

# RADIATOR POSITIONING INFO SHEET

## Selecting Radiators for the Project

The first requirement is for the radiator kilowatt output to meet the needs of the room. A heating engineer can provide this information. When the radiator output requirement is known, the physical dimensions of the radiator can be selected to best suit the room layout.

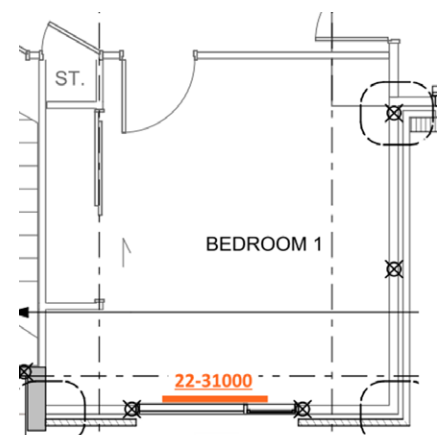
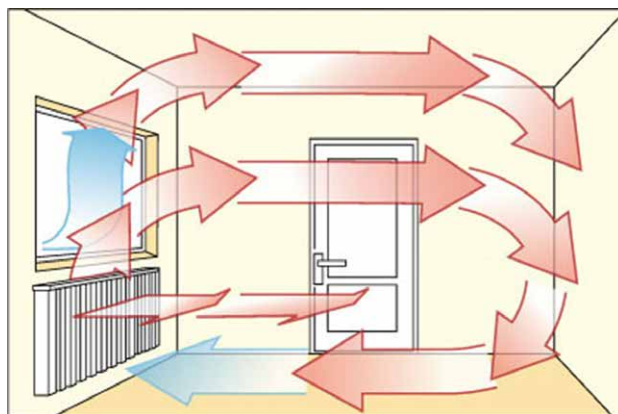
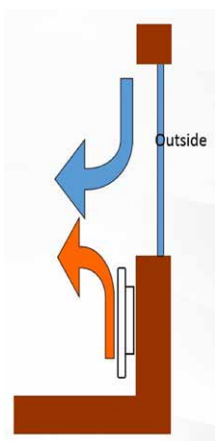
## Radiator Positioning in a Building

Radiators need to be positioned throughout a building to provide an even spread of heat. This typically means at least one radiator per room. Larger rooms or unusual shaped rooms will require more than one radiator.

The technically correct position for radiators is on an external wall or under a window. This is because the coldest part of the room is the best place to combat the cold. In rooms that have large windows, the cold air drops off them and a radiator positioned below can counteract this downdraft.



*Ideal Radiator Positioning*



Free standing radiators or trench heaters are often used in commercial buildings or where there is floor to ceiling glazing.

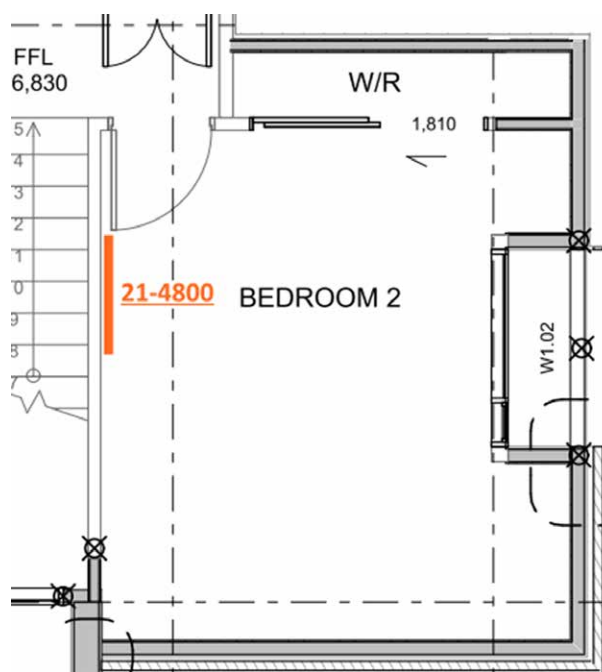


## Practical Radiator Positioning

Sometimes it is not practical to have radiators under windows. If the client wants floor length drapes (which would limit the output of the radiator when drawn) or if the window sill height is too low, or if there is glazing to the floor level, then a practical approach has to be taken.

In reality a radiator can be situated anywhere in a room. Especially with high performance glazing and wall structure. A slight increase in radiator output can usually overcome the compromised position.

Positioning a radiator next to a door can be a good option as it is unlikely that any occupant would have a piece of furniture in this position as it impedes access through the doorway.



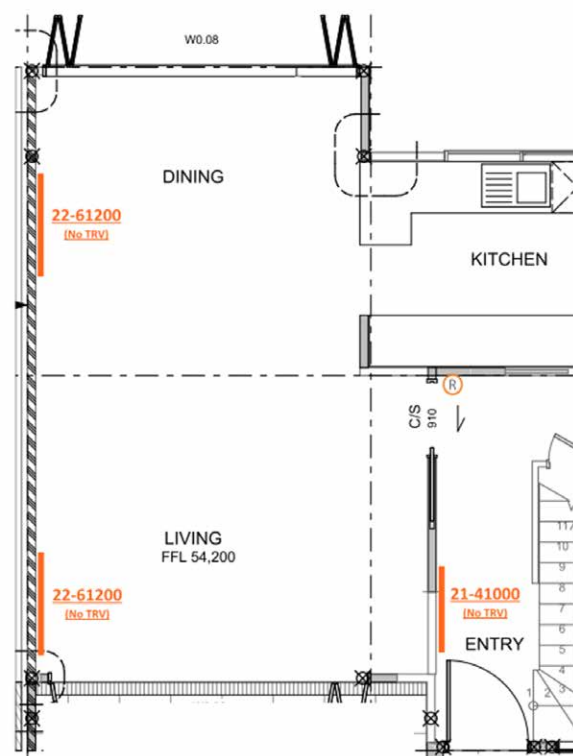
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## Large Rooms

In larger rooms such as living areas, it is better to have 2 radiators, one at each end, rather than one large radiator. This enables a more even spread of heat which is more comfortable to the occupants

In kitchen or dining rooms where wall space is limited, one option is locating the radiator on the back of the kitchen island. This is usually a more central position but is a good option as the overhang on the kitchen bench ensures the heat comes out at a low level which is ideal.



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Another option is vertical radiators. These take up less space in length but are taller. The tallness gives a good spread of radiant heat to the human body and are popular as designer features

In kitchens where often there is no wall space at all, a fan coil radiator recessed into the kick space under the benches is an innovative solution. These can also be used in bathrooms or laundry's



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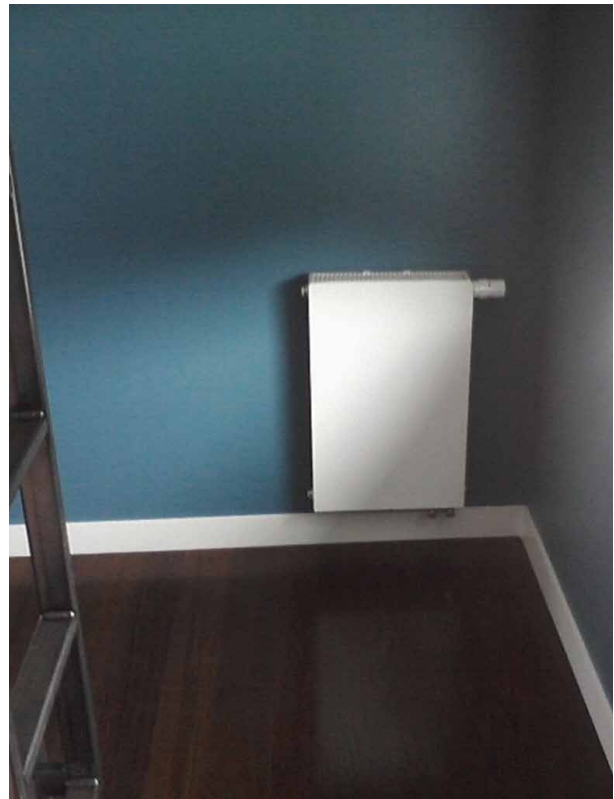
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## The Aesthetics of Situating a Radiator on the Wall

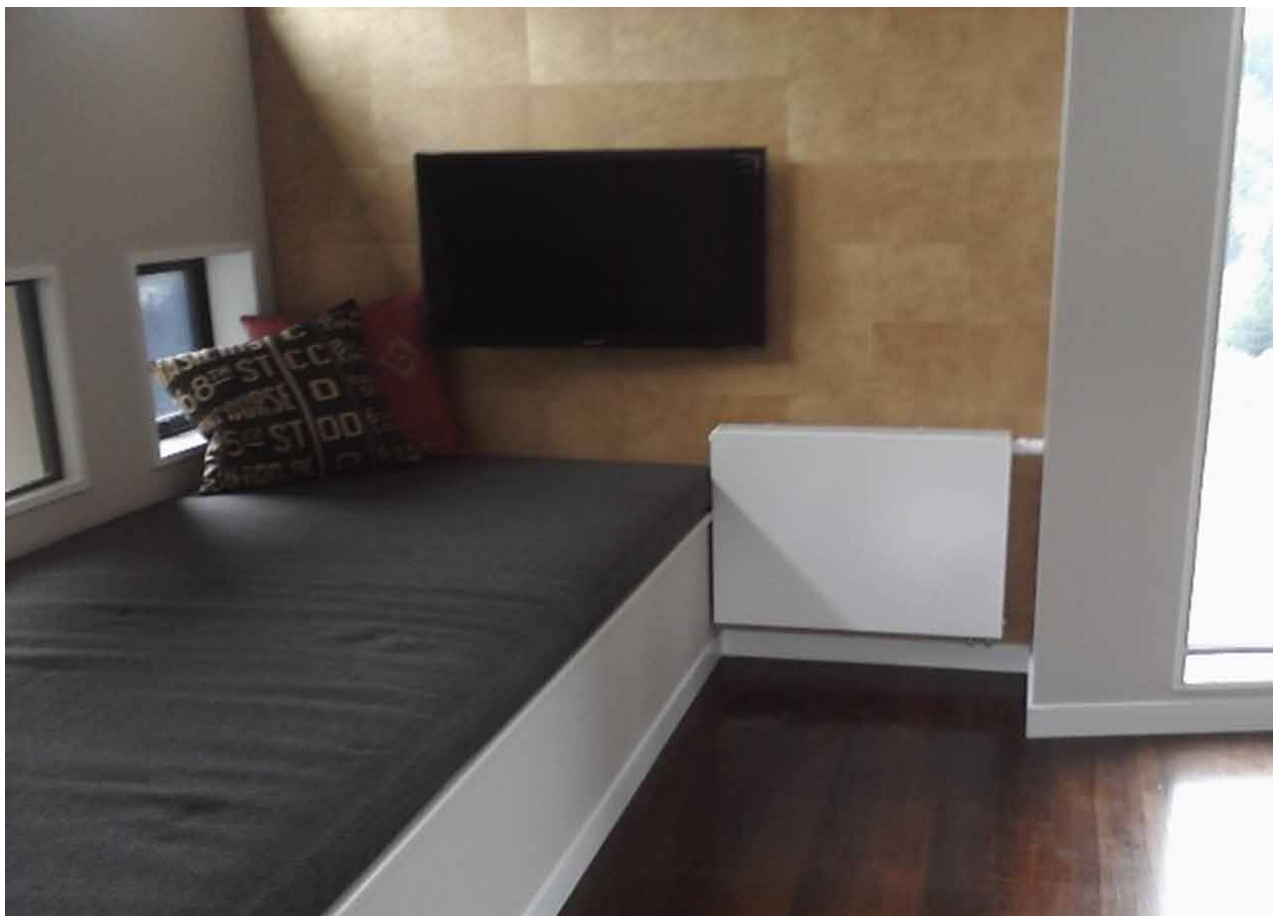
Getting the right proportions when situating radiators means selecting the right height and length for the available wall space notwithstanding the kilowatt output requirements for the room must be met. For example, in a hallway where the walls are long, it is generally less attractive to have a short length radiator. A long radiator that is perhaps lower in height can be more attractive. A radiator that is situated evenly from left to right on a wall is generally more aesthetically pleasing than one that is squashed into a corner.

Standard stocked horizontal radiators come in two heights. 600mm high and 400mm high. Other heights are available on indent order from 300mm high to 900mm high. Lengths start from 400mm long and go to 1800mm long and on indent order up to 3000mm long.

Vertical radiators come in many sizes, but typically 1800mm high and 600mm long.



*Less than stella rad dimensions and positions*



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## Radiator Height from the Floor

Typically, standard radiators are mounted so that the bottom of the radiator is 150mm from the floor. The governing factor from an aesthetic point is the height of the skirting boards that will be present. If the skirting boards are very tall the radiator may be mounted higher than 150mm so that they don't appear squashed on the floor.

The pipework from the radiator also has some bearing on this. If the pipework is coming from the wall, the pipes should never penetrate through the skirting. The radiator should move higher on the wall so that the pipes come through the wall above the skirting's. If the pipework comes from the floor as in a retro installation, then the height of the radiator is governed less by the skirting and if there are very tall skirting's present, then the radiator can sit so that the bottom is lower than the top of the skirting.

If the radiator is going under a window and to get the proportion correct, the radiator can be below 150mm from the floor.



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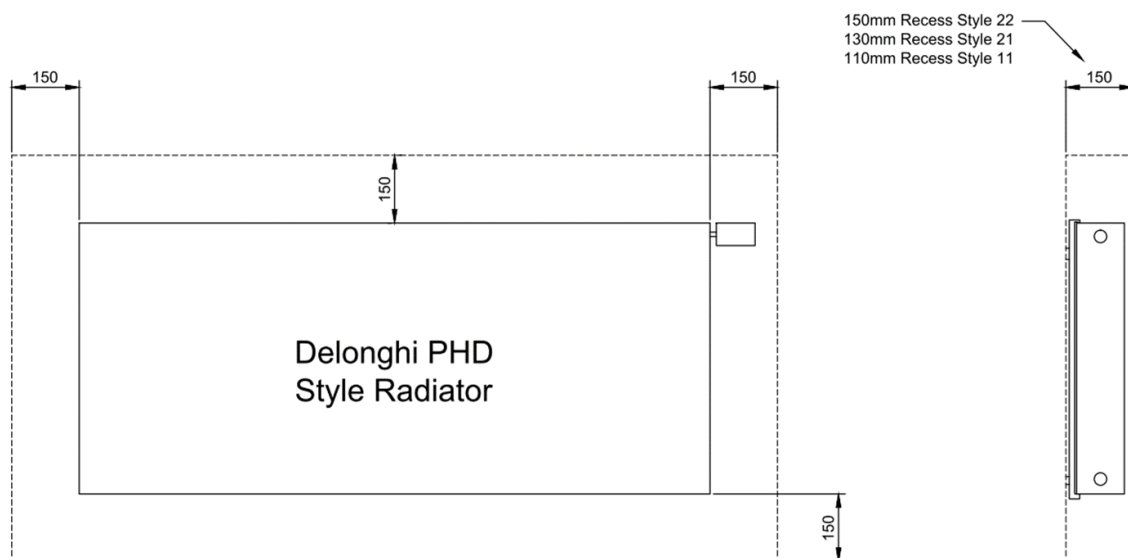
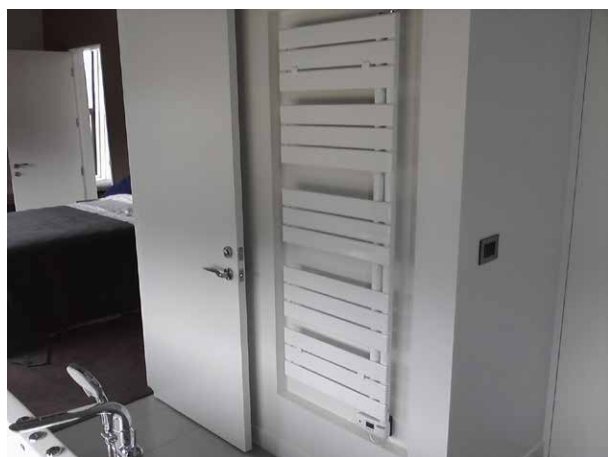
## Allowance for Thermostat

100mm clearance is required at each end of the radiators to allow for the thermostat at one end and ability to bleed the radiator from the air vent at the other end.



## Recessing Radiators into Walls and Joinery

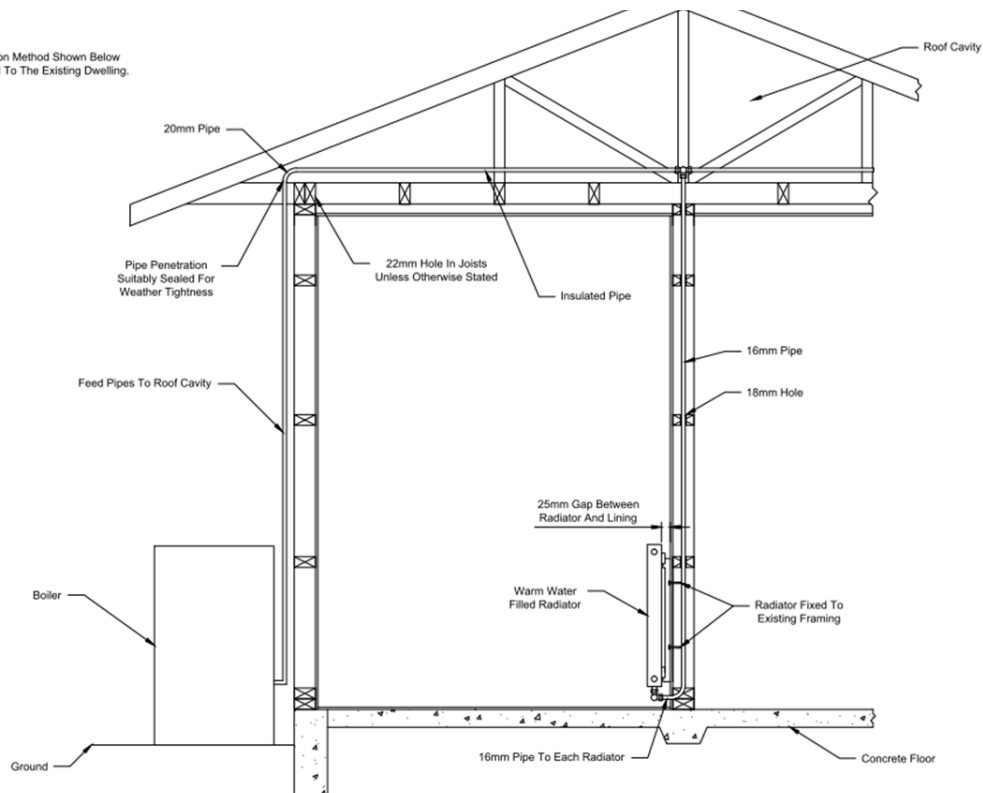
In a new or renovation project, radiators can be recessed into the walls or joinery units to lessen obtrusiveness. The space required around the radiator so that there is no impedance on heat output due to insufficient natural air movement, is a minimum of 10% of the height of the radiator. In reality, it is aesthetically better to have at least 150mm around the radiator due to the protrusion of the thermostatic valve.



# Typical Radiator Pipe Work Detail in Wall Framing

## Notes:

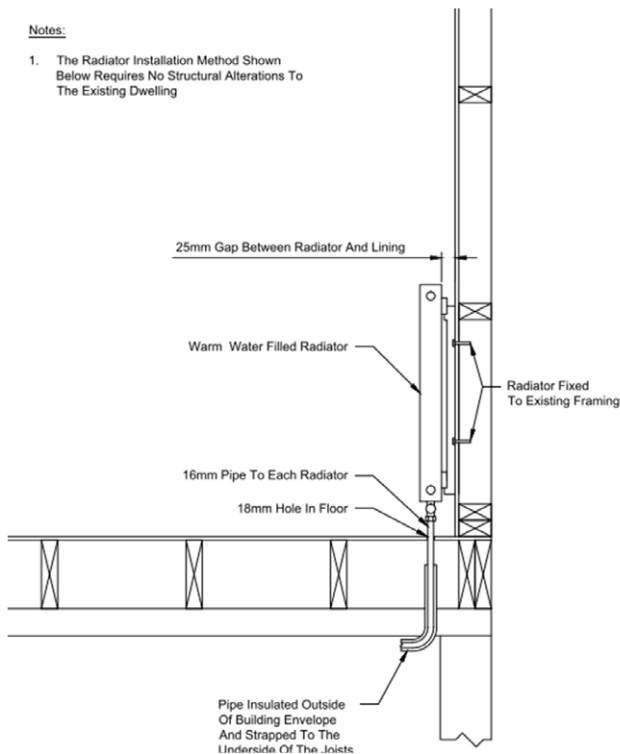
1. The Radiator Installation Method Shown Below Requires No Structural To The Existing Dwelling.



# Typical Radiator Pipework Detail in Joisted Floor

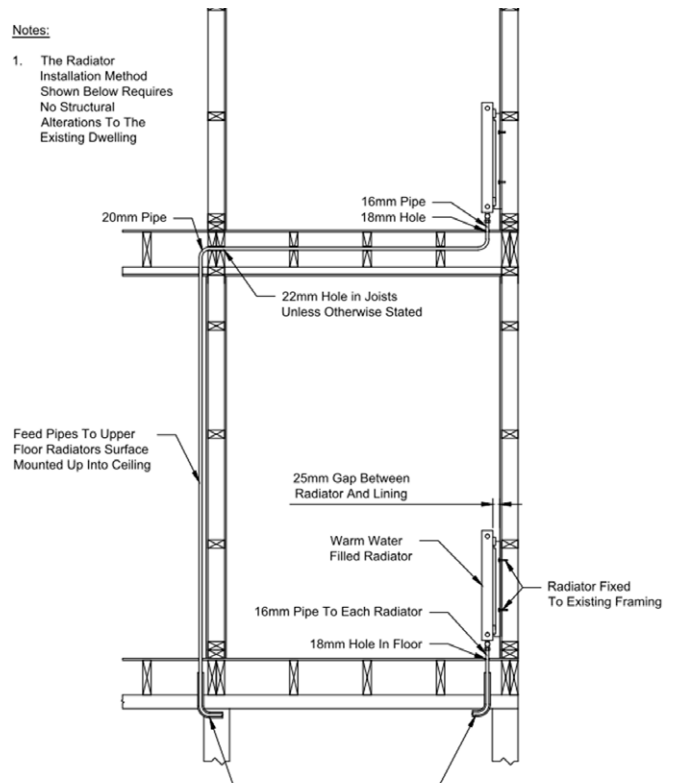
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