



PD 5500 Section 2.3.3

Steel Designation	Materials With Specified Elevated Temperature Values	Materials Without Specified Elevated Temperature Values
Carbon, carbon manganese and low alloy steels $T \leq 50 \text{ }^\circ\text{C}$	$f_E = \min\left(\frac{R_e}{1.5}; \frac{R_m}{2.35}\right)$	$f_E = \min\left(\frac{R_e}{1.5}; \frac{R_m}{2.35}\right)$
Carbon, carbon manganese and low alloy steels $T \geq 150 \text{ }^\circ\text{C}$	$f_E = \min\left(\frac{R_{e(T)}}{1.5}; \frac{R_m}{2.35}\right)$	$f_E = \min\left(\frac{R_{e(T)}}{1.6}; \frac{R_m}{2.35}\right)$
Austenitic stainless steels $T \leq 50 \text{ }^\circ\text{C}$	$f_E = \min\left(\frac{R_e}{1.5}; \frac{R_m}{2.5}\right)$	$f_E = \min\left(\frac{R_e}{1.5}; \frac{R_m}{2.5}\right)$
Austenitic stainless steels $T \geq 150 \text{ }^\circ\text{C}$	$f_E = \min\left(\frac{R_{e(T)}}{1.35}; \frac{R_m}{2.5}\right)$	$f_E = \min\left(\frac{R_{e(T)}}{1.45}; \frac{R_m}{2.5}\right)$
NOTE: between $50 \text{ }^\circ\text{C}$ and $150 \text{ }^\circ\text{C}$, f_e is obtained by linear interpolation		