Australian Standard®

Test methods for general access floors

Method 4: Test for the effect of temperature

METHOD

1 SCOPE This Standard sets out the method for testing floor panels of an elevated floor system for hygrothermal conditions due to the effect of temperature.

2 PRINCIPLE Test specimens from the elevated floor system are tested for distortion in the forms of concavity, convexity, twist and non-squareness of the panel after being subjected to extreme temperature conditioning periods.

3 APPARATUS The following apparatus is required:

(a) *Air circulating oven or refrigerator*—capable of maintaining the specified test temperature to within ±1°C dry bulb.

(b) *Apparatus for measuring the concavity and convexity of the panel*—as specified in AS 4155.1.

(c) *Apparatus for measuring the twist of the panel*—as specified in AS 4155.2.

(d) *Apparatus for measuring the squareness of the panel*—as specified in AS 4155.3.

4 TEST SPECIMEN The test specimen shall be one floor panel without covering selected at random from samples submitted.

5 PROCEDURE The procedure for testing the effect of temperature on the panel is as follows:

(a) Place the specimen flat with the edges supported in an air circulating oven or refrigerator. If more than one panel is to be conditioned, it shall be separated from its neighbour by at least 25 mm.

(b) Condition the panel at 5°C dry bulb at 80% relative humidity for 14 days (336 h) continuously, after which the change in concavity, convexity, twist and squareness shall be ascertained by measurement as detailed for test methods specified in AS 4155, Methods 1, 2 and 3, respectively.

(c) Examine for any delamination of materials or components for each test panel.

(d) Condition the panel at 23°C dry bulb at 75% relative humidity for 14 days (336 h) continuously, after which the change in concavity, convexity, twist and squareness shall be ascertained by measurement as detailed for test methods specified in AS 4155, Methods 1, 2 and 3, respectively.

(e) Examine for any delamination of materials or components for each test panel.

(f) Condition panel at 30°C dry bulb at 50% relative humidity for 14 days (336 h) continuously, after which the change in concavity, convexity, twist and squareness shall be ascertained by measurement as detailed for test methods specified in AS 4155, Methods 1, 2 and 3, respectively.