

# REPORT OF LOAD TESTS ON CABLEDUCT 2000 SERIES **FLOORBOX**

Summary No. 0321 Test Reference: SW033.07 Issue Date: 04/04/2007

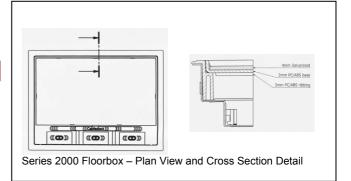
## Project

On behalf of the client, Cableduct Ltd. CERAM Building Technology requested to undertake a point load test on an installed 2000 Series floorbox.

## Client



Cableduct Ltd. 30 Selhurst Rd London **SE25 5QF** 



### Test Method

25x25mm Square point loading in the centre of an installed 2000 Series floorbox based on the test method T8.00 in PSA MOB PF2 PS/SPU "Performance Specification for Platform Floors". Deflection measurements were taken at every 1.5kN, as load was applied, up-to a maximum load of 4.5kN. This load was then held for 5 minutes. The tests were carried out in accordance with the requirements for a light grade system, which maximum deflection after 24 hours at 1.5kN ≤ 2.40mm are:-

stability between 23 and 24 hours ≤ 0.02mm

permanent deformation ≤ 0.50mm

sustain 3 x safety factor load (4.5kN) for not less than 5 minutes

## Test Results

### Results from the 25mm square loading test

Load Applied (kN)	Deflection as Load Applied (mm)	Deflection After 5 minutes (mm)	Permanent Deflection After Removal of Load (mm)
0.0	~	~	~
1.5	1.92	~	0.16
3.0	3.72	4.33	0.24
4.5	5.01	5.03	~
9.0	~	10.4	1.7
24 hours loading @ 1.5kN	2.13		0.16

Failure occurred at 11.6kN

As the floorbox was tested within a panel, the panel deflection was monitored and has been removed as appropriate.

#### Assessment

The 2000 Series floorbox withstood the test load of 1.5kN (light grade) for 24 hours with a deflection of 2.13mm. The floorbox also withstood a load 4.5kN (heavy grade) with a deflection of 5.01mm. After the load had been held for 5 minutes the deflection had crept to 5.03mm, an increase of 0.02mm. The 2000series floorbox maintained a safety factor load of 9kN for 5 minutes without collapse (medium grade)

#### Authorised by:

**Dave Dix** (Project Manager, Structures Group)

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