part of the building excluding chimneys, lighting rods, and any other projections.

2. Additional Height Limits and Exceptions in Business Districts. In a business district, the following additional height limits and exceptions shall apply. Chimneys and solar energy systems shall not exceed the height of a building by more than eight (8) feet. Lightning rods shall not exceed the highest point of a structure by more than three (3) feet. The Board of Appeals may authorize by special permit one or more spires, domes, cupolas, and/or towers in excess of forty-five (45) feet in height above the ground but less than seventy-five (75) feet in height above the ground as part of a building with a business use. One or more spires, domes, cupolas, and/or towers in excess of forty-five (45) feet in height above the ground may be a part of a building which is used for religious or educational purposes, provided that no such spire, dome, cupola or tower may be in excess of twice the height of the building as determined for Paragraph 1, and that the portion of any spire, dome, cupola or tower in excess of forty-five (45) feet in height above the ground shall not have an exterior perimeter measurement of more than sixty-four (64) feet. Upon a finding that the portion of a spire, tower or dome in excess of forty-five (45) feet in height reasonably requires an exterior
perimeter measurement of more than sixty-four (64) feet, the Board of Appeals shall authorize, by
special permit, such a spire, tower or dome as part of a building used for religious or educational
purposes, provided that in no event shall such a larger spire, tower or dome exceed seventy-five (75)
feet in height. No spire, dome, cupola or tower shall have a height above the ground in excess of
the distance from any contiguous lot in a residence district under separate ownership.
Height of a spire, dome, cupola or tower shall be measured from the mean finished grade of the
ground contiguous to the building of which the spire, dome, cupola or tower is part, as such ground
will exist subsequent to construction.
F. Buildings with an Educational or Religious Use in Residence D, D-1 and D-2 Districts. Notwithstanding
the foregoing Paragraphs B, C and D, any building for educational or religious use in a Residence D, D-1
or D-2 district, which is not an accessory use to housing for the elderly or handicapped in a Residence D
or Residence D-1 district or an accessory use to housing for the elderly in a Residence D-2 district or for
which no special permit has been issued pursuant to Section III.D, shall meet the requirements contained
in Paragraph A for a building for educational or religious use in a Residence AA district. Any building or
portion of a building with such a non-accessory educational or religious use in a Residence D, D-1 or D-2
district shall also be subject to all other regulations of these bylaws applicable to such a building in a
Residence AA district, including, but not limited to, the Building Coverage and Floor Space provisions
in Section VI.E., the Open Space provisions in Section VI.F., and the Parking regulations in section VII.
The addition of a new building with such a non-accessory educational or religious use or conversion of
an existing building to such a use shall render any other building or buildings with a different use on the
same lot or on adjoining lots in common ownership nonconforming.
G. Antennas. In any zoning district, the Board of Appeals may authorize by special permit an antenna in
excess of the height permitted in this section but not to exceed fifty (50) feet in height above the ground
if the additional height is necessary for use of the antenna and will have no substantial adverse effect on
neighboring properties. If, under applicable state or federal law, an applicant is entitled, as a matter of
right, to an antenna in excess of the height permitted hereunder, the Board of Appeals shall authorize an
antenna in accordance with the requirements of such law, subject to permissible safeguards and conditions
Section VI - Area Regulations
minimizing any adverse effect on neighboring properties. The provisions of this Section V do not apply
to wireless telecommunications facilities, which are governed by Section III.G.
H. Berms and Terraces. Earthen berms or other mounding of earth materials, which exceed a slope rising
more than one (1) foot in four (4) feet (4:1) within thirty (30) feet of a building shall not be considered
in determining the mean finished grade of the building. Terraces, which project less than fifty (50) feet
from the face of a building, shall not be considered in determining the mean finished grade of the building.
This subsection shall not apply to any project for which Site Plan Approval pursuant to Section VIII.F has
been granted by the Planning Board prior to adoption of this subsection, even if amendments to such site
plan approval are subsequently granted.

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**Nahant**

*How is height of residential structures measured?*

Section 2.02 Definitions

HEIGHT OF BUILDING: For the purpose of this bylaw, the height of any building shall be the vertical distance of the highest point of the roof, or any
rooftop deck, fence, railing, widows walk or other rooftop structure or feature, above the mean original grade of the ground undisturbed adjoining the
building before any construction is commenced. Chimneys, ventilators, skylights, tanks, bulkheads, and solar panels shall not be considered part of the
height of the building if they do not extend more than four feet above the specified height limit. Domes, towers or spires which are an integral part of
churches or religious buildings shall not be subject to these limitations, provided that such features shall in no way be used for living purposes.

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**Natick**

*How is height of residential structures measured?*

Zoning Bylaw Town of Natick, Section 200 (from Natick website as of August 19, 2004)

Height, Building: The vertical distance from the grade to the highest point of the roof. When
a building faces more than one street the height shall be measured from the average of
the grade at the center line of each street or, if it does not abut on a street, from above the
mean finished grade of the ground adjoining the external walls thereof. An external wall
extending above the roof shall be considered as part of the height of the building.*
**Needham**  
*How is height of residential structures measured?*

The Land Use Ordinance of Needham  
NORFOLK COUNTY, MASSACHUSETTS  
ZONING BY-LAW  
1. GENERAL  
Definitions - 1.3

Height – the vertical distance of the highest point of a structure or the roof of a building above the average grade of the ground adjoining the building or surrounding the structure.

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**Newbury**  
*How is height of residential structures measured?*

Town of Newbury Zoning Bylaw (Adopted 1959, Amended 1999)

Section 2: Definitions  
E. Height: No part of any building on lots in said district may stand more than 35 feet in height as measured from, the mean level of the established grade at the building to the mean height of the roof.

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**Newburyport**  
*How is height of residential structures measured?*

City of Newburyport Zoning Ordinance, Amended 2004

Section II - Definitions  
10. Building height. Building height is measured from the mean grade elevation (average grade around perimeter of building) to the mean roof elevation (one-half the vertical distance from eave to ridge).

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**Newton**  
*How is height of residential structures measured?*

City of Newton Zoning Ordinance: Section 30-1, Definitions

"GRADE PLANE A reference plane for a building or structure as a whole representing the average Of finished round level adjoining the Or Structure at all exterior walls. In calculating said reference plane, tile elevation of each point used to calculate said average shall he determined by using the lowest elevation of finished round level within the area immediately adjoining the building or structure and either tile lot line or a point six (6) feet from the building or structure, whichever Is closer to the building or structure, as illustrated in the diagrams below."

Newton's Zoning Ordinance Definitions:

Height - the vertical distance between the elevations of the following: (a) the grade plane and (b) the midpoint between the highest point of the ridge of the roof and the line formed by the intersection of the wall plane and the roof plane. Not included in such measurements are 1) cornices which do not extend more than five (5) feet above the roof line; 2) chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed fifteen (15) feet in height above the roof line; 3) enclosures for tanks which do not exceed twenty (20) feet in height above the roof line and do not exceed in aggregate area ten (10) per cent of the area of the roof; and 4) towers, spires, domes and ornamental features.
Norfolk

How is height of residential structures measured?

ZONING BYLAW FOR THE TOWN OF NORFOLK, MASSACHUSETTS
Section B. DEFINITIONS

HEIGHT, BUILDING - The vertical distance from the grade to the top of the highest roof beams of a flat roof, or to the mean level of the highest gable or slope of a hip roof. When a BUILDING faces on more than one (1) STREET, the height shall be measured from the average of the grades at the center of each STREET front.

North And

How is height of residential structures measured?

Town of North Andover Zoning Bylaw, Section 2.27(Adopted 1972, Last Amended 2003).

2.27 Building Height (1999/20)
The vertical distance as measured from the average finished grade level adjoining the building at all exterior walls to the highest roof surface, but shall not include chimneys, spires or mechanical equipment, or penthouses used for enclosures of mechanical equipment.

North Attle

How is height of residential structures measured?

Town of North Attleborough Zoning Bylaw (Adopted 1974, Amended 2001)

Section IX - DEFINITIONS
BUILDING, HEIGHT . The vertical distance measured from the average finished grade of the adjacent ground to the highest part on the roof surface, if a flat roof; to the deck lines of a mansard roof; and to the mean height level between eaves and ridge for a gable, hip or gambrel roof.

North Read

How is height of residential structures measured?

Zoning Bylaw Town of North Reading, Section 2.1.27 (from ordinance.com as of August, 2004)

27. HEIGHT : The vertical distance from the average finished grade of the adjacent ground to the highest point on the highest roof of the stricture.

Northboro

How is height of residential structures measured?

Town of Northborough Zoning Bylaw

7-04-050 Definition
HEIGHT OF BUILDING — The vertical distance to the highest point of the roof above the mean grade of the ground immediately adjoining the building.

STORY — Any horizontal portion through a building between floor and ceiling, of which the ceiling is six (6) feet or more above the average grade of the sidewalk or ground adjoining.

Northbridge

How is height of residential structures measured?

Norton  

**How is height of residential structures measured?**

Town of Norton Zoning Bylaw, 2004

ARTICLE II - DEFINITIONS
2.2 The following words and terms shall have the meanings indicated below:
i. HEIGHT in feet shall be measured to the highest point of the building from the average ground level adjacent to the building. Height in stories shall include all stories suitable for human occupancy, whether or not so occupied, which are more than 50 percent above the average ground level adjacent to the building.

Norwell  

**How is height of residential structures measured?**

From the Town of Norwell Zoning Bylaws, Article V.

HEIGHT: The vertical distance above the average grade adjoining the building or surrounding the structure to the ridgeline of the building.

Norwood  

**How is height of residential structures measured?**

According to the Town of Norwood Zoning Bylaws, Section 8000, building height is defined as, "the vertical distance from the average of the finished ground level at the center if all walls of a building to the highest point of the roof surface. Not included in the measurement are parapets or cornices extending no more than five feet above their intersection with the roof, spires, cupolas, elevator head-houses, water tanks, chimneys, ventilators, pipes and similar apparatus not devoted to human occupancy and not aggregating more than 25% of the ground area covered by the building."

Paxton  

**How is height of residential structures measured?**

Paxton Zoning Bylaw (Amended 2003)

Definitions 1.3
HEIGHT (BUILDING) : The vertical distance measured from the finished established grade plane to the highest point of the roof surface for flat roofs, to the deck line of mansard roofs, and to the average (mean) height of that portion between-eaves and ridge for gable, hip, and gambrel sloped roofs.

Peabody  

**How is height of residential structures measured?**


Height: The height of a building shall be the vertical distance measured from the mean level of the established grade at the building to the mean height of the roof.
80
5.1.4 Height limitation.
The limitation on height of buildings and structures in subsection 5.2 schedule of dimensional regulations shall not apply in any district to chimneys, ventilators, skylights, tanks, bulkheads and other accessory features usually carried above roofs, nor to towers or spires of churches and other buildings, if such features are in no way used for human habitation. In addition to the foregoing, in business and industrial districts, the limitation on height shall not apply to such features as water tanks, which shall be at every point sixty (60) feet back from the center line of any street and shall not cover more than twenty-five (25) percent of the area of the building.

In all zoning districts, stone, masonry, reinforced concrete, steel sheet piling or other approved materials used for retaining walls over ten (10) feet in height shall be designed by a professional engineer, according to the Massachusetts State Building Code, and approved by the Special Permit Granting Authority designated as follows:
1. In all zoning districts, walls ten (10) feet in height and less than twenty (20) feet in height shall be designed by a professional engineer according to the Massachusetts State Building Code.
2. In all zoning districts, walls twenty (20) feet in height or greater shall be designed by a professional engineer and a Special Permit be required from the City Council.

Pembroke
How is height of residential structures measured?
Not listed.

Pepperell
How is height of residential structures measured?
"BUILDING HEIGHT: The vertical distance as measured from the average finished grade at the intersection with the front wall of the building to the top of the roof structure. The maximum building height for any building shall be two and one-half (2½) stories, but not more than thirty-five (35) feet, except in the Urban Residence or Commercial Districts, as provided in section 4300 of this By-law."

- Zoning By-Law, Town of Pepperell, Massachusetts (as amended 12/16/03). Section 10000 Definitions

Plainville
How is height of residential structures measured?

Town of Plainville Zoning Bylaw

4.1 - Definitions
BUILDING HEIGHT: The vertical distance measured from the average elevation of the proposed finished grade at the front of the building to the highest point of the roof for flat roofs, to the deck line of mansard roofs, and to the mean height between eaves and ridge, for gable, hip and gambrel roofs.

Plymouth
How is height of residential structures measured?

Town of Plymouth Zoning Bylaw 2004

HEIGHT - The vertical distance of the highest point of the roof beams, in the case of a flat roof, or of the top of the rafters at the ridge in the case of a sloping roof, measured from the mean grade of the natural ground contiguous to the structure.
Accessories or appurtenances necessary to the operation of the building and not greater than five feet in breadth may exceed the height limit by not greater than five feet, except that the total area of such appurtenances shall not exceed five percent of the total roof area. Other structures may be allowed by special permit. For structures other than buildings, height shall be measured from the mean grade of the natural ground around the structure to the highest point on the structure.

Plympton  

**How is height of residential structures measured?**


5.7 Building Height
The limitations on height of buildings shall not apply in any district to chimneys, ventilators, towers, spires or other ornamental features of buildings, which features are in no way used for living purposes.

5.1.3 Maximum Height of Buildings

<table>
<thead>
<tr>
<th># of Stories/Height in Ft</th>
<th>AR</th>
<th>2 1/2</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>3</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>LM</td>
<td>3</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>3</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Princeton  

**How is height of residential structures measured?**

Town of Princeton Zoning Bylaws (Adopted 1957, Amended 2002)

2. Definitions:
· HEIGHT: shall be the distance measured from the mean finished ground level at the base to the highest point on the structure.

Quincy  

**How is height of residential structures measured?**

Zoning Ordinance City of Quincy, Section Definitions (On website: http://www.bpenet.com/codes/quincy/, 8/13/04)

"Height of building" means the vertical distance measured from the finished ceiling of the top story to a point at the finished grade, measured at the center of the building at the front wall.

Randolph  

**How is height of residential structures measured?**

The Randolph zoning bylaw does not specifically define how building height is calculated.

Raynham  

**How is height of residential structures measured?**

Note: the following is for apartments:
6.8.2 HEIGHT AND BULK REGULATIONS
Apartment houses may be constructed subject to the following rules and regulations:
(a). Maximum height shall be limited to thirty-five (35) feet above the average elevation of the finished grades of the building lot. Height shall be measured to the highest point on the roof of the building.
(b). Maximum number of stories shall be limited to three including the basement level. A story is defined as that part of a building between any floor and the floor or roof next above.

Reading  
How is height of residential structures measured?

The Zoning Bylaw Town of Reading, Section 2.2.16 (2003)

2.2.16. Height of a Building: The vertical distance measured at the center line of its principal front from the established grade or from the natural grade if higher than the established grade, or from the natural grade if no grade has been established: to the level of the highest point of the roof beams in the case of flat roof or roofs inclining not more than one inch to the foot, and to the mean height level between the top of the main plate and the highest ridge in the case of other roofs. For buildings with more than one principal front, said vertical distance shall be measured from the average of the established grade or the natural grade, as applicable, measured at the centerline of each principal front.

Rehoboth  
How is height of residential structures measured?

No definition found.

Revere  
How is height of residential structures measured?

The Land Use Ordinance of Revere (City)
SUFFOLK COUNTY, MASSACHUSETTS
Title 17 ZONING
Chapter 17.08 DEFINITIONS
17.08.040 Terms defined in building code.

17.08.120 BUILDING HEIGHT . Building height means the vertical dimension measured from the average elevation of the finished lot grade to the highest point of the roof. (C.O. 83-3 Section 17-2(B) (9))

Rockland  
How is height of residential structures measured?

Town of Rockland Zoning Bylaw, Section II Definitions (Last Amended 2003)

BUILDING HEIGHT . The vertical distance measured from the mean level of the ground surrounding the building to the highest point of the building, but not including chimneys, spires, towers, and similar projections.
How is height of residential structures measured?

Rockport

Rockport Zoning Bylaw (Amended 2002)

Section I.C Definitions.

"HEIGHT OF BUILDING : The vertical distance, measured from the average elevation of the lot grade prior to any site preparation or other construction activity, surrounding the entire building, to the ridge or highest point of the roof of the building. (Amended ATM 4/29/99, approved 5/26/99)"

Rowley

Town of Rowley Zoning Bylaw

6.5.1 Building Height
6.5.1.1 The height of any structure in all districts shall not exceed thirty-five (35) feet or two and one-half stories.
6.5.1.2 Building height shall be measured as the vertical distance from the average elevations of the existing lot grade at the front of the building to the highest point of the top story in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof.
6.5.1.3 Each story shall be deemed to be the portion of a building between the upper surface of any floor and the upper surface of any floor next above, having more than one half of its height above the average elevation of the finished grade adjoining the building.
6.5.1.4 Limitations of height shall not apply to flagpoles, chimneys, radio and television antennae, windmills, silos, water tanks, public utility structures, and similar non-inhabitable structures.

Salem

City of Salem, Zoning Ordinance, Definitions.(Last Amended 2001).

HEIGHT : The distance measured from the ground level or roof level, whichever is the base of the tower, to the highest point on the structure.

Salisbury

Town of Salisbury Zoning Bylaw

Definitions
15. HEIGHT : The vertical distance from the mean grade of the adjacent ground to the top of the highest point of the structure, not to exceed thirty-five (35) feet.

Saugus

The Land Use Ordinance of Saugus
ESSEX COUNTY, MASSACHUSETTS
ZONING BY-LAWS (Incorporated 1815; June 1999; With amendments through 12/4/2000 ATM)
ARTICLE III - DEFINITIONS

Height: The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a fiat roof, or the mean level of the highest gable or slope of a hip roof, but not to exceed ninety (90) feet.
Scituate

*How is height of residential structures measured?*

Town of Scituate Zoning Bylaw, Section 200 (as amended 2003)

**Height**

The distance measured vertically from the average finished grade of the ground adjoining a building to the highest point for flat roofs, to the deck line for mansard roofs, and to the average distance between hip and ridge for gable, hip and gambrel roofs.

Seekonk

*How is height of residential structures measured?*

Seekonk Zoning Bylaw

Definitions

**BUILDING HEIGHT** : The vertical distance measured from the average elevation of the finished lot grade at the front of the building to the highest point of the top story in the case of a flat roof or to the mean height between the plate and the ridge in the case of a pitched roof. In determining building height, belfries, steeples, chimneys, outdoor theatre screens, and similar projections shall be excluded.

Sharon

*How is height of residential structures measured?*

Sharon Zoning Bylaws

**ARTICLE V. DEFINITIONS**

**Height, Building.** The vertical distance of the highest point of the roof beams above the mean grade of the curb or of the street surface at the center line of the highest adjoining street, or the mean grade of the ground adjoining the building if such building does not lie nearer than twelve (12’) feet to a street line. The limitations as to building height in feet shall not apply to such nonresidential accessories as chimneys, ventilators, skylights, tanks, bulkheads, penthouses and other accessory features which are required or are customarily carried above roofs, nor to towers, spires, domes, cupolas and ornamental features of churches and other buildings, if such features are not used for living purposes.

Sherborn

*How is height of residential structures measured?*

Town of Sherborn Zoning Bylaws, Section 4.5.11 Definitions (2004)

**Height of Building or Structure (Added 1996)**
The vertical distance between the average lowest finished grade adjacent to the exterior walls of a building to the highest point of a roof.

***

From ordinance.com:

AVERAGE LOWEST FINISHED GRADE (Added 1996) The average (mean) lowest elevation of the ground adjacent to all the exterior walls of a building. It is calculated by determining the lowest elevation adjacent to each wall, weighting that elevation by the length of its adjacent wall (multiplying the elevation in feet by the length of the wall in feet), and dividing the sum of all weighted elevation figures by the total length of all exterior walls. The elevation figure used may be the height above mean sea level (msl), elevation relative to the top of the concrete foundation, or some other appropriate fixed point in the discretion of the building inspector. See illustration below:

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**Shirley**

*How is height of residential structures measured?*

According to Sec. 3.2.1 of the Shirley Zoning Bylaw Draft, "Height shall be measured as the vertical distance from the average ground elevation around the exterior walls of the structure to the highest point of the top story in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof provided that the ridge of a pitched roof shall not be higher than 130% of the stipulated height for the district."

---

**Shrewsbury**

*How is height of residential structures measured?*

Town of Shrewsbury Zoning Bylaw (Adopted 1967, Amended 2004)

SECTION II - DEFINITIONS

Building Height: The vertical distance from the average finished grade within ten (10) feet of the front wall of the building to the highest point of a flat or mansard roof, including the top of a parapet or to the mean level between the eaves and ridge for gable, hip or gambrel roofs.

---

**Somerset**

*How is height of residential structures measured?*

Town of Somerset Zoning Bylaw (2003)

Definitions

HEIGHT OF BUILDING: The vertical distance of the highest point of the roof above the mean grade of the ground adjoining the building.

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**Somerville**

*How is height of residential structures measured?*

According to Somerville Zoning Ordinance, Section 2.2.66 (adopted 1990):

"Height of Building. The vertical distance measured from the finished grade adjoining an exterior wall of a building to the highest point of roof beams of the top story in the case of a flat roof, to the deck line of a mansard roof, and to the average height between the plate and ridge of a gable, hip or gambrel roof."

***

2.2.63. GRADE, FINISHED. For purposes of this Ordinance, unless specifically defined elsewhere in this Ordinance, finished grade shall be the elevation of the reference plane representing the average finished ground line adjoining a building at all the exterior walls. When the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest point within the area between the building and the lot line if, when the lot line is more than fifteen (15) feet from the building, between the building and a point fifteen (15) feet from the building. Average finished
grade of a parcel with more than one building located thereon shall be the average of all the individual finished grades calculated for each building located on said parcel. NOTE: See Figure 2E.

Southboro  
**How is height of residential structures measured?**

Zoning Chapter of the Town of Southborough, Massachusetts, Section 174-2.

HEIGHT - The vertical difference between the average of the mean finished ground elevations of all sides of the building or structure and the elevation of the highest point of the roof for flat roofs, to the deckline of mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs.

***

This definition shall not include signs and the structural features exempt by Section 174-15 hereof and extending not more than twenty (20) feet above the permitted height. For buildings subject to site plan approval under Section 174-10 hereof, the average finished ground elevation shall not be raised above the original natural ground through fill or regrading to more than two (2) feet above the center-line grade of the frontage street opposite the proposed building, unless the approved site plan provides for such buildup. [Added 4-8-1985 ATM, Art. 38]

Sterling  
**How is height of residential structures measured?**

Town of Sterling Protective Zoning Bylaw, 2002

ARTICLE 5. DEFINITIONS

BUILDING HEIGHT for a building abutting a street, shall be measured from the natural grade on the street side(s) and, if not abutting a street from the mean ground level along its front to the highest point of the exterior in the case of a flat roof or to the ridge in the case of a pitched roof.

Stoneham  
**How is height of residential structures measured?**

The Land Use Ordinance of Stoneham (Town of) MIDDLESEX COUNTY, MASSACHUSETTS CHAPTER 15 ZONING 2.0 DEFINITIONS 2.1 Definitions

2.1.9 BUILDING HEIGHT : The vertical distance from the average elevation of the finished lot grade at the front (containing the primary entranceway) of the building, to the highest point of the top story in the case of a flat roof, and to the mean height between the plate and the ridge in the case of a pitched roof, except that in instances where the topography is extremely irregular or there is frontage on two streets, the following will apply: No structure shall exceed the specified height in feet listed in Table One Dimensional Requirements (Section 5.2.1) except for lots with a slope variance greater than seven (7) feet at the structure. In no case shall the height of any exposed portion of a structure be greater than the allowable height in Table I plus seven (7) feet for all sloped lots with a slope variance greater than seven (7) feet, or the average variance, whichever is less, as determined by the Building Inspector. (10-21-85, Art. 15; 10-30-89)

Stoughton  
**How is height of residential structures measured?**

Town of Stoughton Zoning Bylaw, Definitions. (Last Amended 2001).

HEIGHT : The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof, or the mean level of the highest gable of the slope of a hip roof.
**Stow**

*How is height of residential structures measured?*

Town of Stow Zoning Bylaw, Section 4.2 (Last Amended 2003).

"4.2.1 The height of any BUILDING or STRUCTURE shall not exceed thirty-five (35) feet unless a special permit has been granted by the Planning Board when there is no obstruction to scenic views from public ways or properties, except that in no case shall the height exceed the limits permitted by Section 35A of Chapter 90 of the General Laws as inserted by Chapter 756 of the Acts of 1960 and any more restrictive amendments thereto. Radio towers, chimneys, broadcasting and television antennae, bulkheads, cooling towers, water towers, ventilators and other appurtenances shall in no event exceed one hundred (100) feet in height, and amateur radio towers and antennae shall not exceed one hundred fifty (150) feet in height, and further provided that if the use requires a permit or license for the intended use from any governmental authority, one has been granted.

4.2 Height Regulations:

4.2.2 Height shall be measured as the vertical distance from the average ground elevation around the exterior WALLS of the STRUCTURE, or, in the case of built-up land, the highest elevation at the site prior to such change in contour, to the highest point of the roof surface in the case of a flat roof, and to the mean height between eaves and ridge in the case of a pitched roof.

4.2.3 Limitations of height shall not apply to spires, domes and steeples."

**Sudbury**

*How is height of residential structures measured?*

Building height in feet: Height in feet shall be the vertical distance measured from the mean of the finished ground level adjoining the entire building at each exterior wall to the ridge or highest point of the roof.

ZONING BYLAW
ARTICLE IX
2003
TOWN OF SUDBURY
MASSACHUSETTS

ARTICLE 7000. DEFINITIONS

ARTICLE 2000. USE, DIMENSIONAL AND TIMING REGULATIONS
2600. DIMENSIONAL REQUIREMENTS.
2630. Exceptions.
2631. Nothing herein shall prevent the projection of cornices or eaves not exceeding eighteen inches in width or of steps, unroofed porches or windowsills into any required yard or other open space.

2632. Height Limitations. The limit of height of buildings in feet shall not apply to chimneys, ventilators, skylights, tanks, bulkheads, penthouses, church spires and other accessory and structural parts of such buildings, if they are not used for living purposes; except towers, whether or not they are to be attached to any building, may be erected for the sole purpose of amateur radio operation in any district in the Town if a permit is granted by the Board of Appeals subject to such conditions and regulations as may be imposed by such board.

2633. In A-RES, C-RES, Village Business Districts and Limited Business Districts, schools and municipal buildings may contain three full stories not to exceed forty-five (45) feet in height.

**Sutton**

*How is height of residential structures measured?*

Town of Sutton Zoning Bylaw 2003

Section I. General
B. Definitions
Height: The vertical distance from the adjacent ground to the top of the structure of highest roof beams of a flat roof, or to the mean level of the highest gable or slope of a hip roof.

Swampscott  

How is height of residential structures measured?

According to the Swampscott Zoning Bylaws, Article VI, "BUILDING HEIGHT : In the case of flat roofs, the vertical distance from the highest point of the roof (or top of parapet if parapet is higher than plane of roof; but this would not apply to parapets two (2) feet in height or less) to the average finished grade of the ground adjoining the building. In the case of sloped roofs, the vertical distance from the midpoint of the slope between the highest ridge and the main plate to the average finished grade of the ground adjoining the building. In either case the height of the building be measured from the top of a basement, cellar, garage, storage area, etc., which is counted as a story. If the existing grades on the site prior to construction are raised three (3) feet or more (on average) for the new construction, then the height of the building shall be calculated from the grades that existed prior to new construction. See Figure 1(a), 1(b) & 1(c) (5/2003) in Appendix B."

Swansea  

How is height of residential structures measured?

No definition of height given.

Swansea Zoning Bylaw (Adopted 1953, Amended 2002)

Section III. Rural and residential districts.

A. Uses

1. Permitted uses.

The following uses are authorized as a matter of right:

a. One-family dwelling not to exceed two and one-half (2 1/2) stories with attached or detached private garage.

***

Definitions

ONE-HALF STORY : That portion of a building under a sloping roof that cubic contents of which are never more than two-thirds (2/3) of that of the story below. If cubic contents are greater, it shall be deemed a story.

Taunton  

How is height of residential structures measured?

City of Taunton Zoning Ordinance

Definitions

NON-RESIDENTIAL BUILDING HEIGHT - the vertical distance from grade to the highest finished roof surface in the case of flat roofs or to a point at the average height of the highest roof having a pitch.

PRE-DEVELOPMENT GRADE - the elevation of the average crown of the adjacent road, or roads, or average natural grade at the base of the structure, whichever is higher. A grade may be increased up to five (5) feet above pre-development grade for a residential structure. Any increase in fill or grade above five feet shall constitute a decrease in the maximum height allowed for residential structures.

Tewksbury  

How is height of residential structures measured?
Town of Tewksbury Zoning Bylaw, Section 10000 Definitions (Last Amended 2004).

"GRADE PLANE: A reference plane representing the average of finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than six feet from the building, between the building and a point six feet from the building."

"BUILDING HEIGHT: The height of a building shall be the vertical distance from the grade plane to the highest point of the roof. Not included are spires, cupolas, antennae, or similar parts of structures which do not enclose potentially habitable floor space."

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**Topsfield**

*How is height of residential structures measured?*

Topsfield Zoning Bylaw, Article I, Section 1.28

1.28 HEIGHT . The vertical distance from the average finished grade of the ground adjacent to the structure to a line representative of the average of the height at the structure's roof line and its height at the gutter line of the main roof.

---

**Townsend**

*How is height of residential structures measured?*

Town of Townsend Zoning Bylaw (Amended 2004)

BUILDING HEIGHT - The vertical distance from the mean level of ground at the actual building line of the proposed building to the highest point of the roof or parapet for flat or shed roofs, to the deck line for mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs. Height limitations shall not apply to television antennas, chimneys, spires or extensions of the structure strictly ornamental in nature. [Amended 3-16-1987 STM by Art. 4]

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**Tyngsboro**

*How is height of residential structures measured?*

Tyngsborough Zoning Bylaw (2001)

2.12.49 Height in Feet, Buildings. Height in feet shall be the vertical distance measured from the mean of the finished ground level adjoining the entire building at each exterior wall to the top of the highest roof beams of a flat roof or to the peak of the highest gable or slope of a hip roof. In all districts appurtenant structures located upon the roof of a building may extend above the height limit but in no case shall they exceed 100 feet in height when combined with the height of the building nor in the aggregate occupy more than 20% of the roof plan area unless authorized by special permit from the Special Permit Granting Authority as designated for the particular use in Section 2.11.30 of the By-law or by the Planning Board if the principal use does not require a special permit. (See Figure 6)

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**Upton**

*How is height of residential structures measured?*

Town of Upton Zoning Bylaw (Amended 2002)

SECTION VI HEIGHT, AREA, AND YARD REQUIREMENTS
A. Building Heights
In all districts the height of buildings shall be measured vertically from the average finished grade of the ground adjoining such building to the highest point of the roof for flat roofs, to the deck line for mansard roofs, and to the average height between eaves and ridge for gable, hip, and gambrel roofs.

**Uxbridge**

*How is height of residential structures measured?*

Town of Uxbridge Zoning Bylaws (Revised 2004)

HEIGHT: The height of a building is the vertical distance from the mean grade of the sidewalks on all abutting streets or the mean grade of the grounds adjoining the building, to the highest point of the roof beams, not including in such measurement of height, cornices which do not extend more than five (5) feet above the highest point of the roof beams, nor enclosures for tanks which do not exceed twenty (20) feet in height above the roof beams and do not exceed in united area ten per cent (10%) of the area of the roof.

**Wakefield**

*How is height of residential structures measured?*

The definition of building height is set forth in the Wakefield Zoning Bylaw, Article 2, Section 190-4(B)

HEIGHT OF BUILDING — The vertical distance of the highest point of the roof above the average finished grade of the ground immediately adjoining the building, as computed before the building is actually erected. This definition excludes chimneys, ventilators, skylights, water tanks, bulkheads, elevator penthouses and other accessory structures which are required or are customarily carried above the roofs of buildings and towers, spires, domes, cupolas and similar parts of buildings if such areas are not used for living or storage purposes and if such structures are not equal to more than twenty percent (20%) of the space occupied by the ground floor of the building. Such accessory structures shall not exceed required height limits by more than twenty (20) feet. Any berm or earth structure changing the grade of the ground shall be added to the elevation of the building to determine its height under this chapter.

**Walpole**

*How is height of residential structures measured?*

According to Jack Mee, Building Inspector, (7/15/04) height is measured from the mean grade to the average of the roof height measured from gutter line to ridge line. Grade is determined post construction.

**Waltham**

*How is height of residential structures measured?*

According to the General Ordinances of the City of Waltham, Article II, Section 2.326.HEIGHT OF BUILDING -- The vertical distance allowed for all structures in each zoning district above the average existing elevation of a lot or parcel of land, the average existing elevation being the average of the aggregate averages of all sides or boundaries. To determine the average elevation of each side or boundary, there shall be a measurement of elevation at each side or boundary angle and at least once every 30 feet between said angles. Further, the determination of the allowed height of a building on any parcel shall be made at the time of application for a building permit.”

**Watertown**

*How is height of residential structures measured?*

ZONING ORDINANCE
Watertown Planning Board
Watertown, Massachusetts
ARTICLE II
SECTION 2.00 DEFINITIONS

SECTION 2.32 HEIGHT OF BUILDING

The vertical distance of the highest point of the structure above the average existing grade along the Front Building Line; notwithstanding the foregoing, in instances where the Lot slopes away from the Front Lot Line, the height of the Building shall be the vertical distance above the average existing elevation of the Lot or parcel of land; the average existing elevation being the average of the aggregate averages of all sides or boundaries. To determine the average elevation of each side or boundary there shall be a measurement of elevation at each side or boundary angle and at least once every thirty (30) feet between angles.

---

Wayland

How is height of residential structures measured?

Code of the Town of Wayland, Massachusetts, Section 104 (June 25, 2004)

§ 198-104. Definitions.

BUILDING HEIGHT -- The distance, measured vertically from mean grade, to the highest roof element

GRADE - A reference plane representing the average of finished ground adjoining the building at all exterior walls, established by the lowest points within the area between the building and a point six feet from the building.

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Wellesley

How is height of residential structures measured?

Zoning Bylaws of the Town of Wellesley, Massachusetts, Section XX (Amended 2003)

SECTION XX. HEIGHTS OF BUILDINGS OR STRUCTURES.
No building or structure, except one for religious or nonresidential municipal purposes, or excepting further, a building or structure in Limited Apartment Districts authorized by SECTION VIA. 3., shall be constructed, enlarged or altered so as to exceed a height measured from the average finished grade of the land surrounding the exterior walls, of forty-five (45) feet or three stories, exclusive of parapets, chimneys, flag poles, solar collectors or necessary projections.
Provided, however, that single family, two family and town house buildings and additions thereto erected pursuant to a building permit issued on or after November 5, 1996 and buildings or additions thereto constructed in the Lower Falls Village Commercial District shall not exceed 36 feet in height as defined and restricted in this Section.
Provided further, however, that the height of residential buildings constructed under the provisions of the RESIDENTIAL INCENTIVE OVERLAY DISTRICT shall be governed by the height restrictions contained in SECTION XIVF.
This Section shall not apply to the replacement, without substantial change or addition thereto, of buildings in existence on May 1, 1949 which are thereafter destroyed or demolished.

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Wenham

How is height of residential structures measured?

*Information collected in 2004*
Town of Wenham Zoning Bylaw, Section IX, (Adopted 1974, Last Amended 2000)

"Section IX - Height Regulations

A. Height.

In all districts, no building shall exceed three stories or thirty-five (35) feet in height, whichever is higher, except as set forth in Clause B of this section. (As amended 3/11/74)

B. Height Exceptions

1. Towers, chimneys, windmills, tanks, radio and television antenna towers and the like may extend to the height of 55 feet, subject to the granting of a special permit by the Board of Appeals and provided that they are accessory to the principal permitted use of the lot and in no way used for living purposes.

2. Steeples and spires may extend to a height in excess of three stories or thirty-five (36) feet, whichever is higher, subject to the granting of a special permit by the Board of Appeals as to the reasonableness thereof, which may impose reasonable restrictions on height and on the use of the structure relating to illumination, sound generation, and exterior appendages so that no nuisance or other activity detrimental to the neighborhood will result and so that

a. the proposed structure does not pose a danger to public health or safety; and

b. the proposed structure will not adversely affect adjacent properties on account of shadowing or obstruction of scenic vistas.

The standards set forth in Section XIII, C, 4, b. shall not apply to the granting of a special permit for height exceptions.

C. No accessory building which has an eave height exceeding ten feet shall be built within twenty feet of the side lot line without a Special Permit from the Board of Appeals. (As amended 5/12/79)."

West Boyls

How is height of residential structures measured?

From Section 4.3(F):

"Building Height Limitations:
In All Districts, except the Multi-Story District as specified within Section 2.8, and the Business District, no building shall be erected or altered to an average height of more than thirty-five feet (35'). Average height is calculated by taking the average of the heights, as measured from the ground surface to the eaves, at every exterior building corner. The maximum building height allowed within the Business District shall be fifty feet (50'). Where such building is proposed to be greater than thirty-five feet (35') tall, it shall be set back from the property line abutting a Residential District a horizontal distance the same as the height of the building." From the Town of West Boyston's Zoning Bylaw, Section 4.3 (F) (Section last amended 5/20/02).

West Bridg

How is height of residential structures measured?

The Land Use Ordinance of West Bridgewater
PLYMOUTH COUNTY, MASSACHUSETTS
ZONING BY-LAWS

2.0. DEFINITIONS
2.1. TERMS AND WORDS
HEIGHT: The vertical dimension measured from the average elevation of the finished lot grade at the front of building to the highest point of the roof.

West Newbury

How is height of residential structures measured?

West Newbury Zoning Bylaw (Revised 2003)

Section 6.0 Intensity of Use

(3) No buildings, except accessory farm buildings, may have more than 2.5 stories within 35' as measured from the midpoint between the eaves and the ridge from the mean elevation or average grade where the foundation meets the soil. However, chimneys, antennae with support structure for personal use, and flagpoles may extend above the height limits proscribed in Section 6.1. Further, architectural elements not used for human occupancy and not exceeding ten feet in height and whose area is less than 10% of the principal building footprint, shall also be permitted to exceed the height limitations of Section 6.1.

Westborough

How is height of residential structures measured?


BUILDING HEIGHT shall mean the vertical distance from the mean finished grade of the ground adjoining the building to the highest point of the roof or parapet for flat or shed roofs, to the deck line for mansard roofs and to the mean height between eaves and ridge for gable, hip, and gambrel roofs. Not included are spires, cupolas, TV antennae or other parts of structures which do not enclose potentially habitable floor space.

Westford

How is height of residential structures measured?

Town of Westford Zoning Bylaw, Section 4.2 (Last Amended 2004).

"4.2 HEIGHT REGULATIONS

4.2.1 Exceptions. The provisions of this Zoning Bylaw governing the height of the building shall not apply to chimneys, poles, spires, tanks, bulkheads, skylights, ventilators, cooling towers, electronic equipment, elevator shafts, and other and other projections or necessary appurtenances carried above the roof, nor to domes, other towers, stacks, or spires which occupy not more than twenty percent (20%) of the ground floor area of the buildings, nor to churches or public, agricultural or institutional buildings, provided, however,

1 that the excepted appurtenances are not located within the flight paths of an airport as defined by Federal Aviation Administration regulations,

2 that such roof top appurtenances shall be screened from public view to the maximum extent feasible

4.2.2 Measurement of Height. The measurement of maximum building height shall be accomplished by measuring from the highest point of the structure, excluding items set forth above to the mean finished grade on every facade of the structure

1 A habitable basement having one-half (1/2) or more of its height above ground or an attic shall be counted as a story, provided that a story in a sloping roof, the area of which story at a height four feet above the floor does not exceed two-thirds (2/3) of the floor area of the story immediately below it, shall be counted as a half-story."

Weston

How is height of residential structures measured?

In all cases, height shall be determined by measuring the vertical distance from the Grade Plane to the highest point of a building. The grade plane is a horizontal reference plane passing through
the elevation of the average natural grade, which is the grade before disturbance for construction. The average grade is calculated from the grade around the perimeter.

Town of Weston Zoning By-Law and Map Section VI (E) (Adopted 1928, Amended 2003)

E. HEIGHT REGULATIONS
1. On all land located within the Town of Weston, no building shall exceed the height limitations set forth in the table below. In all cases, height shall be determined by measuring the vertical distance from the Grade Plane to the highest point of a building.

Town of Weston Zoning By-Law and Map Section II (Adopted 1928, Amended 2003)

GRADE
For purposes of dimensional determinations:
NATURAL GRADE shall be the natural grade of the land at any point along the perimeter of a proposed building prior to disturbance for construction. The elevation of the natural grade prior to disturbance for construction shall be certified by a registered land surveyor, or may be such elevation as may be determined from maps or records satisfactory to the town.
FINISH GRADE shall be the final grade of the land at any point along the perimeter of a building at the completion of construction. The elevation of the finish grade shall be determined by a site plan satisfactory to the Town showing proposed contours at completion of construction.
GRADE PLANE
A horizontal reference plane passing through the elevation of the Average Natural Grade of a proposed building from which building height is determined.
AVERAGE GRADE
The average of the elevations of the Grades around the perimeter of a proposed building, as determined by the formula:
\[
\frac{(e_1 + e_2) \times L}{P}
\]
where S is a segment of the building perimeter, e1 and e2 are the Grades at the respective ends of the segment; L is the corresponding length of the segment; and P is the length of the total building perimeter. In the case of a rectangular building, average grade may be determined by taking the average of the Grades of the four extreme corners of the building.

Westwood

How is height of residential structures measured?

Town of Westwood Zoning Bylaw, Section 2.61 (Adopted 1961, Amended 2004).

"2.61 Height, Building Measured at the vertical distance from the average finished ground elevation adjoining the building at all exterior walls (grade plane) to the average height of the highest roof surface, except that in residential districts, height is measured from the highest finished ground elevation adjoining the building at all exterior walls. The limitations of height shall not apply to chimneys, ventilators, skylights, tanks, bulkheads, penthouses, amateur radio antennae and other necessary features usually carried above the roof line, provided such features do not cover more than twenty-five percent (25%) of the area of the roof of the building or other structure and are used in no way for human occupancy."

Weymouth

How is height of residential structures measured?

Weymouth Zoning Ordinance, Section 120-6 (adopted 1969):

"HEIGHT OF BUILDING -- The vertical distance of the highest point of the roof above the mean finished grade of the ground adjoining the building, excluding penthouses, bulkheads and other permitted superstructures above the roof:"

*Information collected in 2004
Whitman  

How is height of residential structures measured?

Town of Whitman Zoning Bylaw

SECTION II Definitions

HEIGHT : The vertical distance from the average finished grade of the adjacent ground to the top of the structure of the highest roof beams of a flat roof or the mean level of the highest gable or the slope of a hip roof.

Wilmington  

How is height of residential structures measured?

Wilmington Zoning Bylaw (2002)

5.2.8 Height

5.2.8.1 Height in Feet - Height in feet shall be the vertical distance from the average of the finished ground level adjoining a building or structure at all exterior walls to the top of the highest roof beams of a flat roof or to the mean level of the highest gable or slope of a hip roof. In all districts chimneys, towers, agricultural silos, antennae, elevator shafts and other similar structures not used for human occupancy or storage may extend above the height limits herein fixed provided that (1) if located upon a roof of a building such structure(s) do not occupy more than 20 percent of the roof surface and (2) in all cases such extensions shall not exceed a height of 48 feet from the ground to the highest point of the structure unless authorized by special permit from the Board of Appeals.

5.2.8.2 Height in Stories - Height in stories shall be the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters. One-half story shall be a story under a gable or slope of hip roof.

Winchester  

How is height of residential structures measured?

Winchester Zoning Bylaw (2003)

Section 9: Definitions

HEIGHT OF A BUILDING . The height of a building is the vertical distance measured from the mean grade of the existing ground level adjoining the building at each exterior wall to the highest point of the roof. Mean grade is to be determined by measuring the elevation at the major exterior corners of a structure and then dividing the total elevation by the number of points of measurement. The maximum height of a building shall not exceed the distance in feet or the number of stories, whichever is less, as set forth in the Table of Dimensional Requirements - Section 6.1 for the district in which the building is located.

Winthrop  

How is height of residential structures measured?

The Zoning Bylaw of the Town of Winthrop, Massachusetts, Chapter 145 of the Winthrop Town Code, Article I, Section 145-5:

BUILDING HEIGHT -- For the purpose of this chapter, the height of any building or accessory structural feature shall be the vertical distance of the highest point of the roof above the mean finished grade of the ground adjoining such building. The limitations of height in feet shall not apply to chimneys, ventilators, skylights, tanks, bulkheads, elevator penthouses and other accessory structural features usually carried above roofs, nor to domes, towers or spires of churches or other buildings, provided that such features shall in no way be used for living purposes.
**Woburn**  
*How is height of residential structures measured?*

City of Woburn 1985 Zoning Ordinances, Section 2 (amendments through 2004)

HEIGHT OF A BUILDING: The vertical distance measured from the average ground elevation around the exterior walls of the building, determined without regard to any attached accessory building or attached parking structure, or the underside of the floor slab of the building above any parking facilities contained within the structure, to the highest point of the roof surface in the case of a flat roof, and to the mean height between eaves and ridge in the case of a pitched roof except that the measurement of height shall not include appurtenant roof structures such as chimneys, service equipment and penthouses or spires, smokestacks, flag poles, aerials, and the like, nor shall it include any parking facilities contained within the building.

**Worcester**  
*How is height of residential structures measured?*


"HEIGHT OF BUILDING – The vertical distance from the grade level measured from the center of that face of the building having the main entrance, to a line extended horizontally from the highest point of the building. Chimneys and other similar projections shall not be included in calculating the height."

**Wrentham**  
*How is height of residential structures measured?*

Wrentham Zoning Bylaw, Section 2 Definitions (adopted 1978).

HEIGHT, BUILDING : The vertical distance from the GRADE to the top of the highest roof beams of a flat roof, or to the mean level of the highest gable or SLOPE of a hip roof. When a BUILDING faces on more than one (1) STREET, the HEIGHT shall be measured from the average of the GRADES at the center of each STREET front.