

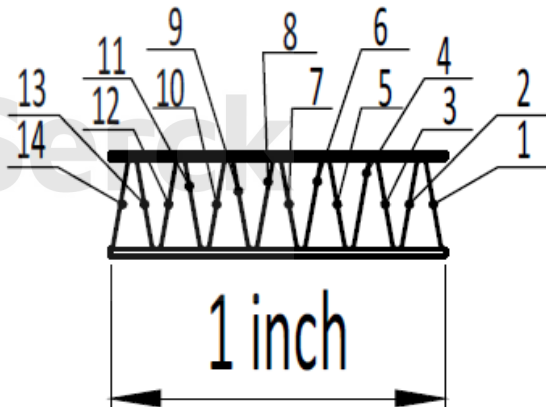
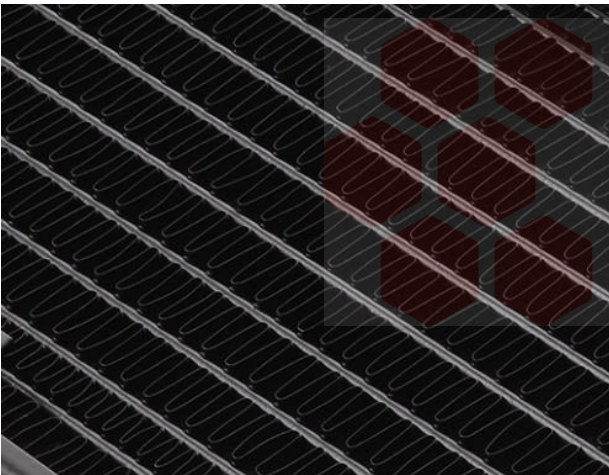
# HOW TO MEASURE YOUR RADIATOR



## How To Measure a Radiator?

- a. Measure the height: As you can see from the diagrams, the core height on a down flow radiator is measured from top to bottom; the "height" on a cross flow radiator is measured from side to side. An easy way to remember this is that CORE HEIGHT IS ALWAYS MEASURED BETWEEN THE HEADERS, no matter how the radiator sits in the truck. Core height is represented by measurement (A) in the diagrams (fig 1 & fig 2).
- b. Measure the width: The measurement is over the side channel. The width is represented by (B) in the diagrams (fig 1 & fig 2) for both CROSS FLOW and DOWN FLOW radiators.
- c. Measure the thickness: This measurement depends on how many tube rows are present in the radiator. The easiest and most precise way to measure the core depth (or thickness) is to insert a small piece of wire between the fins on your radiator until the end is flush with the other side. Mark the wire and measure it for your core depth measurement.
- d. Tube Pitch: Distance between two tubes centres. Measure over 10 tubes and calculate tube centre distance.
- e. Measure the Fin Per Inch (FPI): Hold measuring tape along tube length & measure number of fins in one inch.

### FPI Measurement



There are two different radiator designs.

- a. Down Flow Radiator the engine coolant flows in the radiator - from the top tank on the radiator to the bottom tank on the radiator (tanks are mounted at top and bottom)

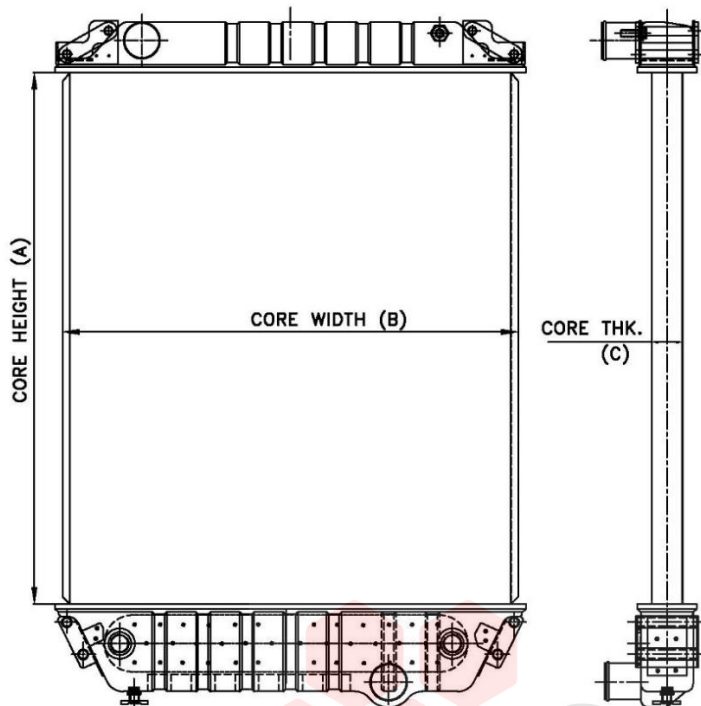


fig. 1

- b. Cross Flow Radiators is one where the coolant travels horizontally from one tank to the other (tanks are mounted on each side)

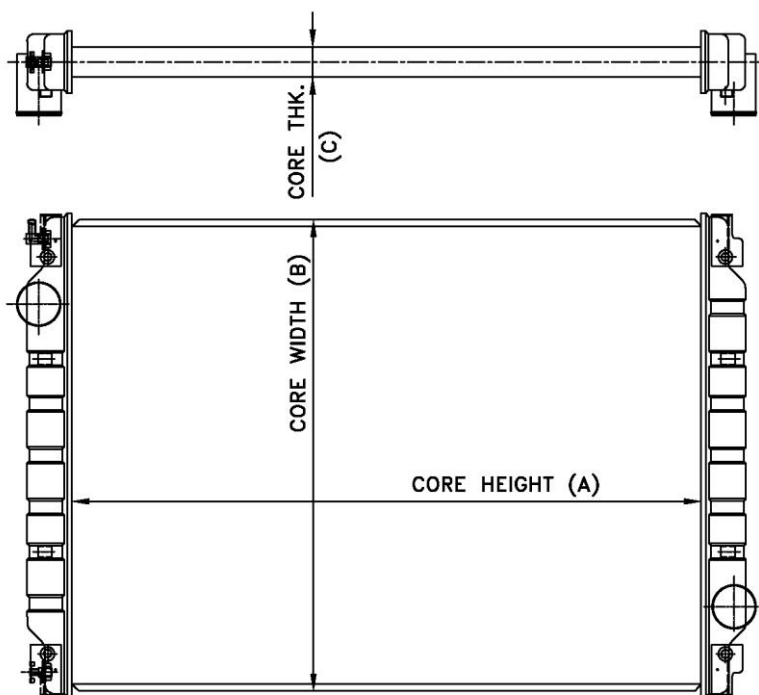
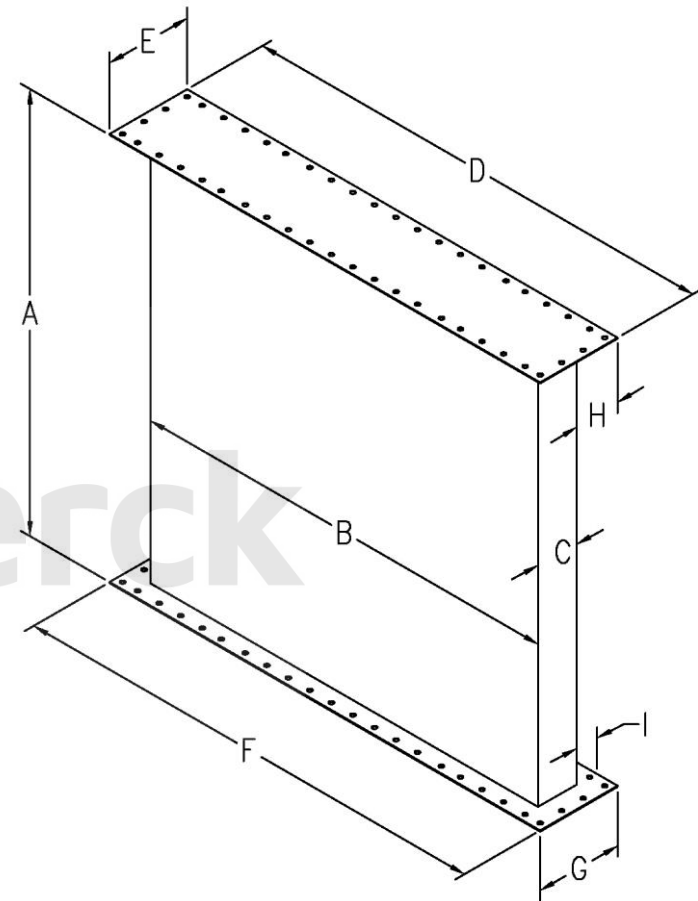
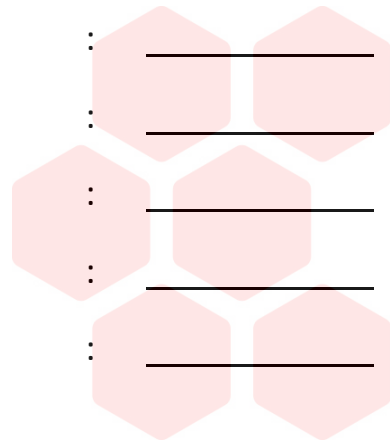


fig. 2

# Radiator Core Measurement Guide



- A. Height of core : \_\_\_\_\_
- B. Width of core : \_\_\_\_\_
- C. Depth of core : \_\_\_\_\_
- D. Length of top header : \_\_\_\_\_
- E. Width of top header : \_\_\_\_\_
- F. Length of bottom header : \_\_\_\_\_
- G. Width of bottom header : \_\_\_\_\_
- H. Top header offset : \_\_\_\_\_
- I. Bottom header offset : \_\_\_\_\_



## Additional Information:

- 1. Number of bolt holes on each headers : \_\_\_\_\_
- 2. Shape of headers : \_\_\_\_\_
- 3. Material thickness of headers : \_\_\_\_\_
- 4. Fin Type : \_\_\_\_\_
- 5. No.of Fins per Inch : \_\_\_\_\_

# Complete Radiator Measurement Guide



- A. Overall height of radiator : \_\_\_\_\_
- B. Height of top tank : \_\_\_\_\_
- C. Height of bottom tank : \_\_\_\_\_
- D. Depth of top & bottom tank : \_\_\_\_\_
- E. Length of top & bottom tank : \_\_\_\_\_
- F. Filler neck Position : \_\_\_\_\_
- G. Inlet pipe position : \_\_\_\_\_
- H. Inlet pipe diameter : \_\_\_\_\_
- I. Inlet pipe length : \_\_\_\_\_
- J. Outlet pipe Position : \_\_\_\_\_
- K. Outlet pipe diameter : \_\_\_\_\_
- L. Outlet pipe length : \_\_\_\_\_
- M. Fan Shroud depth : \_\_\_\_\_
- N. Fan hole diameter : \_\_\_\_\_
- O. Fan centre line : \_\_\_\_\_

Additional Information:

1. No. of sockets and size:
2. Material Thickness tank / bracket / shroud:

