

DESIGN A VACUUM DELIVERY SYSTEM FOR A DOUBLE-STOREY OFFICE

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ABSTRACT

The vacuum delivery system is a system which utilizes the suction force generated by the pressure difference from a vacuum pump to deliver document via a pathway. The system has a similar concept or technology as the pneumatic tubes, systems which utilize compressed air to partial vacuum to move containers through a network of tubes. The vacuum delivery system of the project is proposed to be implemented in a double-storey office to offer an alternative and possibly a faster way of delivering hard copy documents in the office. Through electronic means of delivering documents are already made available, there are still some documents which require physical paperwork such as private and confidential document. In addition, the vacuum delivery system was also introduces to minimize the burden of staffs in the office to leave their departments each time they need to deliver certain documents within the office by walking up the stairs I the double0storey office. The piping system was designed to cover all the departments involved with the receiving stations at the particular stations. With the help of the delivery system, the staffs can deliver the documents from their respective departments and the productivity of the staffs can be increased. Furthermore, the labor cost of the company for delivery staffs, if any, can also be used for other investments., the delivery system will utilize a container which will transport the documents places inside the container to the specific recipients or departments in the office via piping design for the vacuum delivery system and the container will be designed to be able to move through the pipe without being stuck at any point. The system would be made user friendly without the need of users to attend to the system frequently with an automated receiving ability. The delivery system would also be designed to deliver at the delivery speed achievable by a staff or by consuming lesser time.