

## **Report No. 14450/08-A1**

### **Tensile tests and bending test on profiles**

WALL-PROFILE GmbH  
Fürstenrieder Straße 279 a - 81377 München

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This report includes 8 pages.

**Accredited Test Lab - DAR Registration Number: DAP-PL-4000.08**

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**Test Report No.:** 14450/08-A1

**Title:** Tensile tests and bending test on profiles

**Customer:** WALL-PROFILE GmbH  
Fürstenrieder Straße 279 a  
81377 München

## 1. Preliminary Note

### 1.1 Information supplied by client

Object/specimens to be tested: Wall profiles  
Date specimens received: 26<sup>th</sup> August 2008

### 1.2 Test objective

- Tensile tests conducted on the profiles of the fracture points are to determine the required tensile forces.
- A component bending test is to be conducted on a profile combination.

### 1.3 Specimen designation

<i>Specimen No.</i>	<i>Profile designation</i>
1	C10 (drawing C10 in enclosure)
2	WOM-XL100 (drawing WOM XL 12mm in enclosure) with WOF-XL105 (drawing WOF XL 12mm in enclosure)

### 1.4 Tests to be conducted:

- Component tensile tests
- Component bending test

## 2. Results of the tensile tests

Component tensile tests were carried out to determine the tensile force of the profiles. Photos 1.1 to 2.2 in the enclosure depict the sheet pile wall profiles before and after the tensile test.

The following table lists the result of the tensile tests:

<b>Specimen No.</b>	<b>Tensile force in kN / lb</b>	<b>Length of sheet pile wall section in mm / in</b>	<b>Calculated tensile force in kN/m / t/m / kip/in</b>
1	60.2 / 13533.5	49.5 / 1.949	1216.2 / 124.0 / 6.94
2	169.3 / 38060.1	49.6 / 1.953	3413.3 / 348.1 / 19.49

Table 1: Results of the component tensile tests  
 M. Renner / 28 Aug. 2008

## 2. Result of the bending test

A bending test was to be conducted on the profile combination WOM-XL100 with WOM-XL105. The result of this test was that the specimen had been bent up to approx. 90° without any negative finding. Photo 3.1 in the enclosure depicts the component before the bending test and Photo 3.2 in the enclosure depicts the component after the test.

  
 Person Responsible: M. Renner



  
 Head of Laboratory

Munich, 29<sup>th</sup> August 2008

Enclosure

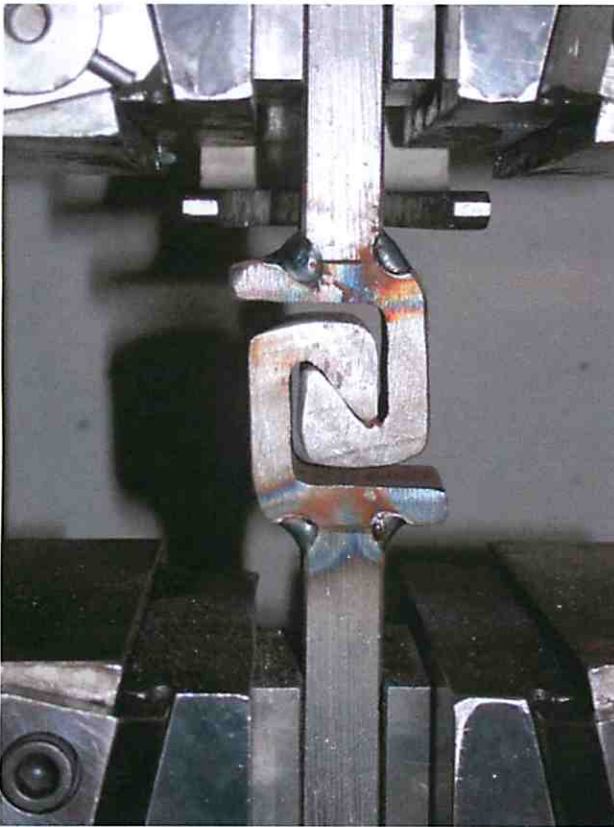


Photo 1.1:

Specimen 1  
Before the tensile test



Photo 1.2:

Specimen 1  
After the tensile test  
Bent and broken open

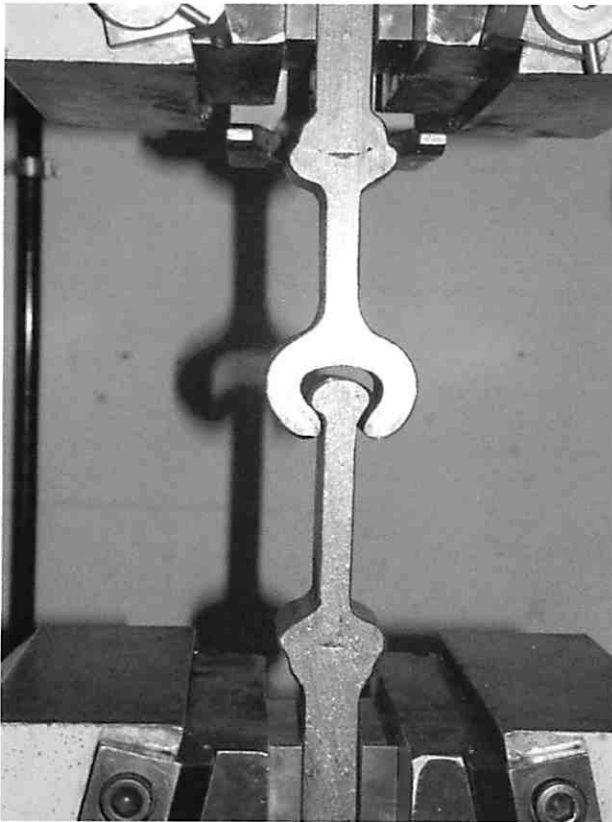


Photo 2.1:

Specimen 2  
Before the tensile test

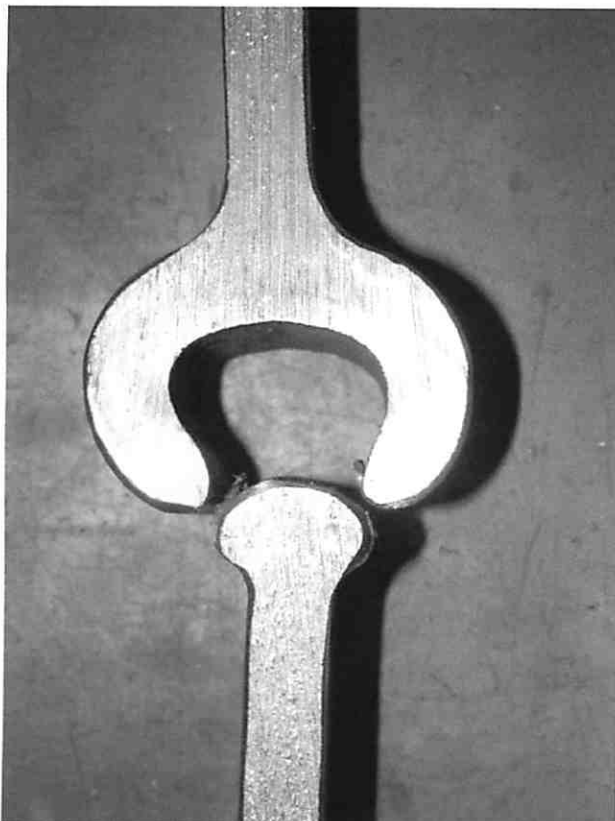


Photo 2.2:

Specimen 2  
After the tensile test  
Profile bent open at top

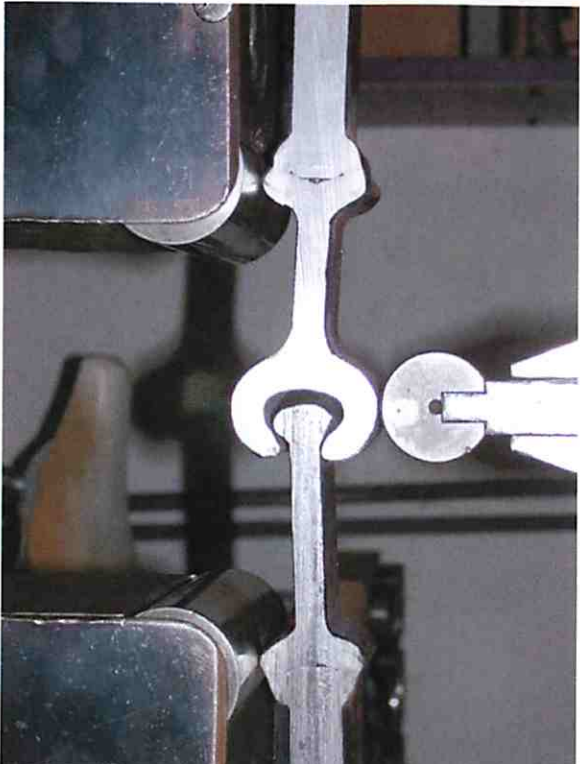


Photo 3.1:

Specimen 3

Before the bending test  
Supported at the outside at the  
end of the profile



Photo 3.2:

Specimen 3

After the bending test  
Approx. 90° no break or starting  
fracture