Table 10.28.: Acceptance Test for Stair Pressurization Systems

ITEMS	REQUIREMENTS
1. ACCEPTANCE TEST	**5. DOOR OPENING FORCE TEST** i. This acceptance test is to measure the door opening force on the doors between the pressurized and unpressurized spaces. ii. The test(s) shall be carried out as follows. a. Measure door opening force without the pressurization system operating. b. Close all relevant doors c. Initiate the pressurization system operation either manually or automatically. d. Actuate the pressure differential system. e. Fasten the end of the force measuring device (e.g. a spring balance) to the door handle, on the side of the door in the direction of opening, release any latching mechanism, if necessary holding it open. f. Pull on the free end of the force measuring device, noting the highest value of force measured as the door opens. g. Measure door-opening force at all doors located within the escape route. h. For each door take at least 3 measurements and calculate the mean of these measurements. iii. These readings shall be taken using a calibrated dynamometer. iv. The calibration of all test equipment shall be such that the measurements are accurate to at least 5 %. v. Door opening forces measured relative to this acceptance test shall comply with specific design door opening forces and in particular shall not exceed the maximum allowable door opening force of 133 N. vi. The door opening force measurements shall be taken for all doors located within the escape routes.
2. MAINTENANCE OF PRESSURIZATION SYSTEMS	**1. GENERAL** i. Maintenance is a combination of all technical, administrative and managerial actions taken with the objective of ensuring the specified function of the pressurization system. ii. Pressurization systems, including the smoke detection system or any other type of fire alarm system used, the Smoke Control Panel (SCP), the fans, the equipment power supply arrangements and the automatically operated ventilation equipment, shall be subject to a regular maintenance and functional testing procedure. iii. The consultant shall be responsible for the design of the system and shall provide the Owner and the facility management with a maintenance check list. Records shall be kept of all maintenance and functional testing by the facility management. iv. The entire pressurization system shall be properly inspected, serviced and if necessary repaired strictly in accordance with the manufacturer's and supplier's instructions. v. The equipment shall be included in the Building Services maintenance schedule. vi. A maintenance and functional test schedule shall be prepared. vii. All unsatisfactory findings or defects found regarding the maintenance of the equipment shall be recorded in the log book and reported to the facility management. viii. Maintenance of equipment shall be in accordance with the manufacturer's instructions. ix. Records shall indicate all reports regarding repeated faults that can be deemed to be design faults.