

Anemostat[®]
SUBMITTAL
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CURVED LINEAR SLOT DIFFUSES

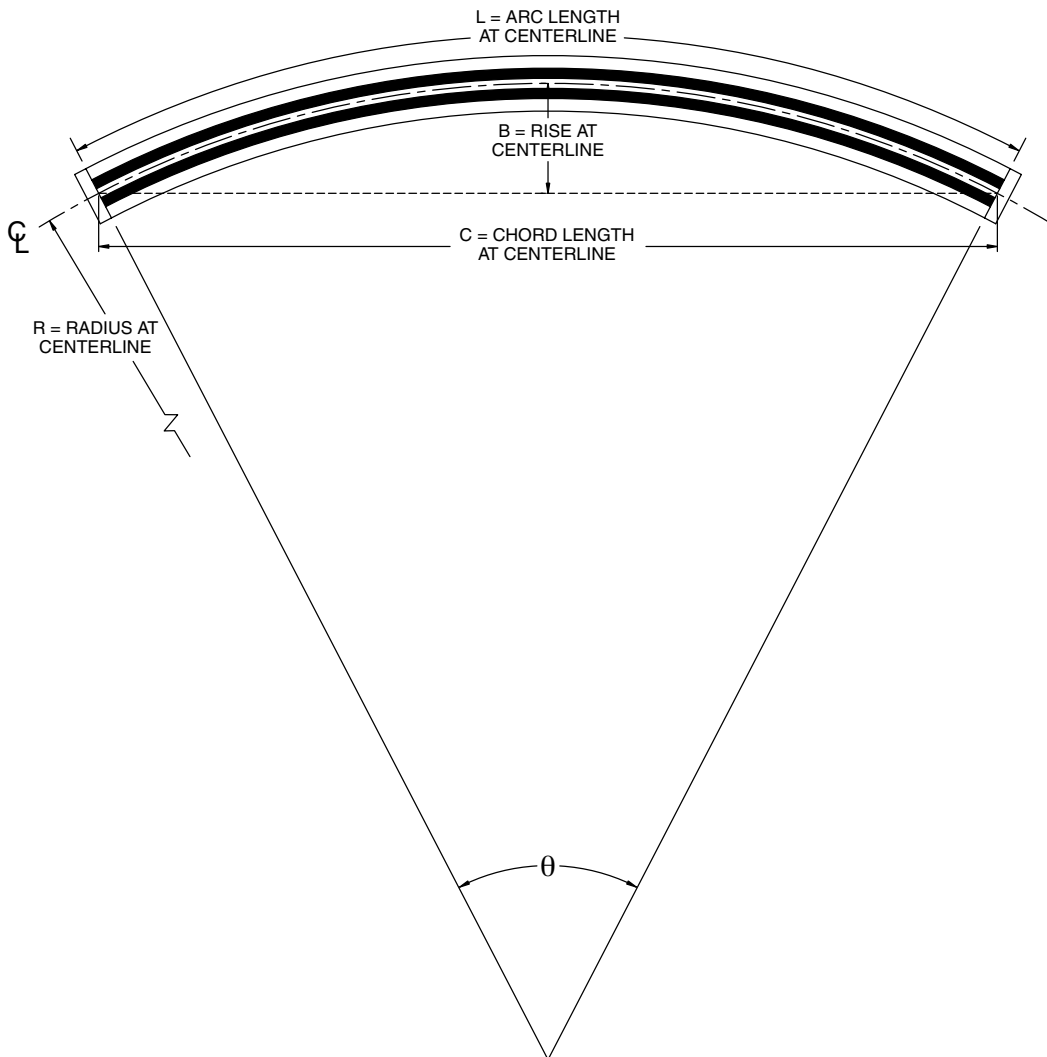
USEFUL EQUATIONS

DIFFUSERS

DIFFUSER CENTERLINE DIMENSIONS

Any 2 of the following 5 dimensions define the required curving for a linear diffuser:

L – Diffuser Arc Length	Example: L = 102.644"	• If you know C & B:	$R = (C^2 + 4B^2) / (8B)$ $\emptyset = 2 \times \text{Arcsin}(C/2R)$ $L = .017453 \times R \times \emptyset$
C – Chord Length (< Diameter)	C = 100"	• If you know L & R:	$\emptyset = 57.296 \times L / R$ $C = 2 \times R \times \text{Sin}(\emptyset/2)$
B – Rise	B = 10"	• If you know L & \emptyset :	$R = L / (.017453 \times \emptyset)$ $C = 2 \times R \times \text{Sin}(\emptyset/2)$
R – Radius	R = 130"	• If you know C & R:	$\emptyset = 2 \times \text{Arcsin}(C/2R)$ $L = .017453 \times R \times \emptyset$
\emptyset – Angle, degrees	$\emptyset = 45.24^\circ$		
$\text{Arcsin} = \text{Sin}^{-1}$			



All dimensions are in inches.

JOB NAME:

SUBMITTED BY: