RADIATOR CONNECTIONS METHODS

Generally radiators are connected in one of the below methods:

1- Top Bottom Same End Connection
Hot water enters from the top and exits from the bottom of the same side. It is the most advised and used method, and in most cases the most energy efficient.

2- Top Bottom Opposite End Connection
This method is generally advised for long radiators where the length of the panel radiator is 4-5 times more than the height.

Example: This method is advised for 500 mm high radiator with lengths of greater than 2250 mm (500 x 4.5 = 2250 mm).

3- Bottom Opposite End Connection
This method is not advised unless absolutely necessary. There will be an output loss of heat 10-20%, depending upon the height of the radiator. In this method, it is important that the right output radiator is chosen.

4- Connection for Ventil (VK) Compact Radiators
Ventil compact radiators have additional two connection taps located at the bottom-right (or -left upon specification) of the radiator. The tap that is to the inner of the radiator is connected to the tap at the top right. This would be the water inlet to the radiator. The outer tap at the bottom is connected to the tap at the bottom right, which is the water outlet.

In this installation method, a thermostatic valve is used so that the heat is controlled more easily and economically.

5- Connection for Centertap Radiators
Centertap radiators have additional two connection taps located at the mid-bottom of the radiator. The centertap that is to the left of the radiator is connected to the tap at the top right. This would be the water inlet to the radiator. The other centertap at the bottom is connected to the tap at the bottom right, which is the water outlet.

In this installation method, a thermostatic valve is used so that the heat is controlled more easily and economically.

6- One Pipe System
In this installation method, the length and the diameter of the by-pass pipe should be calculated accurately to minimize pressure drop which will reduce the heat output of the radiators. A pump may be used to control the water pressure. In this form of connection, it should be taken into consideration that every radiator will have a different average temperature.

7- Serial Connection
This is a method used for connecting a series of radiators and is used very rarely. If it must be used, the total heat output of the series must not exceed 7000-8000 kcal/h, otherwise the capacity of the circulation pump will be exceeded. The capacities of the series should be calculated carefully because of the different average water temperature between each panel.