

5.4-2 Repeat Problem 5.4-1 for steel with $F_y = 65 \text{ ksi (450 MPa)}$.

	λ	λ_p	λ_r
FLANGE	$b_f/2t_f$	$0.38\sqrt{E/F_y}$	$1.0\sqrt{E/F_y}$
WEB	h/t_w	$3.76\sqrt{E/F_y}$	$5.70\sqrt{E/F_y}$

FLANGE $8.03 \leq \lambda \leq 21.12$

W30x90, W24x104, W21x48, W18x76, W16x36, W14x109

W14x99, W14x90, W12x79, W12x72, W12x65, W12x53

W12x26, W12x14, W10x54, W10x49, W10x33, W10x12, W8x35

W8x31, W8x24, W8x10, W6x20, W6x15, W6x9, W6x8.5

M12.5x12.4, M11.6x11.6, M12x10, M4x6, M3x2.9

WEB $79.42 \leq h/t_w \leq 120.40$

NO SHAPES ARE NONCOMPACT FOR WEB

b) FLANGE $b_f/2t_f > 21.12$ NO SHAPES ARE SLENDER

WEB $h/t_w > 120.40$ NO SHAPES ARE SLENDER