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

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

| Description: 25J bell-ring flare | | |

Small end diameter (D1) | 7.5 | NOTE: If only the height of the truncated
Large end diameter (D2) | 8.75 | cone is known, enter that number here
Diagonal side dimension (L) | 8.522947 | (in D6) to calculate 'L' (enter D1 & D2 first)
(between edges of D1 & D2)

8.5 gives L > 8.522947 enter
this value in L (B6)

Intermediate calculated values:
Radius of small end (R1) | 3.75
Radius of large end (R2) | 4.375
Numbers in beige are decimal portion in 16ths of inch
Radius of small drawn circle (RA) | 51.13768 | 2
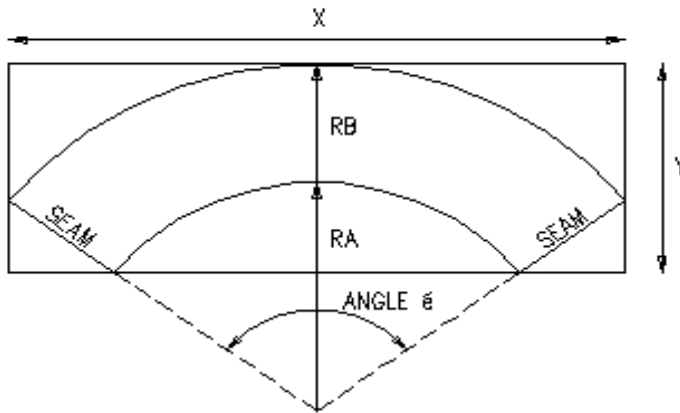Radius of large drawn circle (RB) | 59.66063 | 11

Degrees of drawn circle to cut out (e') | 26.39932

Angle e' converted to radians | 0.460755
90 degees converted to radians | 1.570796

Horizontal dimension of material (X) | 27.24642 | 4
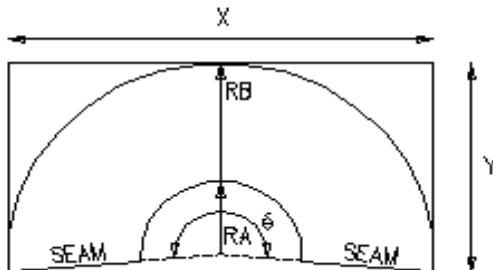Vertical dimension of material (Y) | 9.873991 | 14
Use results in blue for pattern layout (below)

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.