

# Test Report

REPORT NUMBER:  
816923



**TEKNOLOGISK  
INSTITUT**

Teknologiparken  
Kongsvang Allé 29  
DK-8000 Aarhus C  
+45 72 20 20 00

Info@teknologisk.dk  
www.teknologisk.dk

REQUISITIONER: Nordic Construction Solutions ApS  
Danmarksvej 93  
DK-8732 Hovedgård

Page: 1 of 5 N P  
Appendices: 1  
Init.: MFRI/MMH

SUBJECT: Three built-up rendered wall panels. A test specimen (drain supports) has been installed in each wall panel.

SAMPLING: The specimen was sent by the requisitioner and received by the Danish Technological Institute on 10.10.2018.

PERIOD: Testing was performed 19.10.2018.

METHOD: The method has been described and performed according to the requisitioner's requirements.

RESULT: Results can be found in the section 'Test performance and results'.

STORAGE: As the test is destructive and non-reproducible, the test specimens were discarded immediately after completion of the test.

TERMS AND CONDITIONS: Tests were performed according to the Danish Technological Institute's General Terms and Conditions applicable on the date of the commencement of the agreement. Test results apply exclusively to the tested specimen. The test report may only be reproduced in extracts with the laboratory's prior written consent.

LOCATION: 28.11.2018, Danish Technological Institute, Building & Construction, Aarhus

Mads O. Fricke  
Head of Section

Direct line: +45 7220 1851  
E-mail: mfri@teknologisk.dk

Mads Møller Hansen  
Consultant, Chief Engineer

Direct line: +45 7220 1141  
E-mail: mmh@teknologisk.dk



## Test specimens

Three rendered walls have been provided. Each wall has a drain support that requires testing installed.

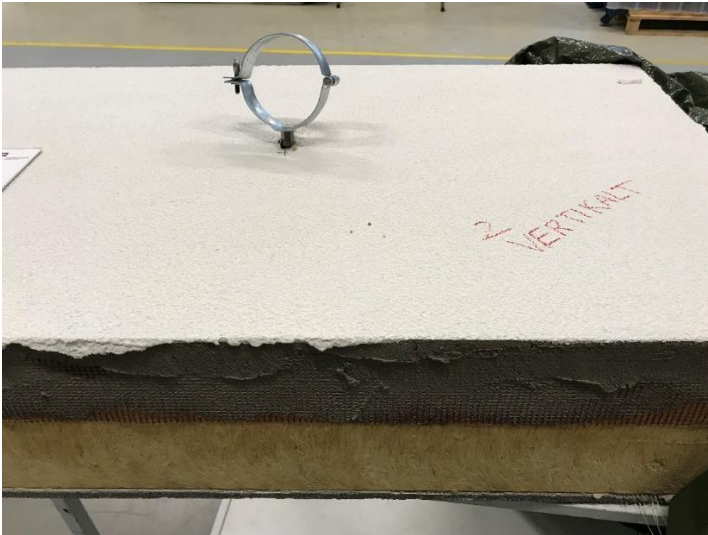


Photo 1 – Example of wall structure



Photo 2 – Brackets used for Specimens 1+2



Photo 3 – Brackets used for Specimen 3

## Test performance and results

Danish Technological Institute, Building & Construction, has performed this project for Nordic Construction Solutions ApS using tensile tests on drain supports installed on a rendered wall.



### 1. Horizontal pull (pull perpendicularly out of the plane)



Photo 4 - Specimen 1 Before testing



Photo 5 - Specimen 1 After testing

A matrix was mounted on the test specimen (highlighted in red). The traction force was then measured with a load cell. Maximum recorded value = **1185 N**



## 2. Vertical pull (pull down along the plane)



Photo 6 – Specimen 2 Before testing



Photo 7 – Specimen 2 After testing

The thread on the screw was pulled (highlighted in red). The traction force was measured with a load cell.

Maximum recorded value = **1194 N**



### 3. Vertically (sideways along the plane)



Photo 8 – Specimen 3 Before testing



Photo 9 – Specimen 3 After testing

The flange was pulled (highlighted in red) where one screw is mounted. The traction force was measured with a load cell.

Maximum recorded value = **2009 N**



The Danish Technological Institute's Standard Terms and Conditions for requisitioned projects applies fully to the technical testing or calibration performed at the Danish Technological Institute as well as to the preparation of associated test reports and calibration certificates.