TABLE 4-5*a*

Shape and depth factors for use in either the Hansen (1970) or Vesić (1973, 1975*b*) bearing-capacity equations of Table 4-1. Use s'_c, d'_c when $\phi = 0$ only for Hansen equations. Subscripts H, V for Hansen, Vesić, respectively.

Shape factors	Depth factors
$s'_{c(H)} = 0.2\dfrac{B'}{L'} \qquad (\phi = 0°)$	$d'_c = 0.4k \qquad (\phi = 0°)$
$s_{c(H)} = 1.0 + \dfrac{N_q}{N_c} \cdot \dfrac{B'}{L'}$	$d_c = 1.0 + 0.4k$
$s_{c(V)} = 1.0 + \dfrac{N_q}{N_c} \cdot \dfrac{B}{L}$	$k = D/B$ for $D/B \leq 1$
$s_c = 1.0$ for strip	$k = \tan^{-1}(D/B)$ for $D/B > 1$
	k in radians
$s_{q(H)} = 1.0 + \dfrac{B'}{L'} \sin\phi$	$d_q = 1 + 2\tan\phi(1 - \sin\phi)^2 k$
$s_{q(V)} = 1.0 + \dfrac{B}{L} \tan\phi$	k defined above
for all ϕ	
$s_{\gamma(H)} = 1.0 - 0.4\dfrac{B'}{L'} \geq 0.6$	$d_\gamma = 1.00$ for all ϕ
$s_{\gamma(V)} = 1.0 - 0.4\dfrac{B}{L} \geq 0.6$	

Notes:

1. Note use of "effective" base dimensions B', L' by Hansen but not by Vesić.
2. The values above are consistent with either a vertical load or a vertical load accompanied by a horizontal load H_B.
3. With a vertical load and a load H_L (and either $H_B = 0$ or $H_B > 0$) you may have to compute two sets of shape s_i and d_i as $s_{i,B}$, $s_{i,L}$ and $d_{i,B}$, $d_{i,L}$. For i, L subscripts of Eq. (4-2), presented in Sec. 4-6, use ratio L'/B' or D/L'.