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Tensile strength test on clip-on eyelets

1 Introduction

By commission of Amicus Trade AB strength testing on Holdon Midi clip-on eyelets was performed.

Test place: Laboratory of SP Building Technology and Mechanics.

2 Test objects

Designation: Holdon Midi clip-on eyelets, see photo 1. The holding efficiency is tested on 650/700 g/sqm coated vinyl fabrics, see photo 2.



Photo 1. Holdon Midi.

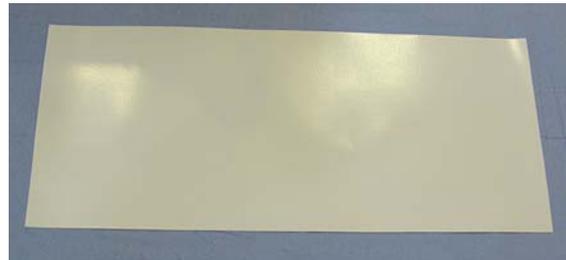


Photo 2. 650/700 g/sqm coated vinyl fabrics.

Selection of test objects: The test objects have been selected by the client without SP's assistance.

Arrival of test objects: 18 June, 2008.

Test date: 23 June - 24 June, 2008.

3 Test method and implement

Holdon Midi clip-on eyelets were tested on coated vinyl fabrics to see the holding efficiency. The test objects were mounted in the testing machine called Adamel, see photos 3 and 4 for test setup. The test objects were then pulled to fracture with a constant speed of 20 mm/min.

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Photo 3. Test setup 1.



Photo 4. Test setup 2.

4 Test results

The test results are shown in tables 1-2. The test results shown in this report refer only to the tested objects.

Table 1. Results for test setup 1. Holdon Midi on coated vinyl fabrics.

Marking	Maximum breaking load (N)	Remarks
Test setup 1	561	Holdon Midi clip-on eyelet slip from the fabric
Test setup 1	663	Holdon Midi clip-on eyelet slip from the fabric
Test setup 1	564	Holdon Midi clip-on eyelet slip from the fabric
Test setup 1	565	Holdon Midi clip-on eyelet slip from the fabric
Test setup 1	615	Holdon Midi clip-on eyelet slip from the fabric

Table 2. Results for test setup 2. Holdon Midi on coated vinyl fabrics with folded ends.

Marking	Maximum breaking load (N)	Remarks
Test setup 2	746	Holdon Midi clip-on eyelet slip from the fabric
Test setup 2	759	Holdon Midi clip-on eyelet slip from the fabric
Test setup 2	832	Holdon Midi clip-on eyelet slip from the fabric
Test setup 2	837	Holdon Midi clip-on eyelet slip from the fabric
Test setup 2	783	Holdon Midi clip-on eyelet slip from the fabric

5 Measurement uncertainty

The total calculated measurement uncertainty for the load is $< 1\%$. Reported uncertainty corresponds to an approximate 95 % confidence interval around the measured value. The interval has been calculated in accordance with GUM (The ISO guide to the expression of uncertainty in measurements), which is normally accomplished by quadratic addition of the actual standard uncertainties and multiplication of the resulting combined standard uncertainty by the coverage factor $k=2$

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