

Observation Zone Rationale Study

Rationale for selection of *Observation Zone*.

The goal of this analysis was to ensure residence views in Somerset Association Community would be visible to at least 95% of the adult population of the United States from a standing position at a comfortable distance from the window glass of the main living areas of the home.

This required knowing the height of a plane parallel to the floor, above which the eyeballs of at least 95% of adult population of the United States would be, if they were standing. This would be taking the lower height value of the 5% female and the higher height value of the 95% male to be used in view obstruction reviews and remodel reviews.

According to the National Health and Human Services Anthropometric Reference Data for 2007 thru 2010 Series 11, Number 252 dated October 2012, 95% of all women are greater than or equal to 4' 11" and 95% of all males are less than or equal to 6' 2".

Taking an empirical average distance from the top of the head to pupil of the eyes of 4", the *Observation Zone* height is 4' 7" from the floor or a 5' 10" from the floor. A 2-foot distance from the window was chosen as a comfortable viewing distance which is approximately an arm's length.

Page 14 □ Series 11, No. 252

Table 10. Height in inches for females aged 20 and over and number of examined persons, mean, standard error of the mean, and selected percentiles, by race and ethnicity and age: United States, 2007–2010

Race and ethnicity and age	Number of examined persons	Mean	Standard error of the mean	Percentile									
				5th	10th	15th	25th	50th	75th	85th	90th	95th	
All racial and ethnic groups ¹				Inches									
20 years and over	5,971	63.8	0.05	59.3	60.3	60.9	61.9	63.8	65.7	66.6	67.3	68.4	
20–29 years	980	64.2	0.09	59.9	60.6	61.3	62.2	64.1	66.0	67.0	67.6	68.9	

Page 16 □ Series 11, No. 252

Table 12. Height in inches for males aged 20 and over and number of examined persons, mean, standard error of the mean, and selected percentiles, by race and ethnicity and age: United States, 2007–2010

Race and ethnicity and age	Number of examined persons	Mean	Standard error of the mean	Percentile									
				5th	10th	15th	25th	50th	75th	85th	90th	95th	
All racial and ethnic groups ¹				Inches									
20 years and over	5,647	69.3	0.08	64.3	65.4	66.2	67.3	69.3	71.2	72.3	73.0	74.1	
20–29 years	895	69.4	0.13	64.4	65.5	66.5	67.4	69.4	71.5	72.6	73.1	74.1	