$F_v$ = Site coefficient defined in Table 1613.5.3(2).

$S_S$ = The mapped spectral accelerations for short periods as determined in Section 1613.5.1.

$S_1$ = The mapped spectral accelerations for a 1-second period as determined in Section 1613.5.1.

**TABLE 1613.5.3(1) VALUES OF SITE COEFFICIENT $F_a$ [a]**

| SITE CLASS | MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD | | | | |
|---|---|---|---|---|---|
| | $S_s \leq 0.25$ | $S_s = 0.50$ | $S_s = 0.75$ | $S_s = 1.00$ | $S_s \geq 1.25$ |
| A | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| B | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| C | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 |
| D | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 |
| E | 2.5 | 1.7 | 1.2 | 0.9 | 0.9 |
| F | Note b | Note b | Note b | Note b | Note b |

a. Use straight-line interpolation for intermediate values of mapped spectral response acceleration at short period, $S_s$.

b. Values shall be determined in accordance with Section 11.4.7 of ASCE 7.

**TABLE 1613.5.3(2) VALUES OF SITE COEFFICIENT $F_V$ [a]**

| SITE CLASS | MAPPED SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD | | | | |
|---|---|---|---|---|---|
| | $S_1 \leq 0.1$ | $S_1 = 0.2$ | $S_1 = 0.3$ | $S_1 = 0.4$ | $S_1 \geq 0.5$ |
| A | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| B | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| C | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 |
| D | 2.4 | 2.0 | 1.8 | 1.6 | 1.5 |
| E | 3.5 | 3.2 | 2.8 | 2.4 | 2.4 |
| F | Note b | Note b | Note b | Note b | Note b |

a. Use straight-line interpolation for intermediate values of mapped spectral response acceleration at 1-second period, $S_1$.

b. Values shall be determined in accordance with Section 11.4.7 of ASCE 7.

**1613.5.4 Design spectral response acceleration parameters.** Five-percent damped design spectral response acceleration at short periods, $S_{DS}$, and at 1-second period, $S_{D1}$, shall be determined from Equations 16-38 and 16-39, respectively:

$$S_{DS} = \frac{2}{3} S_{MS} \qquad \textbf{(Equation 16-38)}$$

$$S_{D1} = \frac{2}{3} S_{M1} \qquad \textbf{(Equation 16-39)}$$