Radius Trench Cover Considerations and Calculations

3/8" TYP. DIST. TO EDGE OF FRAME EA. WAY

OVER-ALL ARC LENGTH OF RUN, MEASURED @ C.L. OF TROUGH OR TRENCH

C.L. RADIUS OF TROUGH OR TRENCH
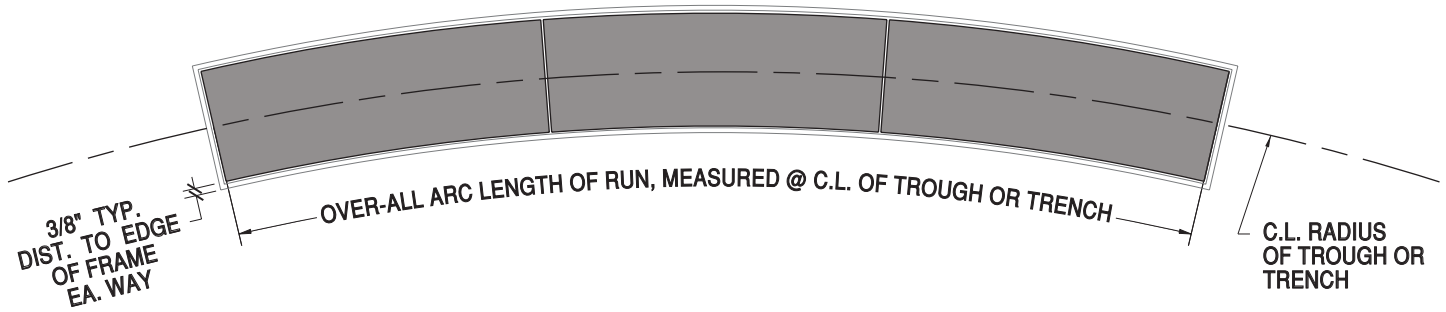
In order for us to **collaborate** with you on your radius trench project, we need to know & you need to consider the following:

1. We can make a grating system to fit just about any sittuation.

2. Your design selection, be it a currently stocked, or custom adaptation of your design and nominal size of trench cover.

3. Radius of trench, measured @ C.L.

4. Over-all length of run, that would be the C.L. arc length. OR: number of castings.
    Keep in mind that the **length** of trench cover castings vary w/ manufacturer of trough that our designs are intended to fit (i.e. ACO = 19.69", NDS = 24", or custom design length).

5. Will partial castings be acceptable? If not, over-all length must be adjusted to nearest whole grate.

6. To calculate complete circles:
    Divide the C.L. circumference in inches (3.1416 x dia.) by the length of your design selection (products for ACO = 19.625", NDS = 24", or custom design) this will produce the number of castings.

    There will likely be a fraction in your answer. Will partial castings be acceptable? If not, we will have to adjust either the length of the run or the radius a bit in order to accomodate.

    To calculate the number of whole castings in a circle:
    Take the previous fractional answer and do this simple calculation - twice:
    once w/ the smaller whole number, and again w/ the next larger whole number.

    # of castings x length in inches (ACO = 19.625", NDS = 24", or custom) divided by 3.1416 = diameter in inches, divide by 12 to get feet.

    Then you must decide which of these two C.L. diameters will work for you.   A custom design can accomodate any diameter in equal pieces.

7. If frames are to be included, please specify frame type (see frame type drawings) and load requirement (pedestrian, med. duty, vehicular).

8. Trench covers can be bolted to frames for the purpose of maintaining equal spacing between castings, tamper resistance or increasing load bearing capacity.