

1.1.1 - Mezzanine General Supply System

The existing general main supply ventilation system from AHU1 has been retained with a new ductwork distribution system extended from the existing riser locations to serve the mezzanine floor. The ductwork runs through the false ceiling void of the mezzanine and branches to serve three mini-air handling units and a series of ceiling mounted linear slot diffusers located above floor mounted fan coil units.

Each mini-air handling unit incorporates a disposable panel filter, a low pressure hot water heating coil, a chilled water cooling coil and a belt driven centrifugal fan unit. Air is drawn into each mini-air handling unit from a wall mounted extract grille and heated or cooled as required. A range of galvanised sheet steel ductwork extends from the top of each mini-air handling unit to run through the false ceiling void and serve a series of ceiling mounted linear slot diffusers.

Each fan coil unit incorporates a washable panel filter, a low pressure hot water heating coil, a chilled water cooling coil and a direct driven centrifugal fan unit. Air is drawn into each fan coil unit from an integral grille at the bottom of the unit, heated or cooled as required and supplied back to the space via an integral supply grille on the top of the unit.

Volume control dampers have been installed within the ductwork at strategic points to enable the system to be balanced and ensure the proper air flow rate at each point.

Fire dampers have been installed into the ductwork at the penetration of fire break walls to prevent the spread of fire through the ductwork system. Access doors have been fitted into the ductwork adjacent to each fire damper to allow for maintenance and re-linking of the mechanism.

For the locations of the equipment and the routes of the ductwork please refer to the as installed drawings contained within Section Ten of this manual.