



LOAD TEST CERTIFICATE
For Dexion 914 x 305 x 0.8mm shelf

The shelf tests done by Southland manufacturing for Dexion meet the test and result requirements set out by the Storage Equipment Manufacturers Association (SEMA).

The tests performed simulate uniformly distributed, gradually applied loads. The Shelf to Upright connections used are those used in finished structure.

The allowable UDL is the smaller of the following two test methods

Maximum deflection

The loads are applied in appropriately small increments of about one-tenth or less of the expected failure load. At each increment the load is held for no less than five minutes until deflections have stabilised and recorded. The load is then removed and the residual deflection recorded. The tests are deemed successful if the residual deflection in each case does not exceed 20% of the maximum.

For a 914mm long shelf the deflection of the shelf edges shall not exceed.

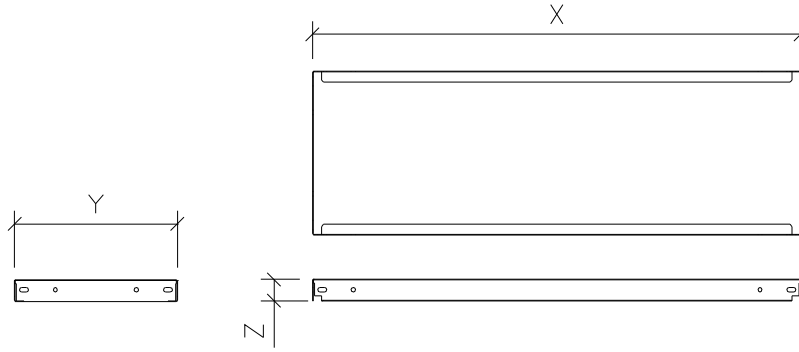
$$\begin{aligned} \text{MAX DEFLECTION} \quad \text{€} &= \frac{\text{L} = \text{LENGTH}}{\text{C} = 40(2+(L/1000))} \\ &= \frac{\text{L} = 914}{\text{C} = 40(2+(914/1000))} \\ &= \frac{914}{116.56} \\ &= \mathbf{7.84} \end{aligned}$$

EXPECTED SHELF CAPACITY = 125kg's UDL

Destructive Test

As above the shelf is loaded gradually until collapsing point, the load at which the shelf collapsed is divided by 1.8 to get allowable UDL.

See page 2 for test results.



WHERE X = LENGTH
 Y = DEPTH
 Z = VERTICLE DEFLECTION

UDL (kg's)	∈ X	∈ Y	∈ Z
12.5	0	0	0
25	0	0	0
37.5	0	0	0
50	0	0	0
62.5	0	0	0
75	0	0	0
87.5	0	.5	0
100	0	1	0
112.5	1	1	0
125	1	1.5	0

Maximum deflection recorded at 125kg's

Test 2 : Destructive test

Load at which collapse took place: 240kg's
 Shelf maximum UDL: 133kg's

Shelf rated at 125kgs UDL

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