



Thermal Insulation Association of Canada

The Voice of The Mechanical Insulation Industry

Association Canadienne de l'Isolation Thermique

La voix de l'industrie de l'isolation mécanique

2019 TIAC Conference

Innovators Sub-committee Update



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La voix de l'industrie de l'isolation mécanique

- **Current Initiatives**
 - Best Practice Guide (BPG) Updates
 - Denis Formula Updates
- **Future Initiatives**
 - Mobile Application
 - Corrosion Under Insulation (CUI)

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Best Practice Guide



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Transition Document

Denis Formula Rev. 05
Canadian Relevant Information
+ Additional content



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Denis Formula Revision 5 – Proposed Changes

- Better define the method of measurement and reduce opportunities for misinterpretation
- Extend factors to include for larger pipe sizes (i.e. 64 NPS)
- Align imperial and metric conversion tables. (Possibly considering only one unit of measure)
- Set factor for heat tracing penetrations (%)
- Simplify height allowances by utilizing a 1 – 2 factors rather than a tiered system
- Revise hot work factor to a single unit rather than a tiered system
- Eliminating factors for screwed fittings (Factor stacking)
- Simplify the view of the conversion factors to a single table

Size	45° Elbows	90° Elbows	Bent Pipe	Tees	Branch Fittings	Reducers / Caps / Termination Points	Hangers / Shoes	Penetrations	Penetrations @ Fitting	Obstruction	Flanges	Valves (Threaded)	Valves (Welded)	Valves (Flanged)	Bonnets	Victaulic Premium
0.50	0.47	0.62	3.00	0.62	0.62	0.47	0.31	0.62	0.93	2.00	0.93	0.62	0.93	0.62	0.62	3.00
0.75	0.47	0.62	3.00	0.62	0.62	0.47	0.31	0.62	0.93	2.00	0.93	0.62	0.93	0.62	0.62	3.00
1.00	0.47	0.62	3.00	0.62	0.62	0.47	0.31	0.62	0.93	2.00	0.93	0.62	0.93	0.62	0.62	3.00
1.25	0.47	0.62	3.00	0.62	0.62	0.47	0.31	0.62	0.93	2.00	0.93	0.62	0.93	0.62	0.62	3.00
1.50	0.47	0.62	3.00	0.62	0.62	0.47	0.31	0.62	0.93	2.00	0.93	0.62	0.93	0.62	0.62	3.00

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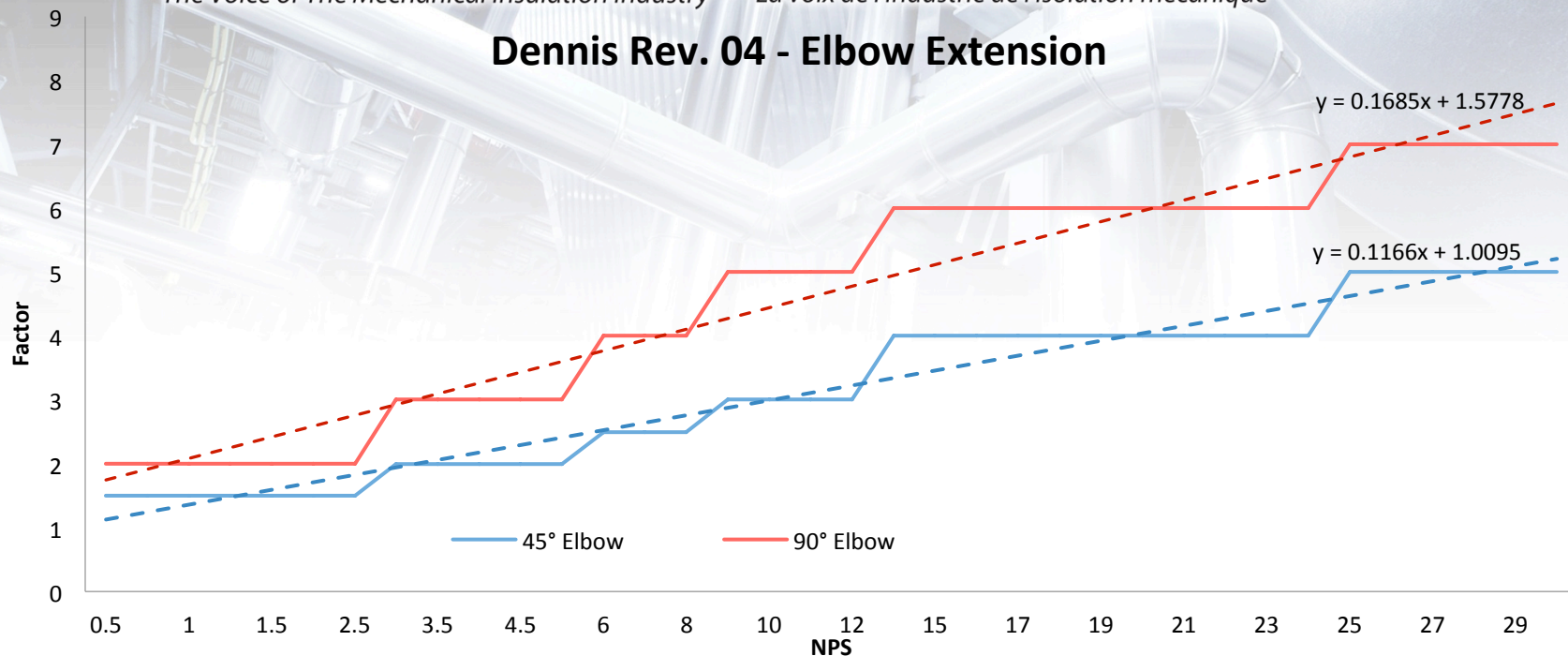
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Dennis Rev. 04 - Elbow Extension

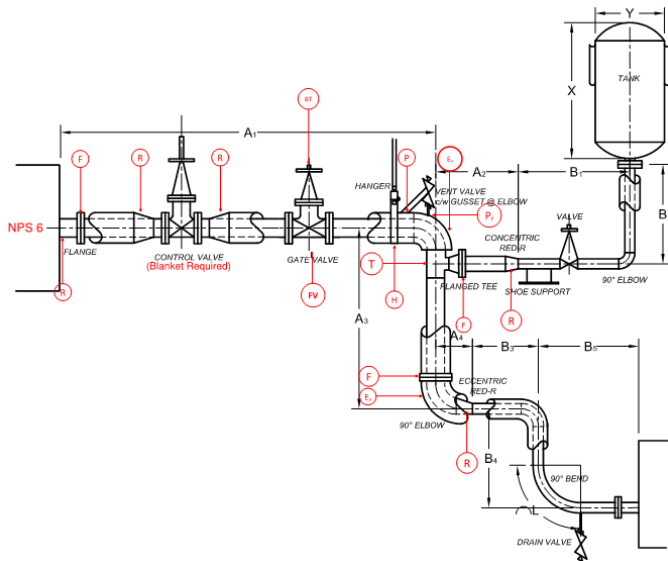


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Sample – Method of Measurement



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Denis Formula - Rev #4 Conversion Calculator (Piping Only)

Size	6	Attributes
Jacketing	Other	<input type="radio"/> None <input checked="" type="radio"/> Screwed/FRP Fitting (Flowable Insulation)
Service	Hot	<input type="radio"/> Victaulic Fittings <input checked="" type="radio"/> Screwed/FRP Fitting (Preformed/Rigid Insulation)
Units	Metric	

Item	Quantity	Factor	Effective Equivalent Measurement
P Piping	3.65	1.00	3.65
E 45° Elbows	0.00	0.78	0.00
E 90° Elbows	2.00	1.24	2.48
B Bent Pipe	0.00	3.00	0.00
T Tees	1.00	0.62	0.62
B Branch Fittings	0.00	0.62	0.00
R Reducers / Caps / Termination Points	5.00	0.47	2.35
H Hangers / Shoes	1.00	0.31	0.31
P Penetrations	1.00	0.62	0.62
P Penetrations @ Fitting	1.00	0.93	0.93
F Flanges	3.00	0.93	2.79
V Valves (Threaded)	0.00	0.93	0.00
V Valves (Welded)	0.00	1.24	0.00
V Valves (Flanged)	1.00	2.79	2.79
H Bonnets	1.00	1.86	1.86
O Obstruction	0.00	2.00	0.00

Total Effective Equivalent Length 18.40