



UNIVERSITY OF  
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# Independent Load Testing Report

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# TEST 1

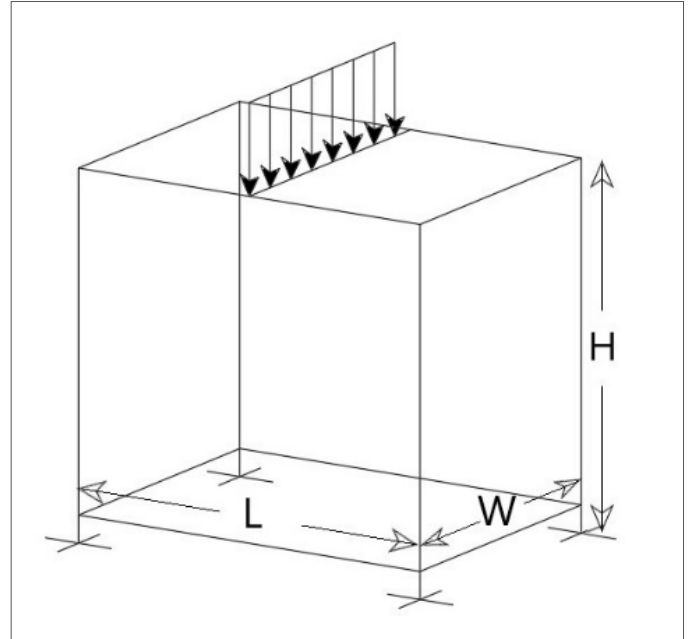
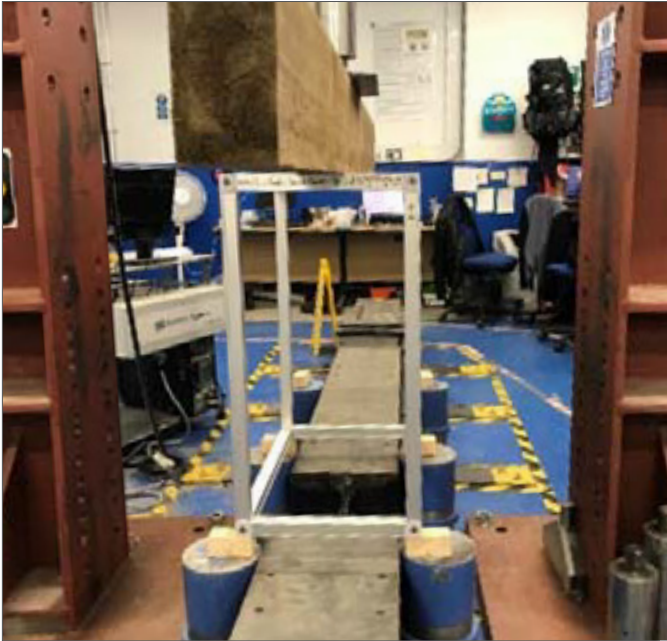
Axial line load Double frame (Test 1 of 3)

$L = 367.5\text{ mm}$

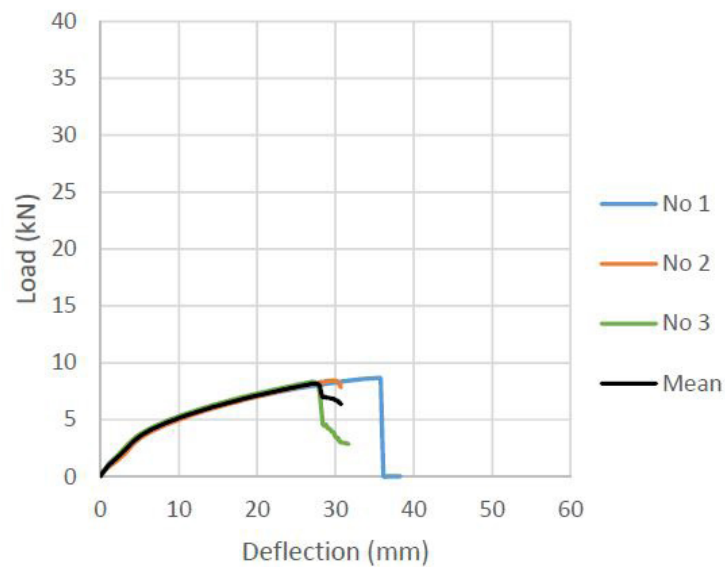
$H = 735\text{ mm}$

$W = 612\text{ mm}$

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total line load should not exceed 3kN  
(300 Kilograms / 674.4 Lbs).

# TEST 2

Axial line load Double frame

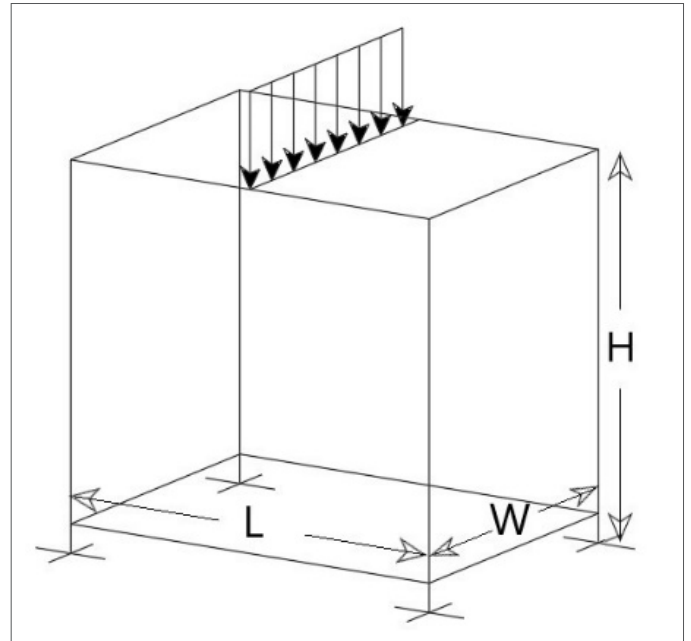
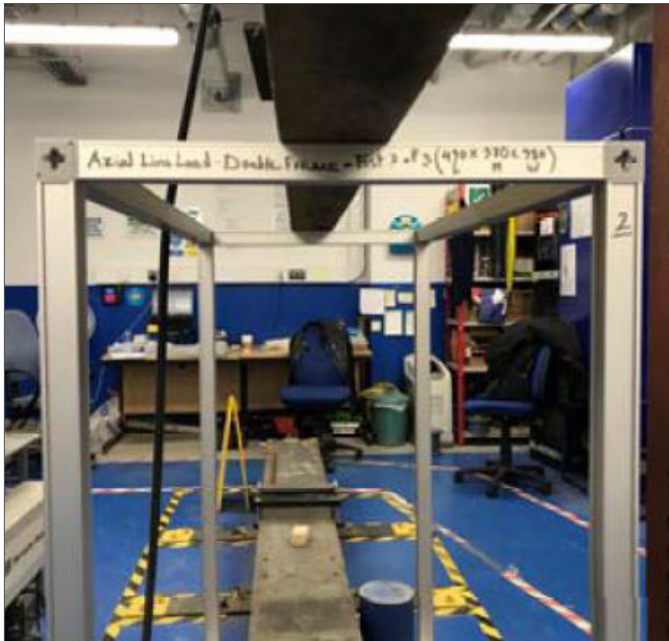
Test 2 of 3

L = 490mm

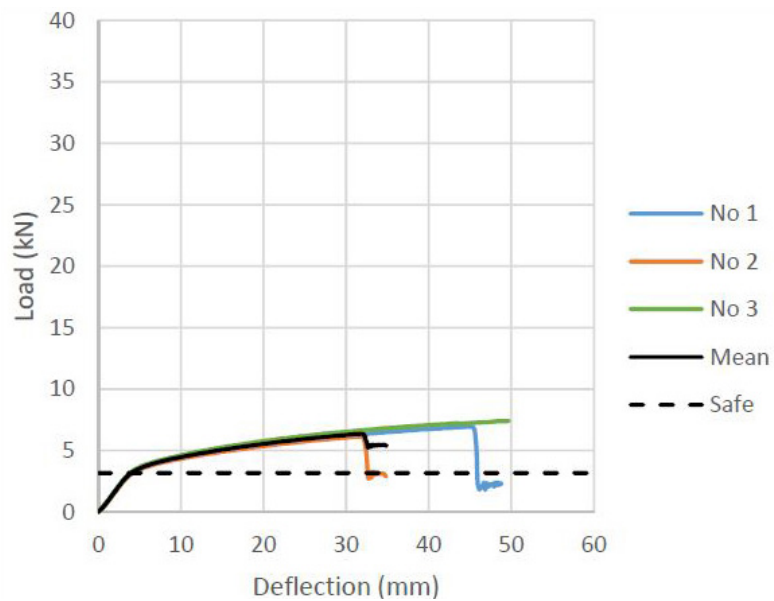
H = 980 mm

W = 980 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total line load should not exceed 3kN (300 Kilograms / 674.4 Lbs).

# TEST 3

Axial line load Double frame

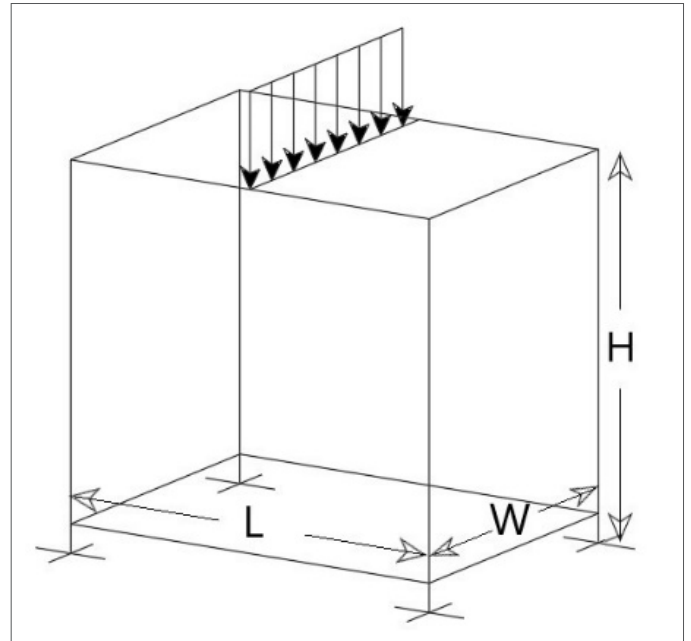
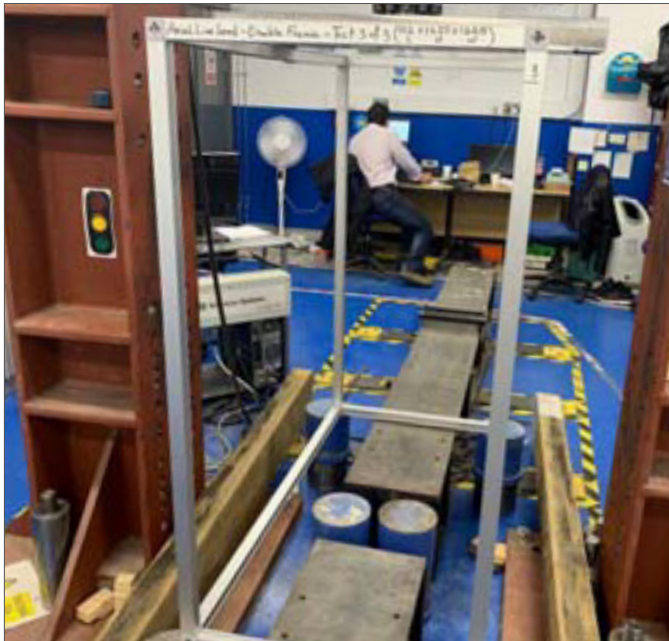
Test 3 of 3

L = 1225mm

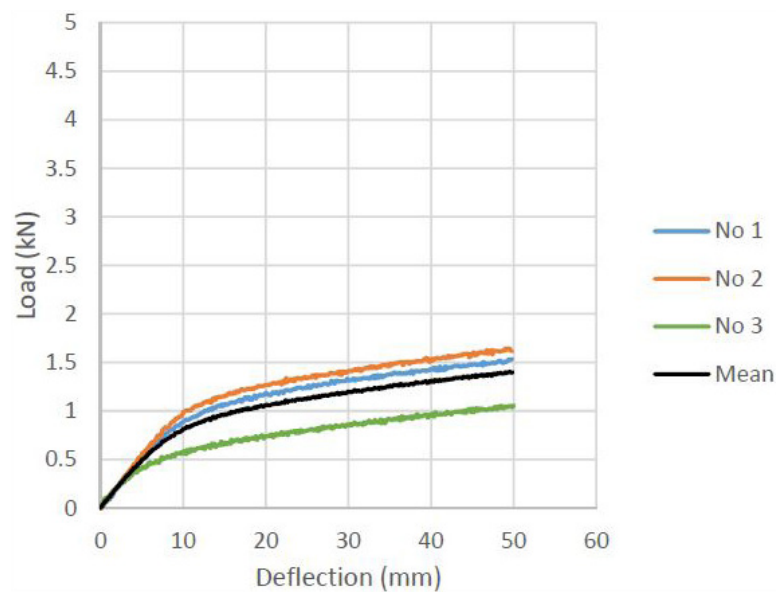
H = 1225 mm

W = 612mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total line load should not exceed 0.4kN  
(40 kilograms / 89.9 Lbs)

# TEST 4

Axial eccentric point load Double frame

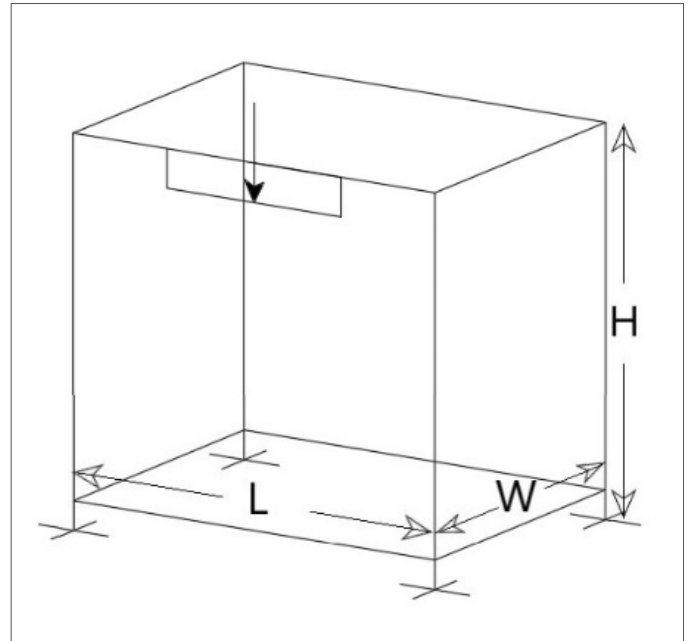
Test 1 of 3

L = 367.5mm

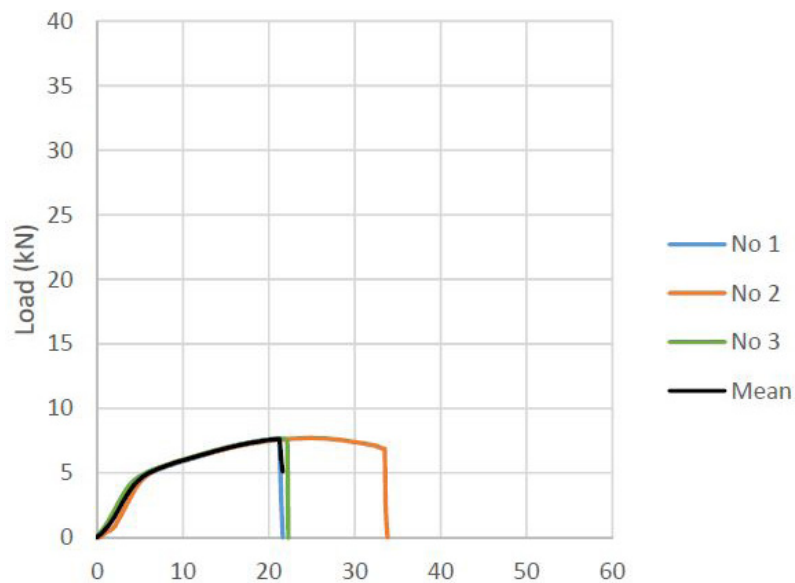
H = 735 mm

W = 612 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total point load should not exceed 2kN (200 kilograms / 449.6 Lbs).

# TEST 5

Axial eccentric point load Double frame

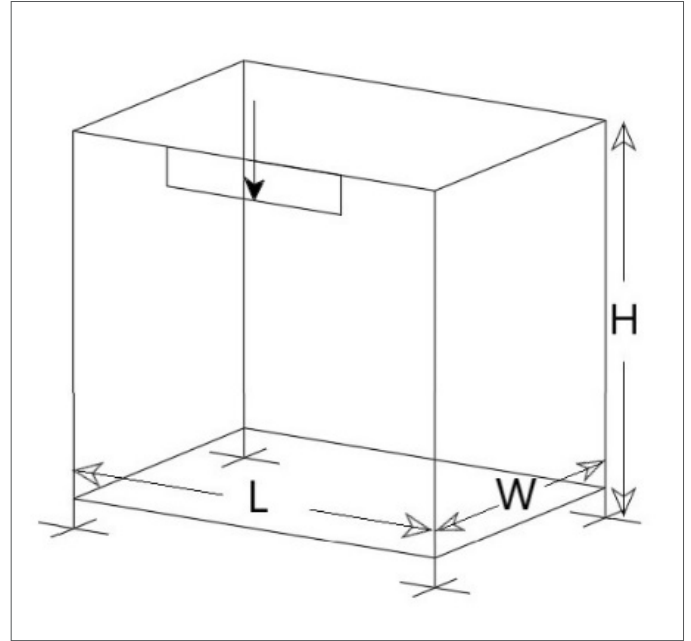
Test 2 of 3

L = 490mm

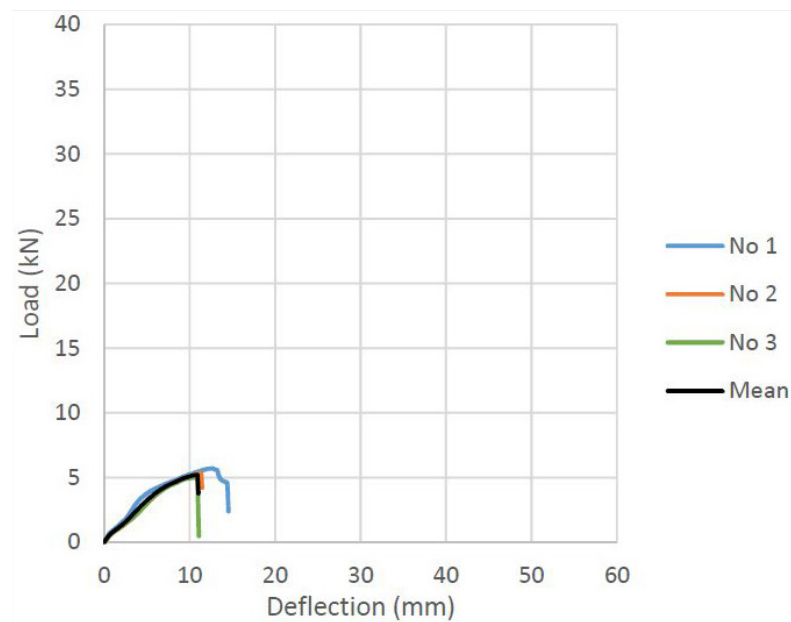
H = 980 mm

W = 980 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total point load should not exceed 1.5kN (150 kilograms / 337.2 Lbs).

# TEST 6

Axial eccentric point load Double frame

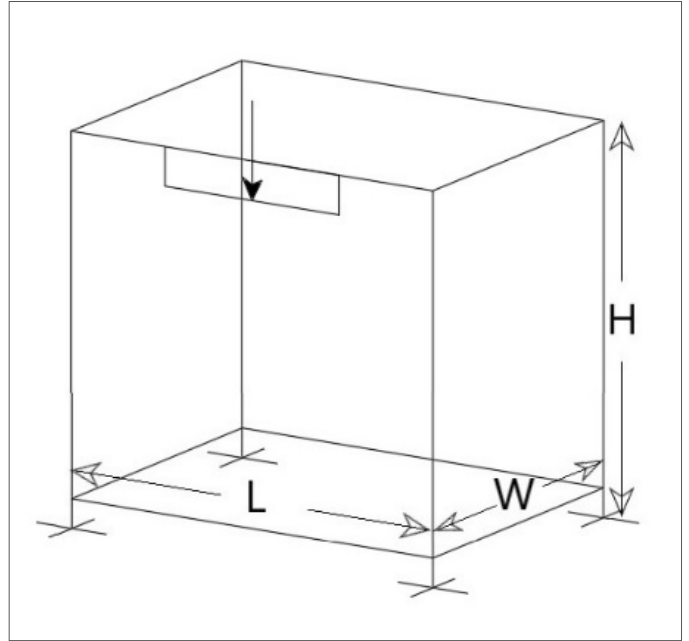
Test 3 of 3

L = 612mm

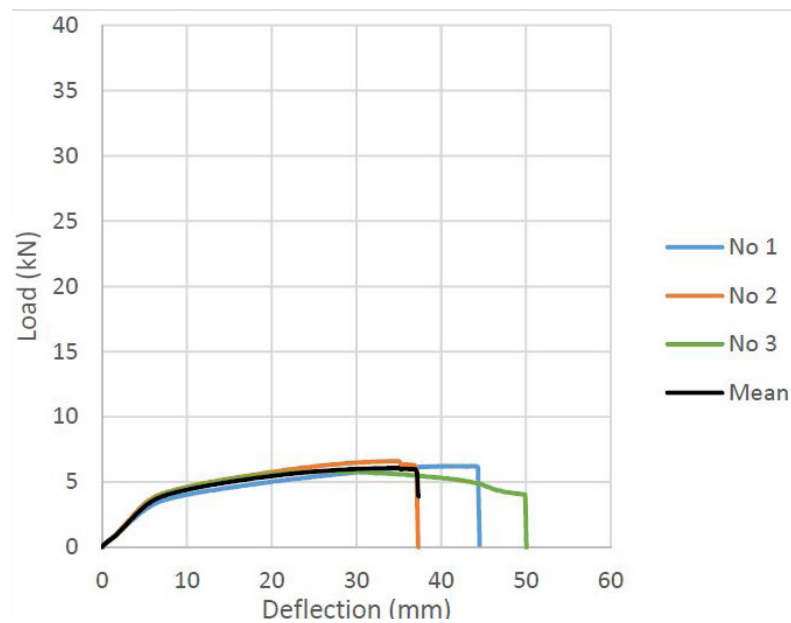
H = 1225mm

W = 1225mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total point load should not exceed 1.5kN (150 kilograms / 337.2 Lbs).

# TEST 7

Axial distributed load Double frame

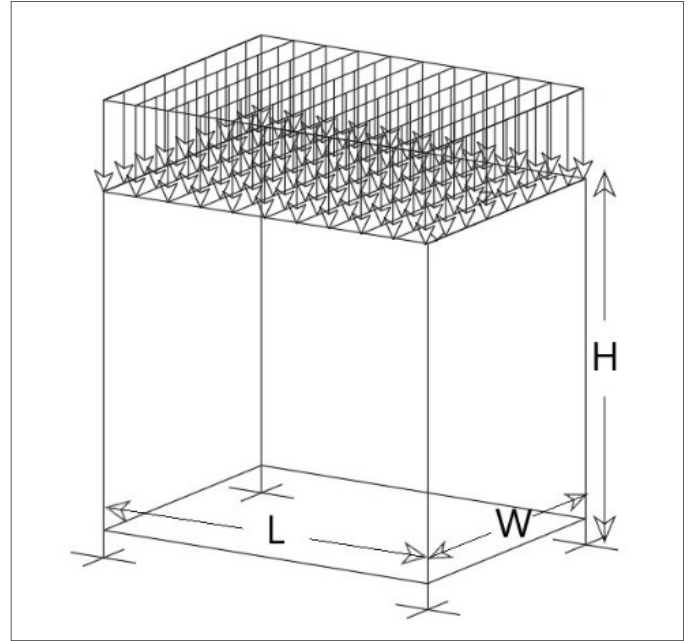
Test 1 of 3

L = 367.5mm

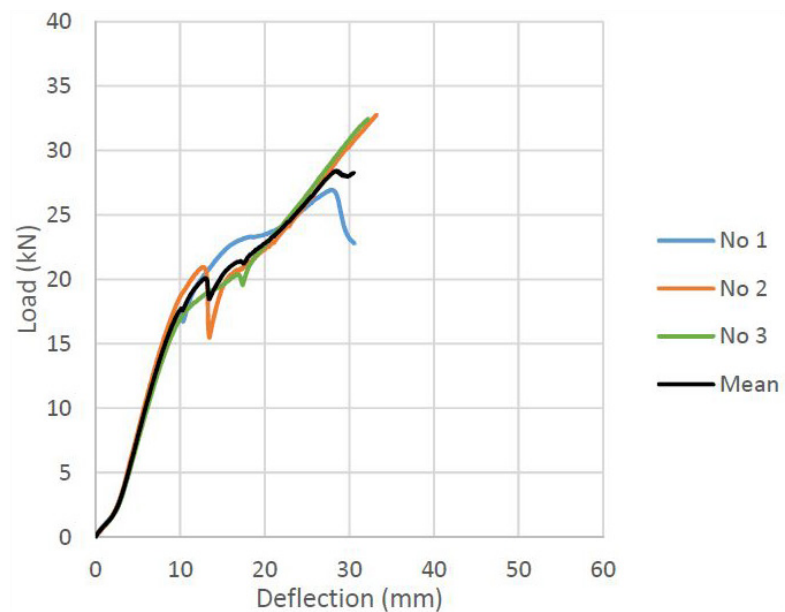
H = 735 mm

W = 612 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 12kN (1200 kilograms / 2697.7 Lbs).

# TEST 8

Axial distributed load Double frame

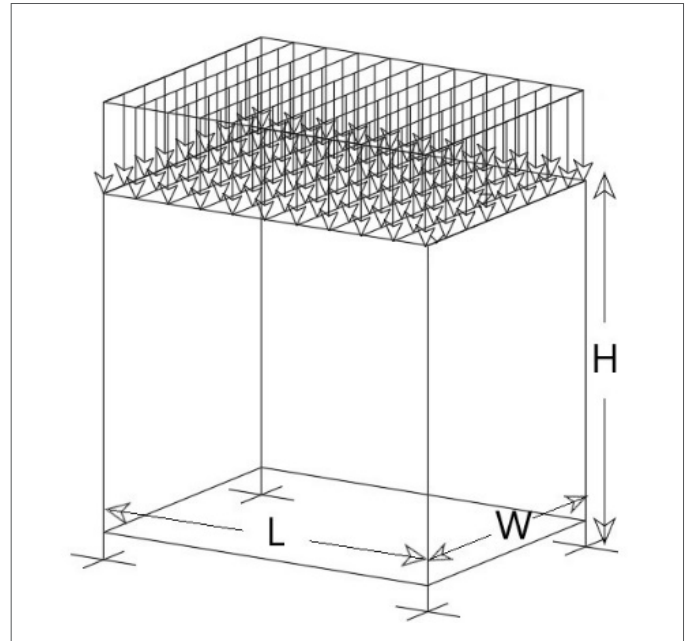
Test 2 of 3

L = 490mm

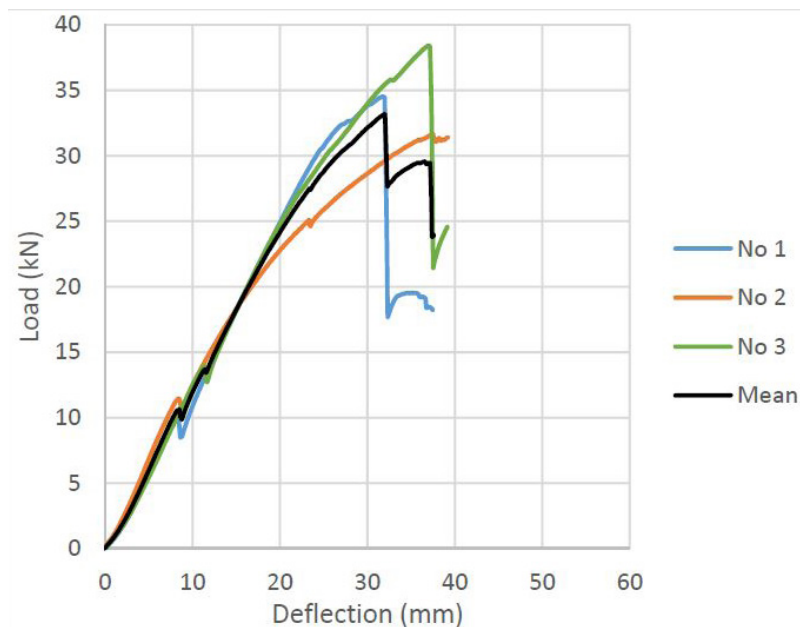
H = 980 mm

W = 980 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 12kN (1200 kilograms / 2697.7 Lbs).

# TEST 9

Axial distributed load Double frame

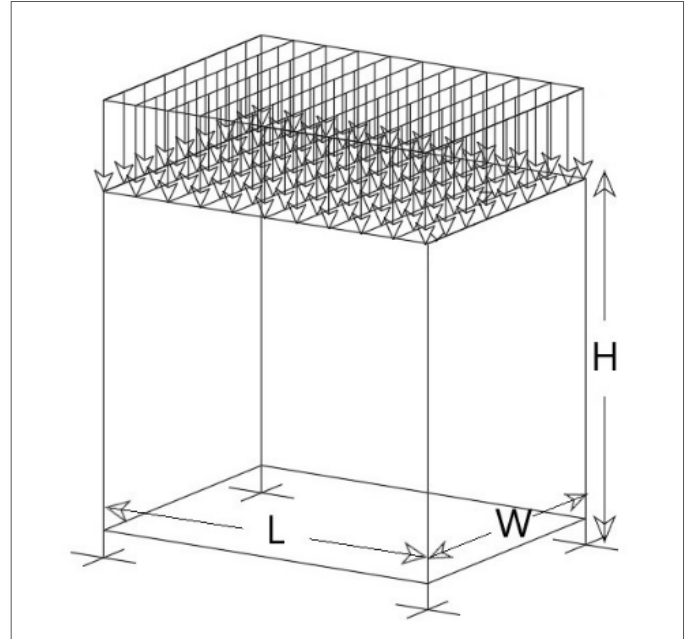
Test 3 of 3

L = 612mm

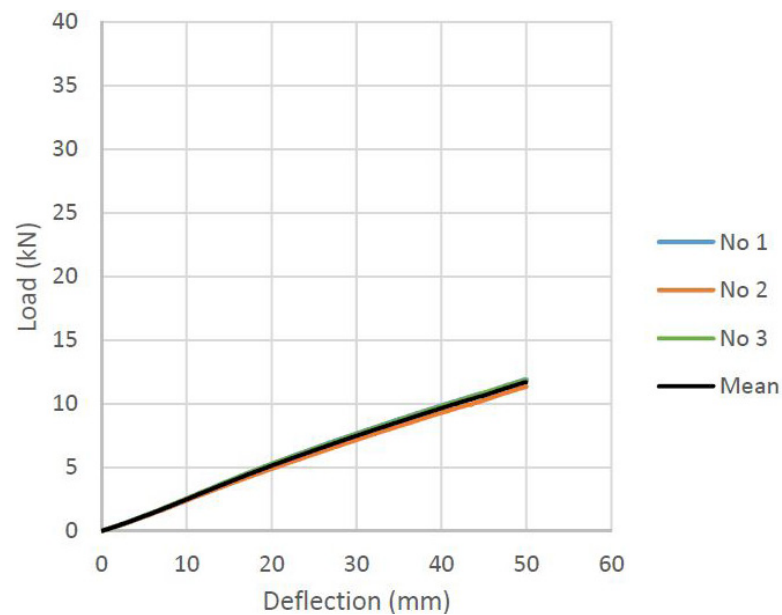
H = 1225 mm

W = 1225 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 5kN  
(500 kilograms / 1124 Lbs)

# TEST 10

Axial distributed load Triple frame

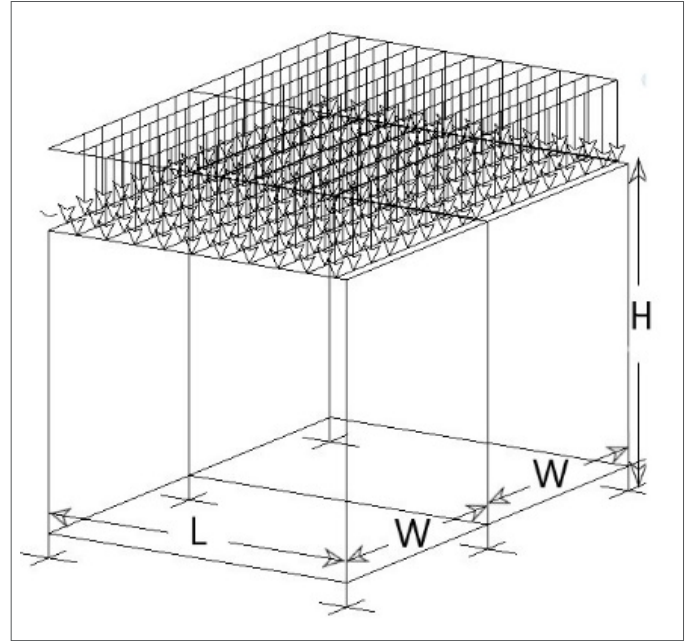
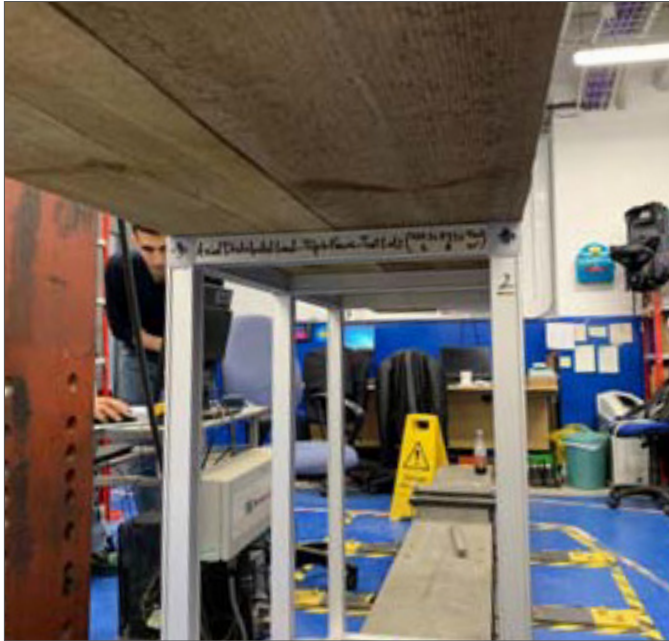
Test 1 of 3

L = 367.5mm

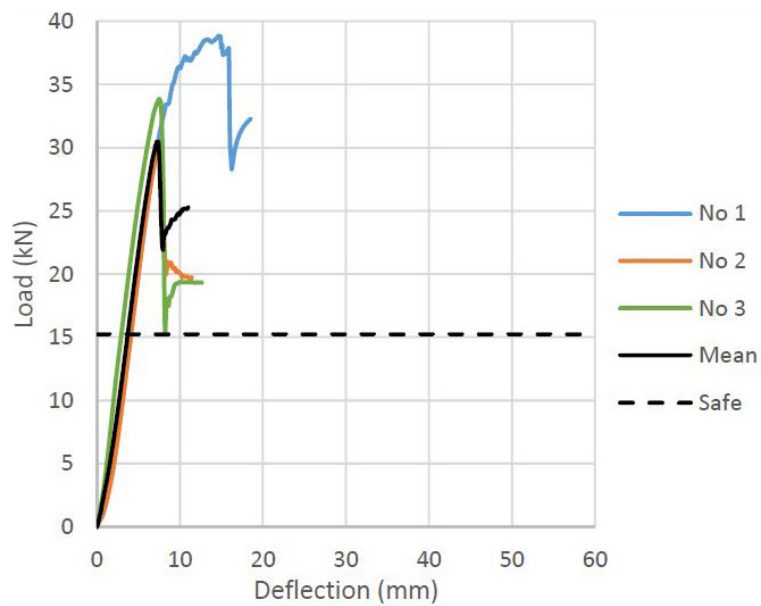
H = 735 mm

W = 400 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 15kN (1500 kilograms /3372 Lbs).

# TEST 11

Axial distributed load Triple frame

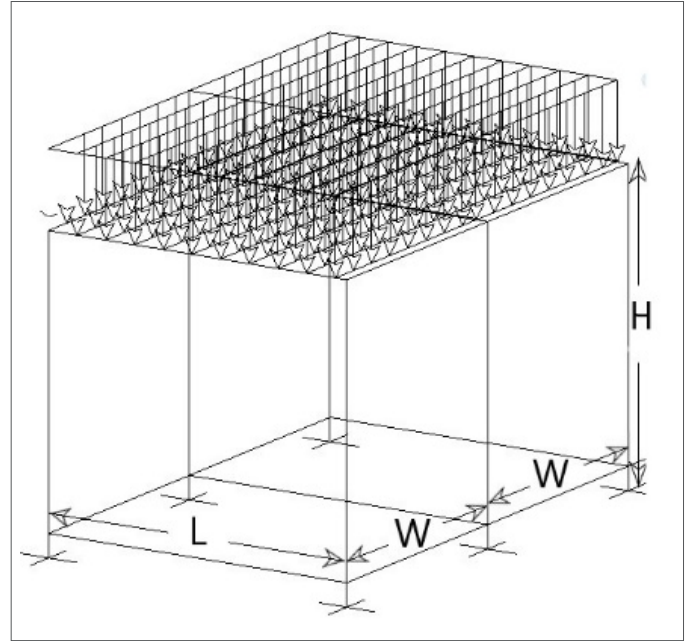
Test 2 of 3

L = 490mm

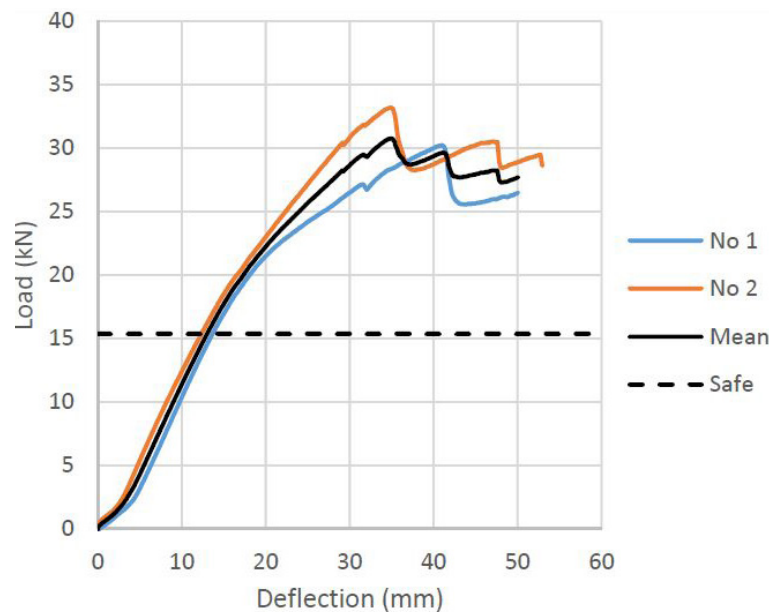
H = 980 mm

W = 980 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 15kN (1500 kilograms / 3372 Lbs).

# TEST 12

Axial distributed load Triple frame

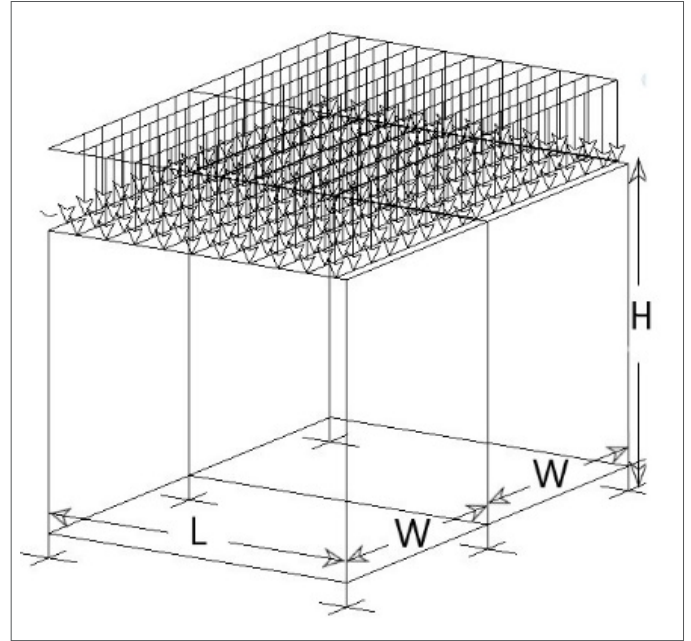
Test 3 of 3

L = 612mm

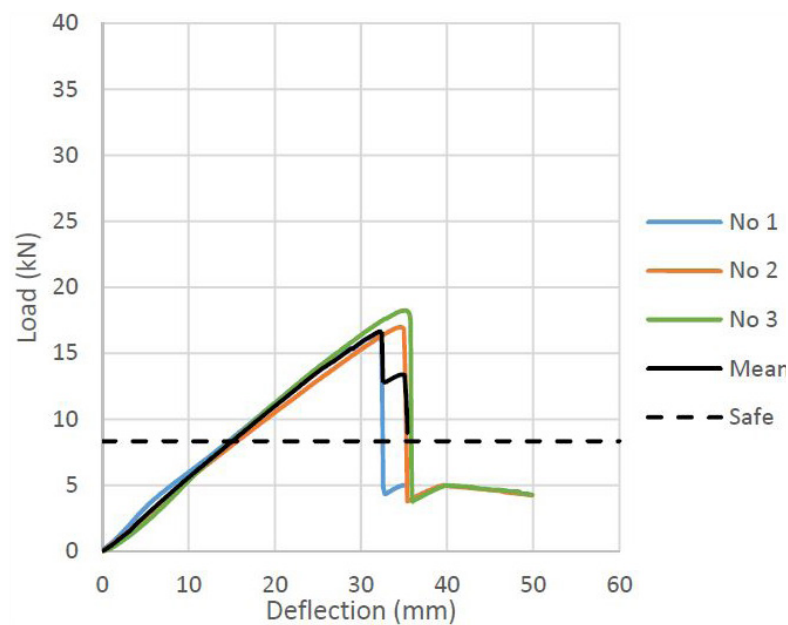
H = 1225 mm

W = 1225mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 8kN (800 kilograms / 1798.5 Lbs).

# TEST 13

Axial line load Triple frame

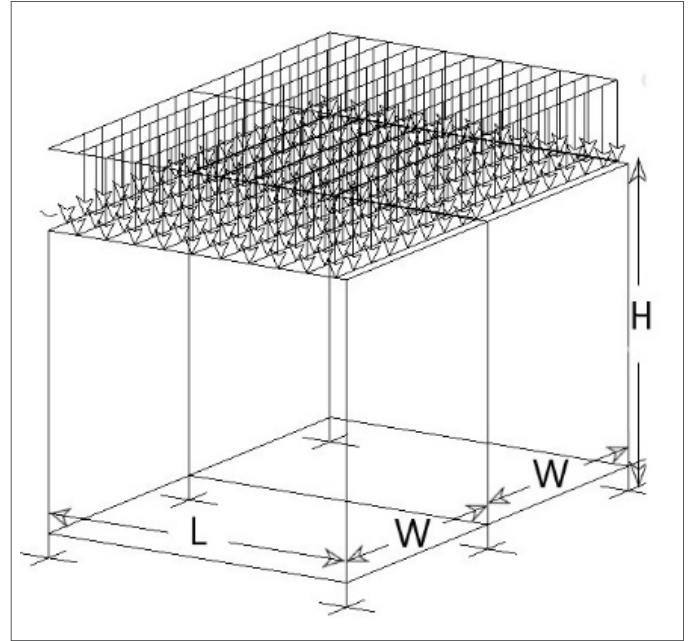
Test 3 of 3

L = 500mm

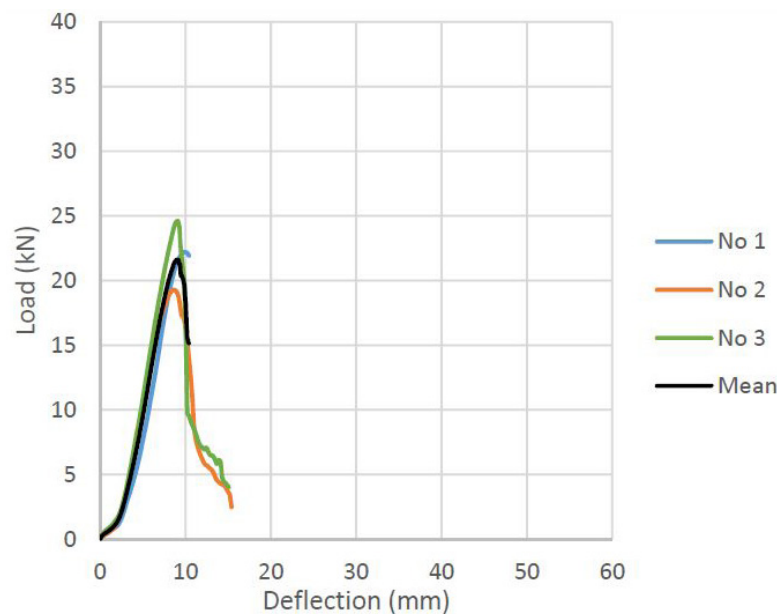
H = 735 mm

W = 400 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total line load should not exceed 8kN

(800 kilograms / 1798.5 Lbs)

Supports/ horizontal members should be fixed to the ground.

# TEST 14

Axial distributed load Double frame

Test 3 of 3

L = 612mm

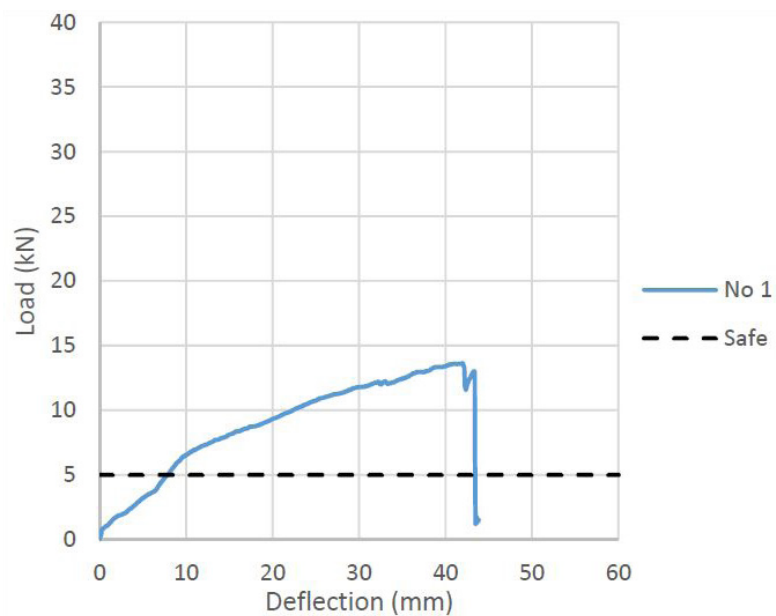
H = 612 mm

W = 212 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Total distributed load should not exceed 4kN (400 kilograms / 899Lbs).  
Frame should be placed directly on the ground.

# TEST 15

## PULLOUT TEST (M5)



Maximum pull out load for M5 connector should not exceed 0.5kN (50 kilogramme / 112.4 Lbs).

## PULLOUT TEST (M8)



## COMMENT

Maximum pull out load for M8 connector should not exceed 1kN (100 kilogramme / 224.8 Lbs).

# TEST 16

Axial distributed load Floor test No feet Test 1

L = 612 mm

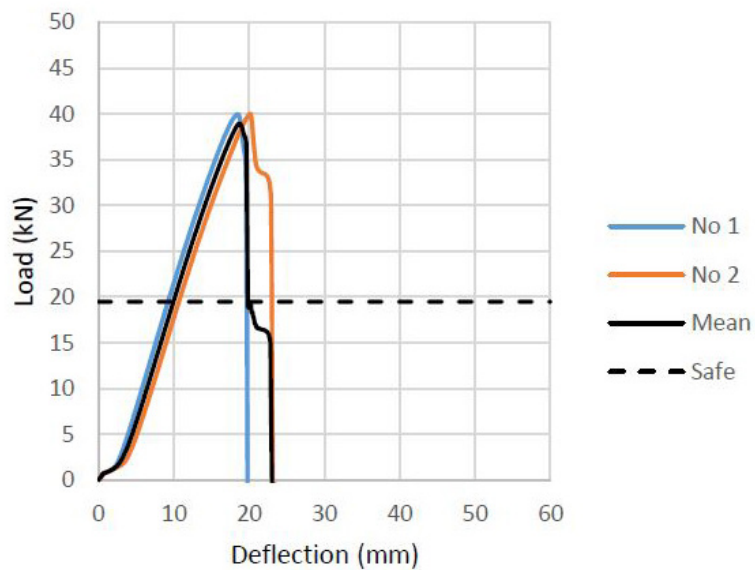
H = 212 mm

W = 612 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Initial failure occurs in joints. Total distributed load should not exceed 20 kN (2000 kilogrammes / 4496 Lbs).

# TEST 17

Axial distributed load Floor test Static M8 feet

Test 2

L = 612 mm

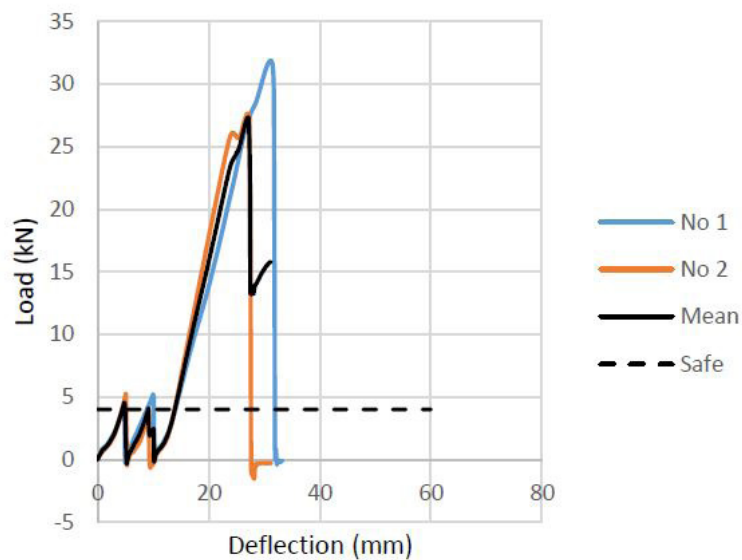
H = 212 mm

W = 612 mm

## PICTURE (TEST SETUP)



## GRAPH



## COMMENT

Initial failure occurs in feet. Total distributed load should not exceed 3 kN (300 kilogrammes / 674.5 Lbs).

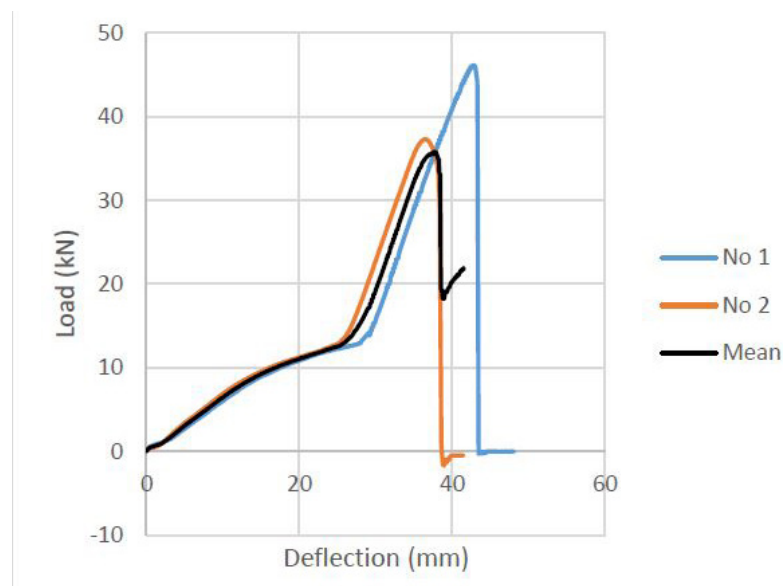
# TEST 18

Axial distributed load Floor test Nutserts M8 feet  
Test 3  
L = 612 mm  
H = 212 mm

## PICTURE (TEST SETUP)



## GRAPH



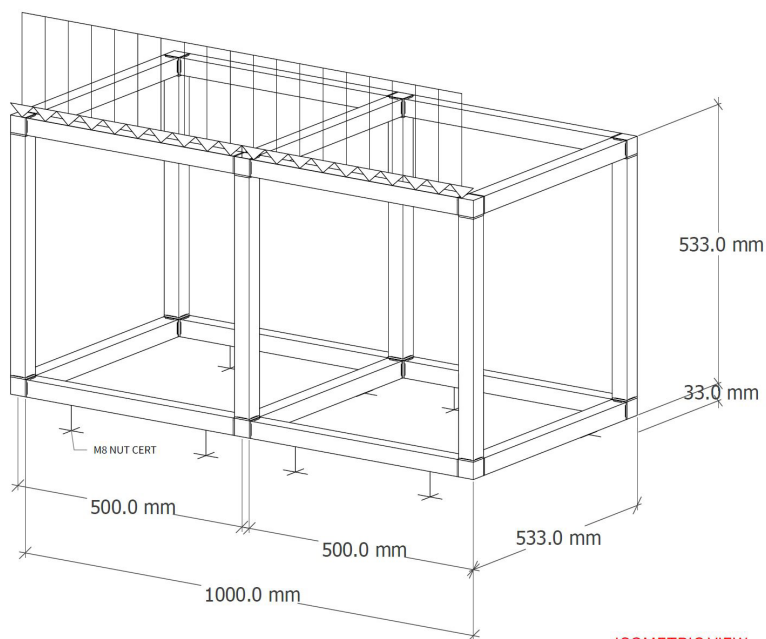
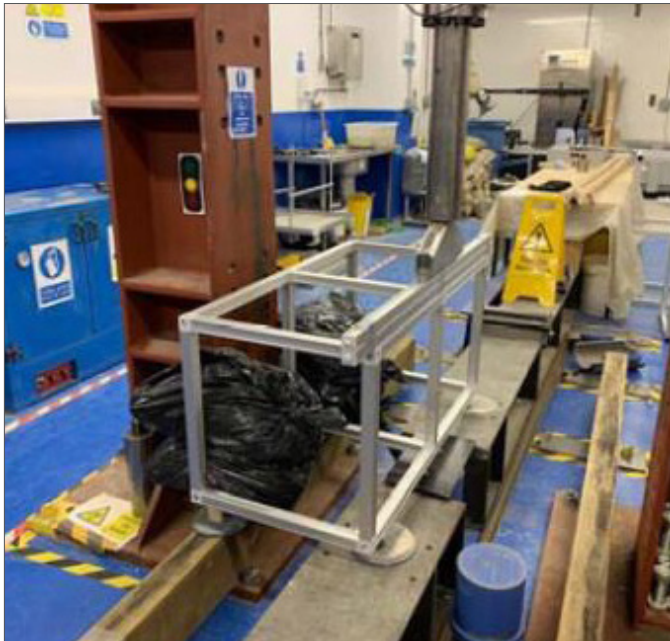
## COMMENT

Initial failure occurs in Nutserts feet. Total distributed load should not exceed 6 kN (600 kilogrammes / 1348.5 Lbs).

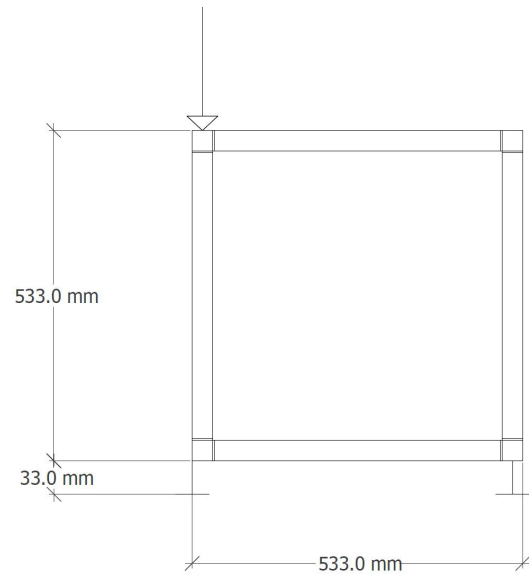
# TEST 19

Axial Eccentric line load  
Floor test Nutserts M8 feet  
L = 500 mm  
H = 500 mm  
W = 500 mm

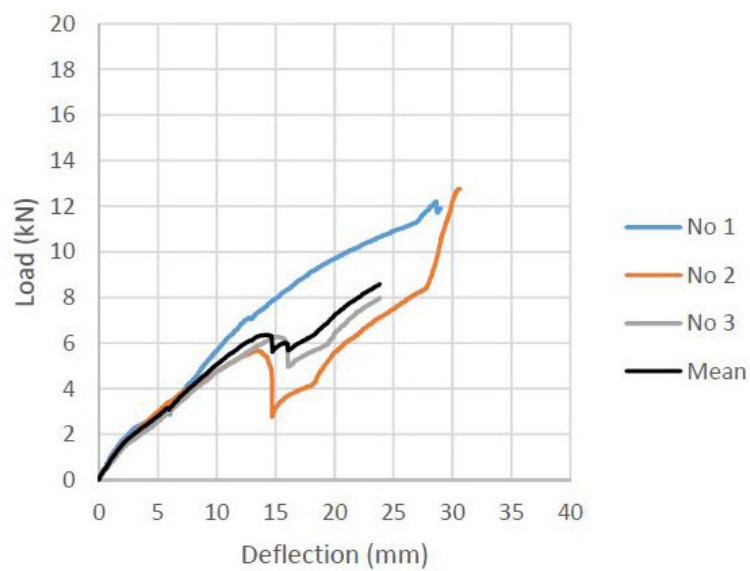
## PICTURE (TEST SETUP)



ISOMETRIC VIEW



## GRAPH



## COMMENT

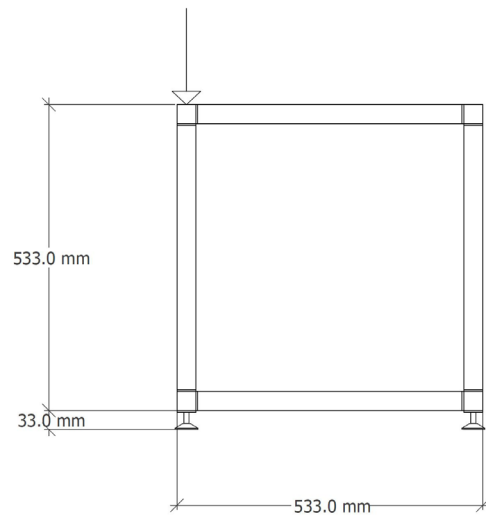
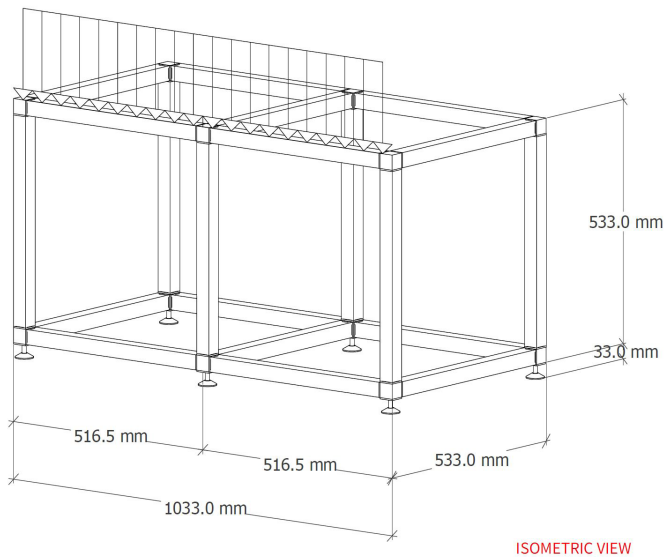
Failure initiated in the Nutsert members.  
Recommended safe load is 1.5 kN (153 kilogrammes / 337.5 Lbs).

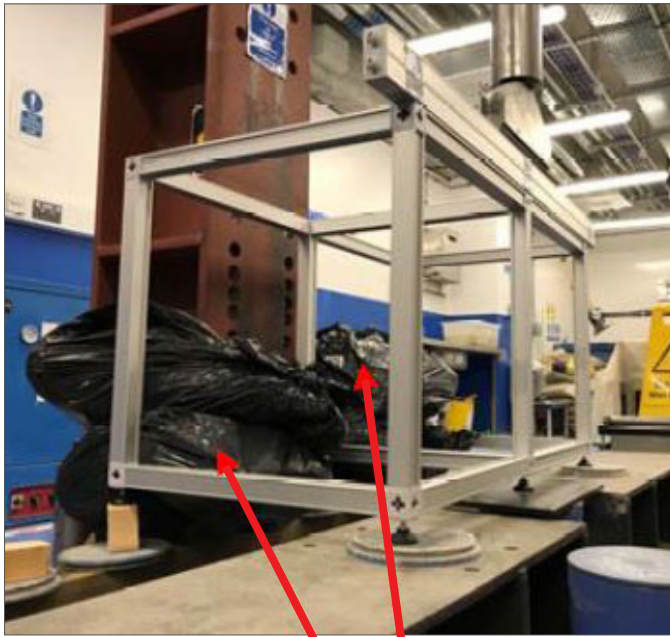
Note: Lower members are loaded with 50 kg sandbags to prevent the rotation.

# TEST 20

Axial Eccentric line load Floor test  
Static M8 feet  
L = 500 mm  
H = 500 mm  
W = 500 mm

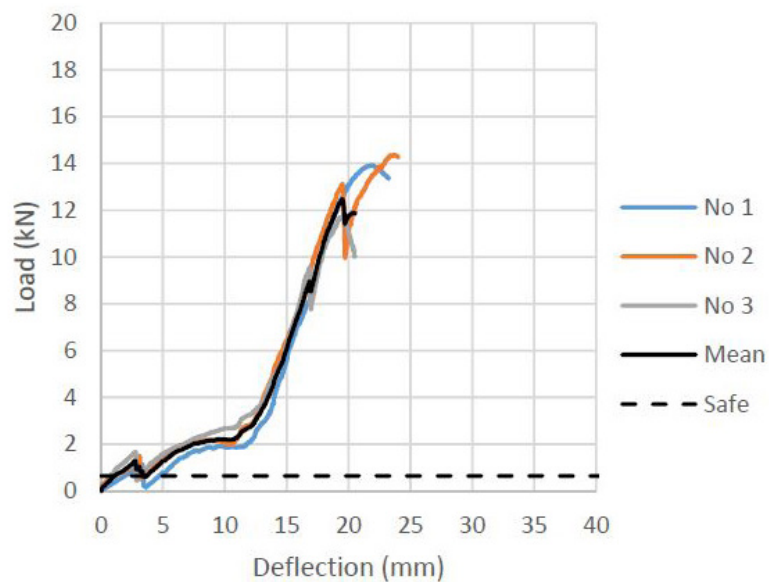
## PICTURE (TEST SETUP)





50kg Sandbags

## GRAPH



## COMMENT

Failure initiated in the Static M8 feet. Recommended safe load is 0.5 kN (51 kilogrammes / 112.5 Lbs).  
 Note: Lower members are loaded with 50 kg sandbags to prevent the rotation.