

RCC-MR

DESIGN AND CONSTRUCTION RULES FOR MECHANICAL COMPONENTS OF NUCLEAR INSTALLATIONS

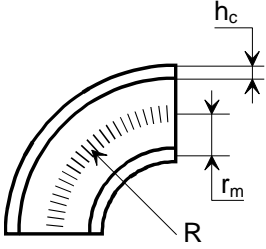
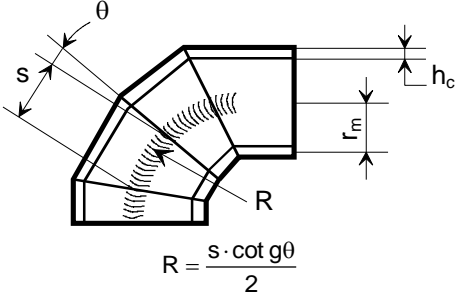
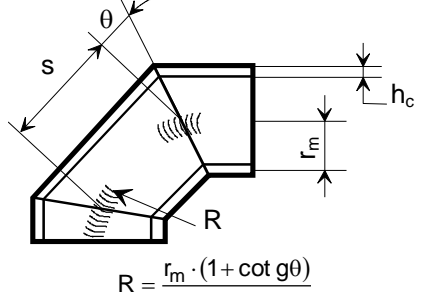
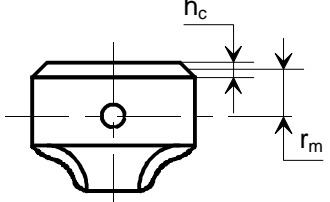
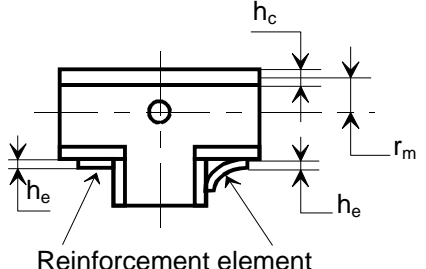
2007 EDITION

2nd Erratum – April 2022

afcen

AFCEN - Association governed by the French Law of 1st July 1901
Administrative Offices : AFCEN, 1 place Jean Millier – 92400 Courbevoie Cedex
ISBN No.2-913638-22-8

Figure RD 3682: stress factors

Description	Flexibility characteristic f	Flexibility factors	Stress factors i	Sketches
<p>Straight pipe</p>	<p>1</p>	<p>1</p>	<p>1</p>	
<p>Welded elbow or pipe bend (1), (2), (3)</p>	$\frac{h_c \cdot R}{r_m^2}$	$\frac{1,65}{f}$	$\frac{0,9}{f^{2/3}}$	
<p>Mitre elbows $s < r_m \cdot (1 + \text{tg}\theta)$ (1), (2), (3)</p>	$\frac{h_c \cdot R}{r_m^2}$	$\frac{1,52}{f^{5/6}}$	$\frac{0,9}{f^{2/3}}$	 <p style="text-align: center;">$R = \frac{s \cdot \cot g\theta}{2}$</p>
<p>Mitre elbows $s \geq r_m \cdot (1 + \text{tg}\theta)$ (1), (2), (4)</p>	$\frac{h_c \cdot R}{r_m^2}$	$\frac{1,52}{f^{5/6}}$	$\frac{0,9}{f^{2/3}}$	 <p style="text-align: center;">$R = \frac{r_m \cdot (1 + \cot g\theta)}{2}$</p>
<p>Welded tee per ANSI B 16.9 (1), (2)</p>	$4,4 \cdot \frac{h_c}{r_m}$	<p>1</p>	$\frac{0,9}{f^{2/3}}$	
<p>Reinforced fabricated tee (1), (2), (5)</p>	$\frac{(h_c + 0,5 \cdot h_e)^{5/2}}{r_m \cdot h_c^{3/2}}$	<p>1</p>	$\frac{0,9}{f^{2/3}}$	 <p style="text-align: center;">Reinforcement element</p>
<p>Unreinforced fabricated tee (1), (2)</p>	$\frac{h_c}{r_m}$	<p>1</p>	$\frac{0,9}{f^{2/3}}$	