

Truncone (Truncated cone) calculator  
rev A, 11-23-12 PRS

**Description: 25J bell-main flare**

Small end diameter (D1)	8.75
Large end diameter (D2)	24
Diagonal side dimension (L) (between edges of D1 & D2)	11.05173

Enter values into 3 or 4 yellow fields  
Disregard F6 value if D6 field is empty/unused

NOTE: If only the height of the truncated cone is known, enter that number here (in D6) to calculate 'L' (enter D1 & D2 first)  
8 gives L > 11.051725 enter this value in L (B6)

Intermediate calculated values:

Radius of small end (R1)	4.375
Radius of large end (R2)	12

Numbers in beige are decimal portion in 16ths of inch

Radius of small drawn circle (RA)	6.341154	5
Radius of large drawn circle (RB)	17.39288	6

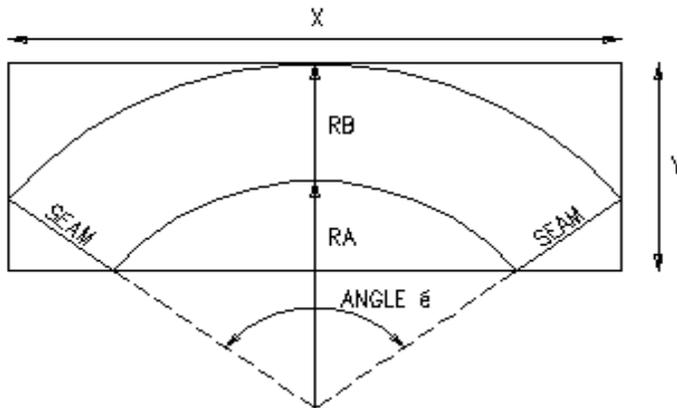
Degrees of drawn circle to cut out (e')	248.3775
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Angle e' converted to radians	4.335005
90 degrees converted to radians	1.570796

Horizontal dimension of material (X)	28.77446	12
Vertical dimension of material (Y)	20.95611	15

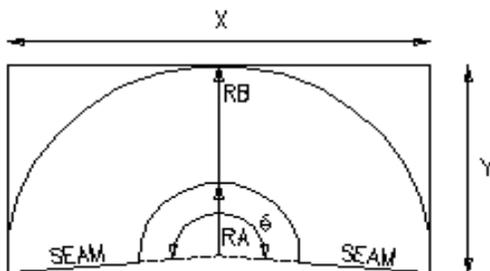
Use results in blue for pattern layout (below)

NOTE: RADIUS RB INCLUDES LENGTH OF RADIUS RA



NOTE:  
Both RA & RB are measured from the same center point; RB is NOT measured starting from arc of RA

NOTE: EXAMPLE OF LAYOUT WHERE e' IS MORE THAN 180 DEGREES



NOTE:  
X & Y dimensions are approximate when e' is greater than 180 degrees (see note below)

When e' is greater than 180 degrees, the 'X' calculation determines the material width at the ends of the seams, not at the widest part of the arc, and the 'Y' calculation similarly determines a material height without the points extending below the center of the RA & RB arc.