

HOLLOW-CORE SLABS

Fig. 3.3.4 Section properties

Span-Deck

Trade name: Span-Deck [®] Licensing Organization: Span-Deck Incorporated, Franklin, Tennessee						
4' - 0" x 8" Textured Soffit				4' - 0" x 8" Textured Soffit with 2" Topping		
Area (sq in.)	y _b (in.)	I (in. ⁴)	Weight (psf)	y _b (in.)	Mom. of Inertia (in. ⁴)	Weight (psf)
144*	4.70	1033*	45	6.16	1965	70
4' - 0" x 8" Smooth Soffit				4' - 0" x 8" Smooth Soffit with 2" Topping		
Area (sq in.)	y _b (in.)	I (in. ⁴)	Weight (psf)	y _b (in.)	Mom. of Inertia (in. ⁴)	Weight (psf)
173	3.90	1527	47	5.43	2904	72
4' - 0" x 12" Textured Soffit				4' - 0" x 12" Textured Soffit with 2" Topping		
Area (sq in.)	y _b (in.)	I (in. ⁴)	Weight (psf)	y _b (in.)	Mom. of Inertia (in. ⁴)	Weight (psf)
177	6.90	3170	54	8.70	5143	78
4' - 0" x 12" Smooth Soffit				4' - 0" x 12" Smooth Soffit with 2" Topping		
Area (sq in.)	y _b (in.)	I (in. ⁴)	Weight (psf)	y _b (in.)	Mom. of Inertia (in. ⁴)	Weight (psf)
205	5.83	4186	56	7.74	7016	80
<p>*Section properties for lightweight soffit sections are calculated using a method in which the bottom soffit is transformed into an effective width having the same properties of the top concrete.</p> <p>Effective width = $\frac{E_c(\text{soffit})}{E_c(\text{top})}$ (Actual width) = 19.7 in. for 4' - 0" wide sections, 39.5 in. for 8' - 0" wide sections.</p>						
<p>Note: All sections not available from all producers. Check availability with local manufacturers. 6" and 10" depths are of similar configuration.</p>						