
British Standard Sections

Institution British Standards

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The Engineering Standards Committee.

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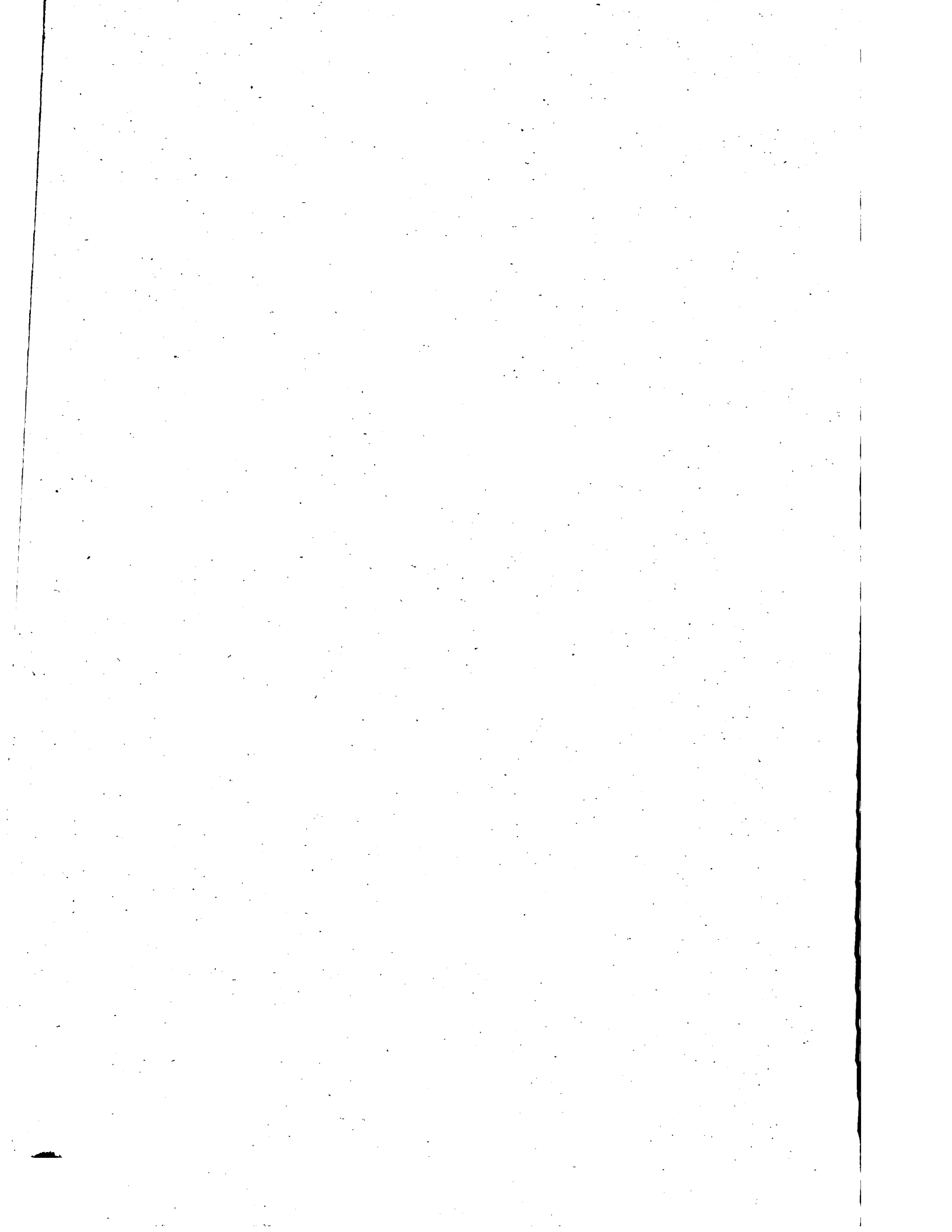
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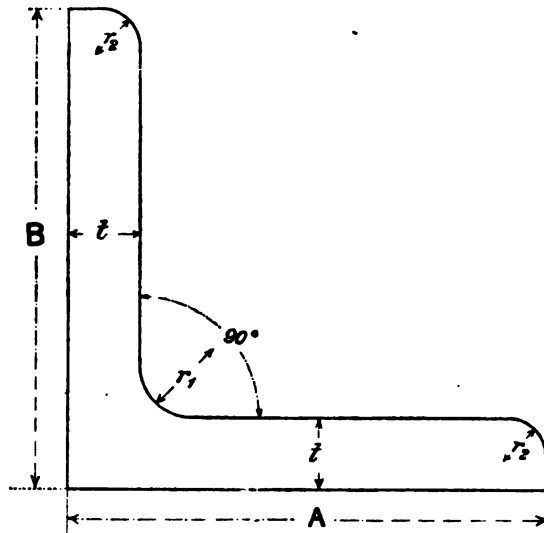
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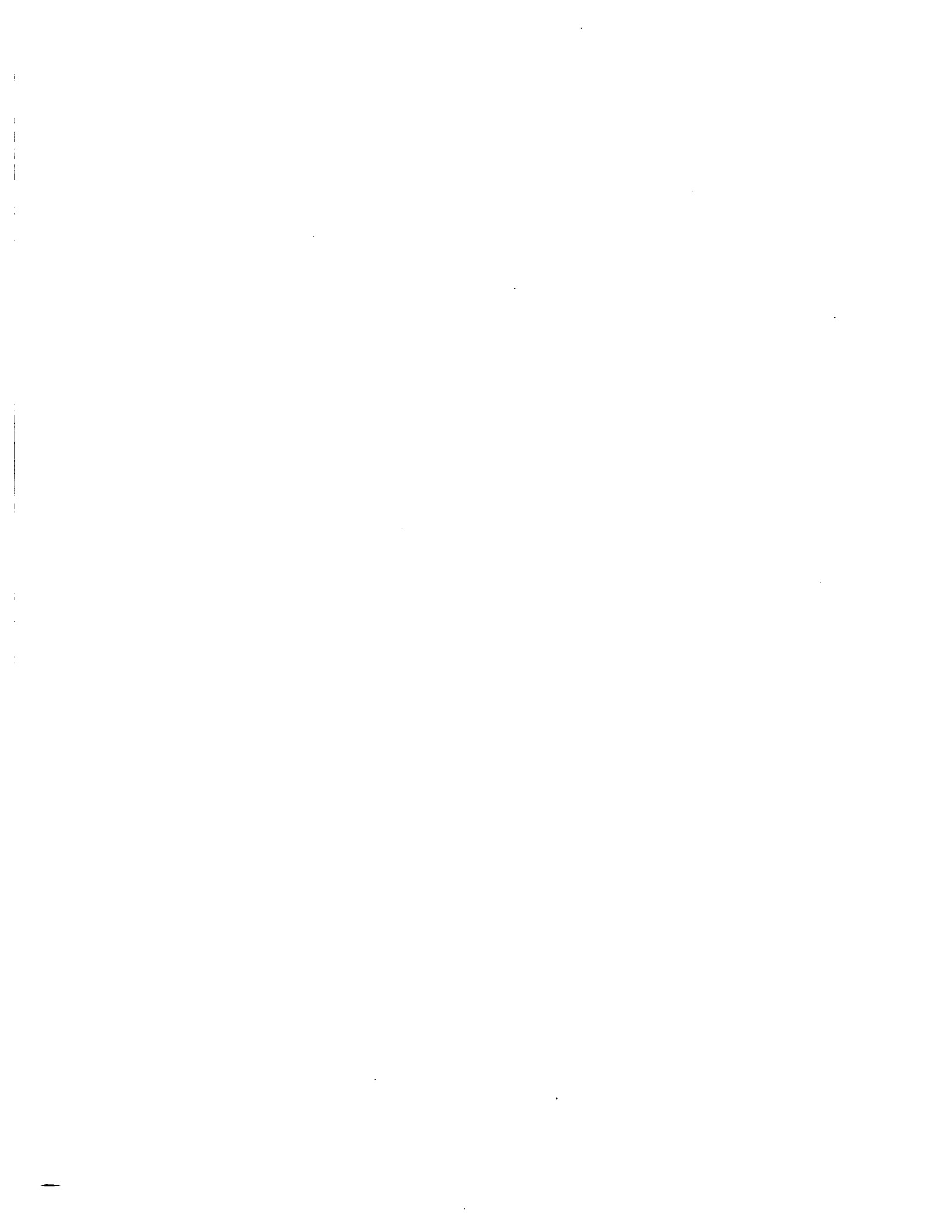
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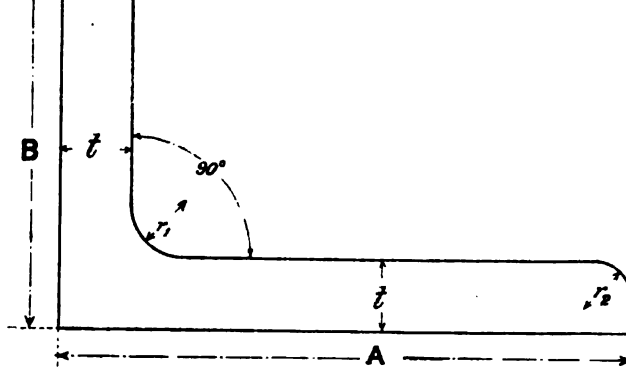


EQUAL ANGLES.



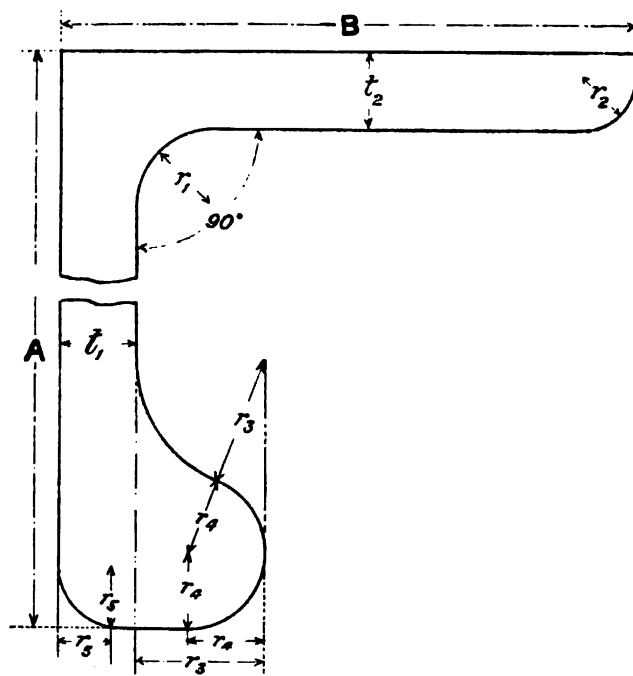
Size. A × B	Thickness at Correct Standard Profile.			Minimum thickness rolled.	Maximum thickness rolled.	Radii.		Remarks.
	Minimum.	Mean.	Maximum.			Root.	Toe.	
	t	t	t			r ₁	r ₂	
Inches.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	<p>The dimensions, thickness, and profile of Standard Angles shall be in accordance with the accompanying list and sketch. Angles ordered to the standard thickness shall be practically accurate in profile; but if the thickness is between, above, or below the standards, the flanges will be proportionately longer or shorter than the standards. The profile at the back of the toe will be slightly rounded when above the standards, instead of square; but the radii at the root and toe will remain unchanged. In Equal Sided Angles the thickness of the flanges will be the same.</p> <p>Angles may be ordered by width of flanges and thickness, or by width of flanges and weight per foot, but not by both. The Committee suggests that all Angles be ordered by size of flanges and weight per foot.</p> <p>A Table giving the Areas of sections in square inches, Weights per foot run, Moments of Inertia, etc., will be issued at a later date.</p>
1 × 1	.125	—	.250	.125	.300	.175	.125	
1½ × 1½	.125	—	.250	.125	.300	.200	.150	
1½ × 1½	.125	—	.250	.125	.350	.200	.150	
1¾ × 1¾	.175	—	.300	.175	.375	.225	.150	
2 × 2	.175	—	.300	.175	.400	.250	.175	
2¼ × 2¼	.175	—	.300	.175	.450	.250	.175	
2½ × 2½	.250	.375	.500	.200	.500	.275	.200	
2¾ × 2¾	.250	.375	.500	.225	.525	.275	.200	
3 × 3	.250	.375	.500	.250	.525	.300	.200	
3½ × 3½	.300	.425	.500	.275	.575	.325	.225	
4 × 4	.300	.425	.500	.300	.625	.350	.250	
4½ × 4½	.375	—	.500	.325	.650	.400	.275	
5 × 5	.375	—	.500	.350	.700	.425	.300	
6 × 6	.450	—	.625	.425	.775	.475	.325	
7 × 7	.500	—	.675	.475	.850	.550	.375	
8 × 8	.550	—	.750	.550	.950	.600	.425	



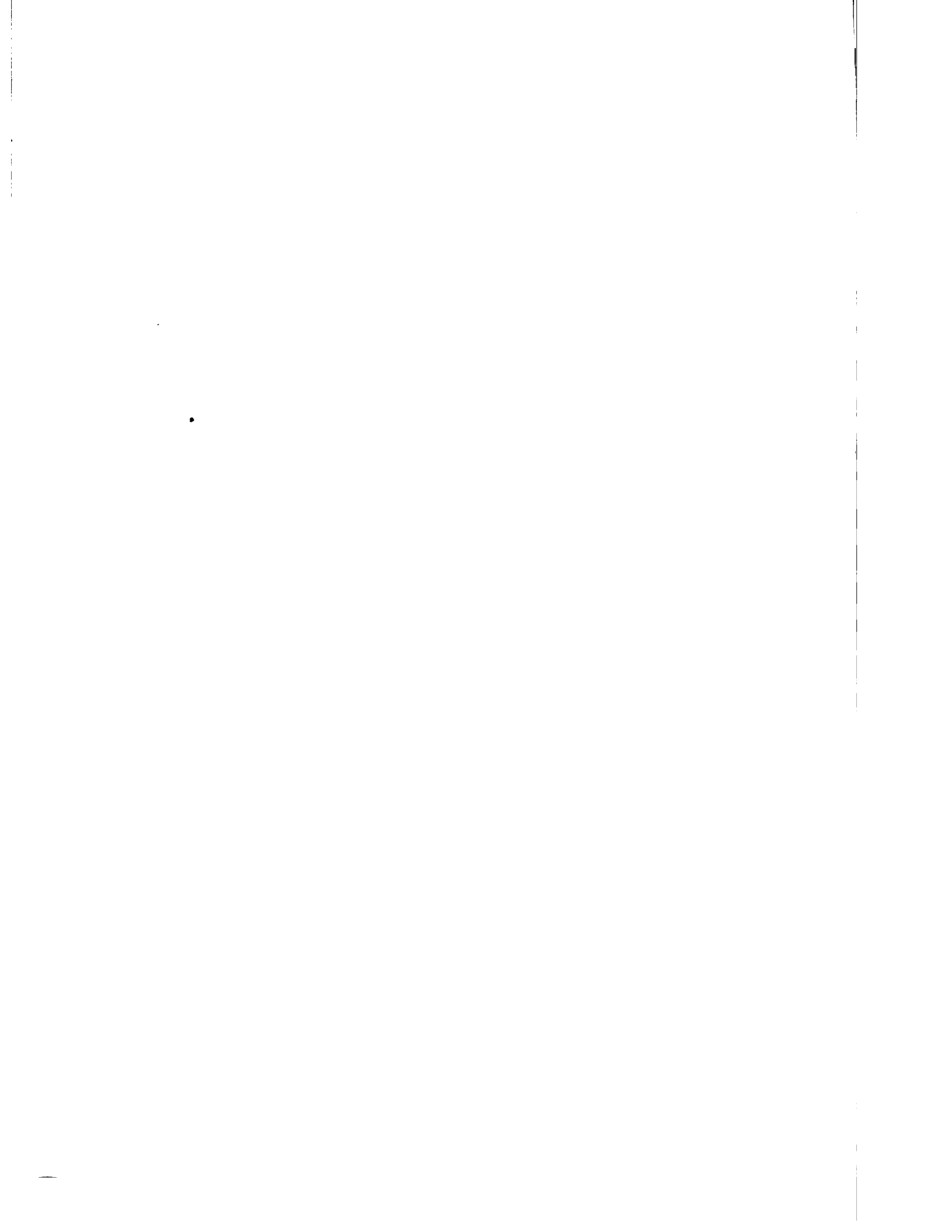


Size. A × B.	Thickness at Correct Standard Profile.			Minimum thickness rolled.	Maximum thickness rolled.	Radii.		Remarks.
	Minimum	Mean.	Maximum			Root.	Toe.	
	t	t	t			r ₁	r ₂	
Inches. 1½ × 1	·125	—	·250	·125	·300	·175	·125	<p>The dimensions, thickness, and profile of Standard Angles shall be in accordance with the accompanying list and sketch. Angles ordered to the standard thickness shall be practically accurate in profile; but if the thickness is between, above, or below the standards, the flanges will be proportionately longer or shorter than the standards. The profile at the back of the toe will be slightly rounded when above the standards, instead of square; but the radii at the root and toe will remain unchanged.</p> <p>In Unequal Sided Angles the flanges may differ in thickness, but the difference up to and including 10 united inches shall not exceed ·05 inch, and over 10 united inches shall not exceed ·075 inch.</p> <p>Angles may be ordered by width of flanges and thickness, or by width of flanges and weight per foot, but not by both.</p> <p>The Committee suggests that all Angles be ordered by size of flanges and weight per foot.</p> <p>A Table giving the Areas of sections in square inches, Weights per foot run, Moments of Inertia, etc., will be issued at a later date.</p>
1½ × 1½	·125	—	·250	·125	·325	·200	·150	
1¾ × 1½	·175	—	·300	·150	·350	·225	·150	
2 × 1½	·175	—	·300	·175	·375	·225	·150	
2½ × 2	·175	—	·300	·175	·450	·250	·175	
3 × 2	·250	·375	·500	·200	·500	·275	·200	
3 × 2½	·250	·375	·500	·225	·525	·275	·200	
3½ × 2½	·250	·375	·500	·250	·525	·300	·200	
3½ × 3	·250	·375	·500	·250	·550	·325	·225	
4 × 2½	·250	·375	·500	·250	·550	·325	·225	
4 × 3	·300	·425	·500	·275	·575	·325	·225	
4 × 3½	·300	·425	·500	·275	·600	·350	·250	
4½ × 3	·300	·425	·500	·275	·600	·350	·250	
4½ × 3½	·300	·425	·500	·300	·625	·350	·250	
5 × 3	·300	·425	·500	·300	·625	·350	·250	
5 × 3½	·375	—	·500	·325	·625	·375	·250	
5 × 4	·375	—	·500	·325	·650	·400	·275	
5½ × 3	·375	—	·500	·325	·625	·375	·250	
5½ × 3½	·375	—	·500	·325	·650	·400	·275	
6 × 3½	·375	—	·500	·350	·675	·400	·275	
6 × 4	·375	—	·500	·350	·700	·425	·300	
6½ × 3½	·375	—	·500	·350	·700	·425	·300	
6½ × 4	—	·525	—	·375	·725	·425	·300	
6½ × 4½	—	·550	—	·400	·750	·450	·325	
7 × 3½	—	·525	—	·375	·725	·425	·300	
7 × 4	—	·550	—	·400	·750	·450	·325	
8 × 3½	—	·575	—	·400	·750	·475	·325	
8 × 4	—	·625	—	·425	·775	·475	·325	
9 × 4	—	·650	—	·450	·825	·500	·350	
10 × 4	—	·675	—	·475	·850	·550	·375	

BULB ANGLES.

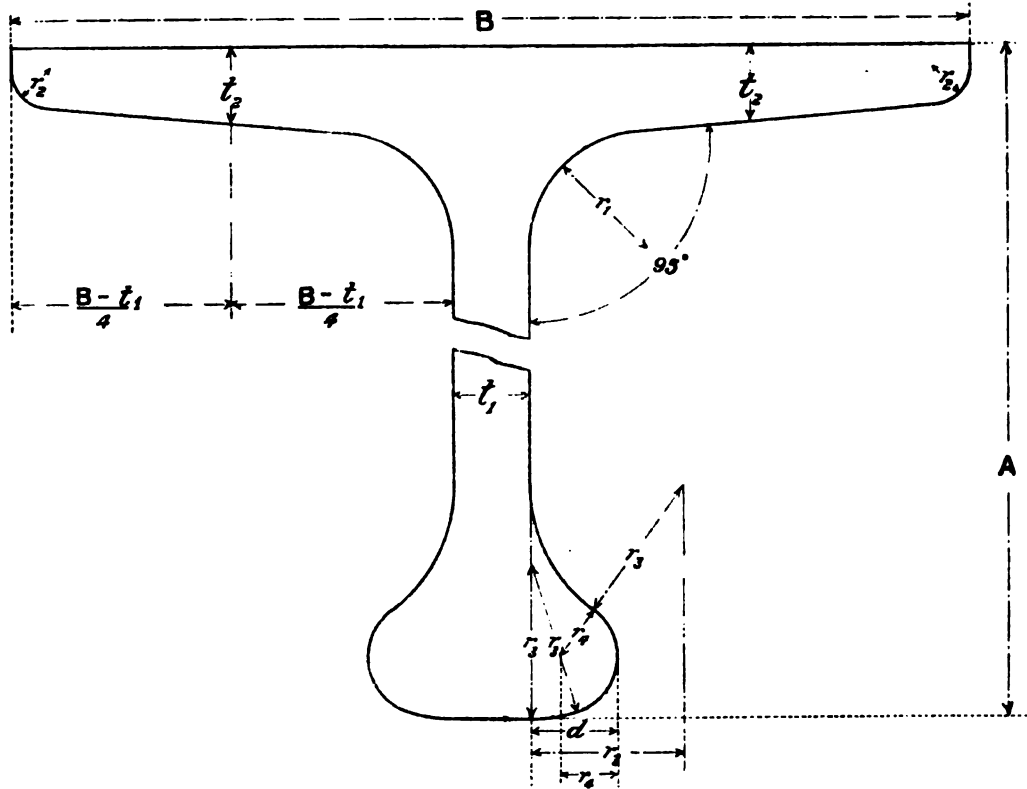


Size.	Thickness at Correct Standard Profile.		Web Thickness.		Radii.					Remarks.
	Web.	Flange.	Maximum rolled.	Minimum rolled.	r_1	r_2	r_3	r_4	r_5	
A x B	t_1	t_2								
Inches.	Inch.		Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	
4 x 2½	·300		·500	·300	·300	·200	·525	·300	·250	<p>The dimensions, thickness, and profile of Standard Bulb Angles shall be in accordance with the accompanying list and sketch.</p> <p>Bulb Angles ordered to the standard thickness shall be practically accurate in profile; but if the thickness is greater than these standards, the width of the flange and bulb and depth of the web will be proportionately increased; instead of the profile being square at the back of the toe it will be slightly rounded, but the profile of the curves of the bulb and the radii at root and toe will remain the same; the flange and web will not be of the same thickness; generally, for each .05 inch increase or decrease in the thickness of the web, the thickness of the flange will be increased or decreased .025 inch; this difference will not be exceeded.</p> <p>Bulb Angles may be ordered by depth of web, width of flange, and thickness, or by depth of web, width of flange, and weight per foot, but not by both thickness and weight per foot. The Committee suggests that all Bulb Angles be ordered by depth of web, width of flange, and weight per foot.</p> <p>A Table giving the Areas of sections in square inches, Weights per foot run, Moments of Inertia, etc., will be issued at a later date.</p>
5 x 2½	·325		·525	·325	·350	·250	·600	·350	·300	
5½ x 3	·350		·550	·350	·375	·250	·650	·375	·325	
6 x 3	·375		·575	·375	·400	·275	·675	·400	·325	
6½ x 3	·375		·575	·375	·425	·275	·700	·425	·350	
6½ x 3½	·400		·600	·400	·425	·275	·700	·425	·350	
7 x 3	·400		·600	·400	·450	·300	·750	·450	·375	
7 x 3½	·425		·625	·425	·450	·300	·750	·450	·375	
7½ x 3	·425		·625	·425	·475	·325	·800	·475	·400	
7½ x 3½	·425		·625	·425	·475	·325	·800	·475	·400	
8 x 3	·425		·625	·425	·500	·325	·825	·500	·400	
8 x 3½	·450		·650	·450	·500	·325	·825	·500	·400	
8½ x 3	·450		·650	·450	·525	·350	·850	·525	·425	
8½ x 3½	·475		·675	·475	·525	·350	·850	·525	·425	
9 x 3	·475		·675	·475	·550	·350	·900	·550	·450	
9 x 3½	·475		·675	·475	·550	·350	·900	·550	·450	
9½ x 3½	·500		·700	·500	·550	·375	·950	·550	·475	
10 x 3½	·525		·725	·525	·575	·400	·975	·575	·500	
11 x 3½	·550		·750	·550	·625	·425	1·050	·625	·525	
12 x 4	·600		·800	·600	·675	·450	1·125	·675	·550	



The Engineering Standards Committee.

BULB TEES.



Size.	Thickness at correct Standard profile.		Web thickness.		Radii.					Remarks.
	Web.	Flange	Maximum rolled	Minimum rolled	<i>d</i>	<i>r</i> ₁	<i>r</i> ₂	<i>r</i> ₃	<i>r</i> ₄	
A × B	<i>t</i> ₁	<i>t</i> ₂								
Inches.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	
7 × 5	·425	·425	·500	·350	·450	·600	·200	·800	·300	<p>The dimensions, thickness, and profile of Standard Bulb Tees shall be in accordance with the accompanying list and sketch.</p> <p>The standard thickness of flange shall be measured at a distance half-way between the extreme edges of the flanges and the nearer side of the web.</p> <p>Bulb Tees ordered to the standard thickness shall be practically accurate in profile; but if the thickness is less or greater than these standards, the thickness of the web and widths of bulb and flange will be decreased or increased by the same amount; otherwise the profile will remain constant.</p> <p>Bulb Tees may be ordered by depth and thickness of web, or by depth of web and weight per foot, but not by both.</p> <p>The Committee suggests that Bulb Tees be ordered by depth of web and weight per foot.</p> <p>A Table giving the Areas of sections in square inches, Weights per foot run, Moments of Inertia, etc., will be issued at a later date.</p>
8 × 5½	·450	·450	·525	·375	·500	·675	·225	·900	·325	
9 × 5½	·475	·500	·550	·400	·575	·750	·250	1·000	·375	
10 × 6	·500	·550	·575	·425	·625	·825	·275	1·100	·400	
11 × 6½	·550	·600	·625	·475	·675	·900	·300	1·200	·450	
12 × 6½	·575	·650	·650	·500	·725	·975	·325	1·300	·475	

