# Dimensions and Sizes for CMU

Three terms are used in referring to dimensions: specified, actual, and nominal. Variations in dimensions are governed by ASTM C90 Standard Specification for Loadbearing Concrete Masonry Units. C90 includes exceptions for split and slump textures.

**Specified dimensions** are those specified for the manufacture of masonry units or the construction of masonry. Design calculations are based on specified dimensions.

**Actual dimensions** are the measured dimensions of the unit. ASTM Standards allow the actual overall dimensions a permissible variation of + or - 1/8 inch. from the specified dimension.

**Nominal dimensions** are those used in stating the unit size. They are equal to the specified dimensions plus the thickness of the mortar joint.

For standard precision units, no overall actual dimension (width, height, and length) may not differ by more than + or - 1/8-inch from the specified dimension.

For split face and slump units, overall dimensions will vary.

Split face: only the non-split overall dimensions may not vary by more than + or - 1/8-inch from the specified non-split dimension.

Slumpstone™: only the height dimension may not vary by more than + or - 1/8-inch from the specified height dimension.

Precision Units and
Non-Split Dimensions of Split Face Units

| Nominal Size | Specified Dimensions |
|---|---|
| 4x8x16 | 3.625 x 7.625 x 15.625 |
| 6x8x16 | 5.625 x 7.625 x 15.625 |
| 8x8x16 | 7.625 x 7.625 x 15.625 |
| 10x8x16 | 9.625 x 7.625 x 15.625 |
| 12x8x16 | 11.625 x 7.625 x 15.625 |
| 16x8x16 | 15.625 x 7.625 x 15.625 |

Slumpstone™

| Nominal Size | Specified Dimensions |
|---|---|
|  |  |
| 6x6x16 | Height 5.5 |
| 8x6x16 | Height 5.5 |
| 10x6x16 | Height 5.5 |
| 12x6x16 | Height 5.5 |
| 16x6x16 | Height 5.5 |

### Dimension Statement

Dimensions must be stated in proper order - width, height, and length (WHL). For example, an 8-inch wide, 16-inch long, 4-inch high unit is an 8x4x16. Reversing any two dimensions will describe a completely different unit. Using the same example stated as 4x8x16 would indicate a unit 4 inches wide and 8 inches high (not 8 inches wide and 4 inches high).