

Directional Inlet Nozzle Installation

This installation guideline applies to commonly proportioned tanks where the depth is 20 to 25 percent of the floor diameter – customised design is required to achieve optimum mixing performance in tanks outside of this criterion.

Inlet nozzles should be reduced by 25 percent of the inlet supply pipeline or the nearest standard pipe size. The tank inlet penetration measurements are to be used as a guide only, as upstream pipe work may be smaller, and thus more nozzle reduction will be required to provide a sufficient mixing velocity.

Floor mounted nozzles shall be positioned at 60° from the vertical line and wall mounted units at 45° for average shaped tanks. Nozzles shall be directed across the floor area at 95° from the adjacent back wall. This will only change if posts and other internal obstructions are within the flow path – the direction will then be altered to best accommodate these structures.

The nozzles are designed to be energy efficient and to take advantage of the natural anti-clockwise rotation that occurs in the Southern Hemisphere – the upwards direction is designed to ‘blend’ the parallel strata’s that can form due to temperature differences and chemical influences.

