

**Table 11.4-1 Site Coefficient,  $F_a$** 

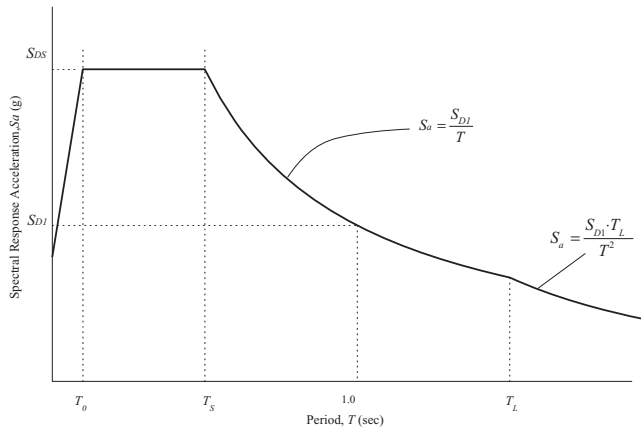
Mapped Risk-Targeted Maximum Considered Earthquake (MCE <sub>R</sub> ) Spectral Response Acceleration Parameter at Short Period					
Site Class	$S_S \leq 0.25$	$S_S = 0.5$	$S_S = 0.75$	$S_S = 1.0$	$S_S \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7				

Note: Use straight-line interpolation for intermediate values of  $S_S$ .

**Table 11.4-2 Site Coefficient,  $F_v$** 

Mapped Risk-Targeted Maximum Considered Earthquake (MCE <sub>R</sub> ) Spectral Response Acceleration Parameter at 1-s Period					
Site Class	$S_I \leq 0.1$	$S_I = 0.2$	$S_I = 0.3$	$S_I = 0.4$	$S_I \geq 0.5$
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	See Section 11.4.7				

Note: Use straight-line interpolation for intermediate values of  $S_I$ .

**FIGURE 11.4-1 Design Response Spectrum.**

### 11.4.5 Design Response Spectrum

Where a design response spectrum is required by this standard and site-specific ground motion procedures are not used, the design response spectrum curve shall be developed as indicated in Fig. 11.4-1 and as follows:

1. For periods less than  $T_0$ , the design spectral response acceleration,  $S_a$ , shall be taken as given by Eq. 11.4-5:

$$S_a = S_{DS} \left( 0.4 + 0.6 \frac{T}{T_0} \right) \quad (11.4-5)$$

2. For periods greater than or equal to  $T_0$  and less than or equal to  $T_S$ , the design spectral response acceleration,  $S_a$ , shall be taken equal to  $S_{DS}$ .
3. For periods greater than  $T_S$ , and less than or equal to  $T_L$ , the design spectral response acceleration,  $S_a$ , shall be taken as given by Eq. 11.4-6:

$$S_a = \frac{S_{D1}}{T} \quad (11.4-6)$$

4. For periods greater than  $T_L$ ,  $S_a$  shall be taken as given by Eq. 11.4-7:

$$S_a = \frac{S_{D1} T_L}{T^2} \quad (11.4-7)$$

where

$S_{DS}$  = the design spectral response acceleration parameter at short periods