

5. Acceptance and Maintenance of Smoke Control Systems

5.1. Pressurization Systems - Acceptance Test and Maintenance

- 5.1.1.** Pressurization systems for Stairs, lift hoistway lobbies, vestibules, corridor etc. shall be tested and maintained in accordance with **Table 10.28.** for acceptance.

Table 10.28.: Acceptance Test for Stair Pressurization Systems

ITEMS	REQUIREMENTS
1. ACCEPTANCE TEST	<p><u>1. GENERAL</u></p> <ul style="list-style-type: none"> i. The pressurization System acceptance testing shall demonstrate that the final integrated smoke-control system installation complies with the specific design and is functioning as intended and that its operating parameters comply with the design objectives defining pressure differences, air velocities and door opening force. ii. Pressurization systems shall prove that the system can be activated either manually or automatically, where applicable, by the building fire alarm system, that all components are placed in the appropriate operating modes in accordance with the control matrix and that the design objectives are met. iii. In addition, the acceptance testing shall enable to evaluate potential interactions that can take place between different smoke-control systems and components installed in the buildings. iv. Prior to the acceptance testing, all building equipment shall be placed in the normal operating mode, including equipment that is not used to implement smoke control. v. The following four acceptance tests shall be carried out. <ul style="list-style-type: none"> a. Activation of pressurization system b. Pressure difference test c. Air velocity test d. Door opening force test <p><u>2. ACTIVATION OF PRESSURIZATION SYSTEM</u></p> <ul style="list-style-type: none"> i. Regardless of the activation methods mentioned below, these tests shall demonstrate that the pressurization system can be activated in case of a fire and is capable to operate in accordance with the specific building design. <ul style="list-style-type: none"> a. Activation by the building Fire Detection and Alarm System: This test shall be to operate the automatic fire detection system (smoke detector) by introducing smoke into the detector head. This shall in turn operate the central fire alarm panel, thus activating the pressurization system. b. Activation by Manual Switches: This test shall be to activate pressurization system by means of manual switch at the Smoke Control Panel (SCP) <p><u>3. PRESSURE DIFFERENCE TEST</u></p> <ul style="list-style-type: none"> i. This acceptance test shall measure pressure differences across the closed door separating a pressurized and an unpressurized space and to determine the pressure distribution (field) within the pressurized space. The test(s) shall be carried out as follows.