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**EINGEGANGEN**  
**29. Okt. 2014**  
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Sommer Antriebs- und Funktechnik GmbH  
Hans-Böckler-Str. 21-27  
D-73230 Kirchheim/Teck  
Tyskland

## Determination of resistance to wind load according to EN 13241-1 (1 appendix)

### Test object

Client: SOMMER Antriebs- und Funktechnik GmbH  
Product name: DOCO SFR Tecsedo  
Type of door: Sectional, overhead door  
Daylight size: Width 5000 mm, Height 3000 mm

The door was supplied and installed by the client in the opening of an airtight chamber, with its exterior facing inwards towards the chamber, see description and pictures in appendix 1.

During the tests was a simulated door operator connected to the top panel.

### Test procedure

The door was tested in accordance with EN 12444 in an air pressure chamber. Before the test measures were taken to minimize air leakage in the door and its supporting construction. The air pressure in the test chamber was increased in steps in accordance with the different classes given in EN 12424.

The test was carried out in accordance with EN 12444.

### Test results

The screws of the outer hinges started to come loose after the inner pressure step of 770 Pa. At an inner pressure of about 900 Pa the screws come loose completely on four of the side hinges and the hinges were permanently deformed.

No visible deformations were noted at pressure step at 620 Pa.

Classification according to EN 12424: Class 2

### Conditions of test

The test results refer only to the tested object.

Date of test: 2014-09-17  
Place of test: SOMMER test site in Kirchheim/Teck, Germany  
Equipment used: Measuring equipment no. 202429  
Estimated error margin: Air pressure difference  $\pm 2$  %  
Ambient climate: Air temperature 19 °C

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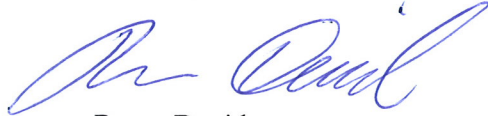
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**SP Technical Research Institute of Sweden**  
**Energy Technology - Building Physics and Indoor Environment**

Performed by



Roger Davidsson

Examined by



Börje Gustavsson

**Appendix**

1: Description and figures of the test object.

Appendix 1

**Description and figures of the door**

<b>Manufacturer of the door</b>	DOCO
<b>Product name</b>	Garage door DOCO SFR
<b>Type of door</b>	Overhead, sectional door
<b>Daylight size (wxh)</b>	5000 mm x 3000 mm
<b>Producer and type of panel</b>	Tecsedo, fingersafe, residential
<b>Total thickness of panel</b>	40 mm
<b>Thickness of sheet in panel</b>	Outside 0,60 mm / inside 0,45 mm
<b>Type of tracks</b>	DOCO SFR
<b>Type of side hinges</b>	DOCO 25734
<b>Type of slide/roller</b>	DOCO 25010-E
<b>Type of intermediate hinges</b>	DOCO 25733
<b>Type of bottom bracket</b>	DOCO 25056/57
<b>Type of top sealing</b>	DOCO 24740 series
<b>Type of side sealing</b>	DOCO 24740 series
<b>Type of bottom sealing</b>	DOCO 825100



Figure 1. Door type DOCO SFR Tecsedo, mounted in the test rig, as seen from inside.

Appendix 1

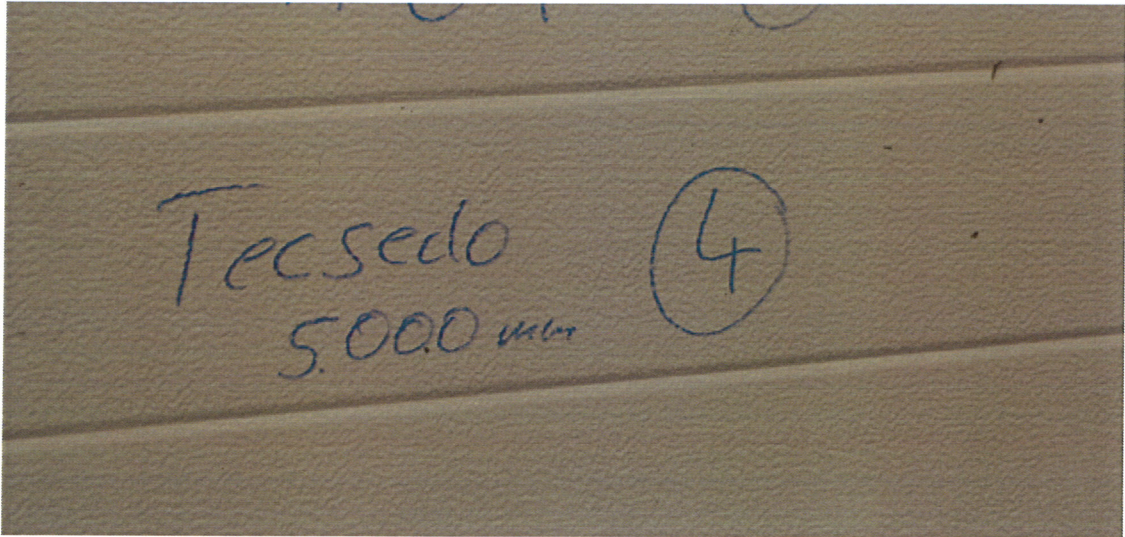


Figure 2. Marking on the test object.

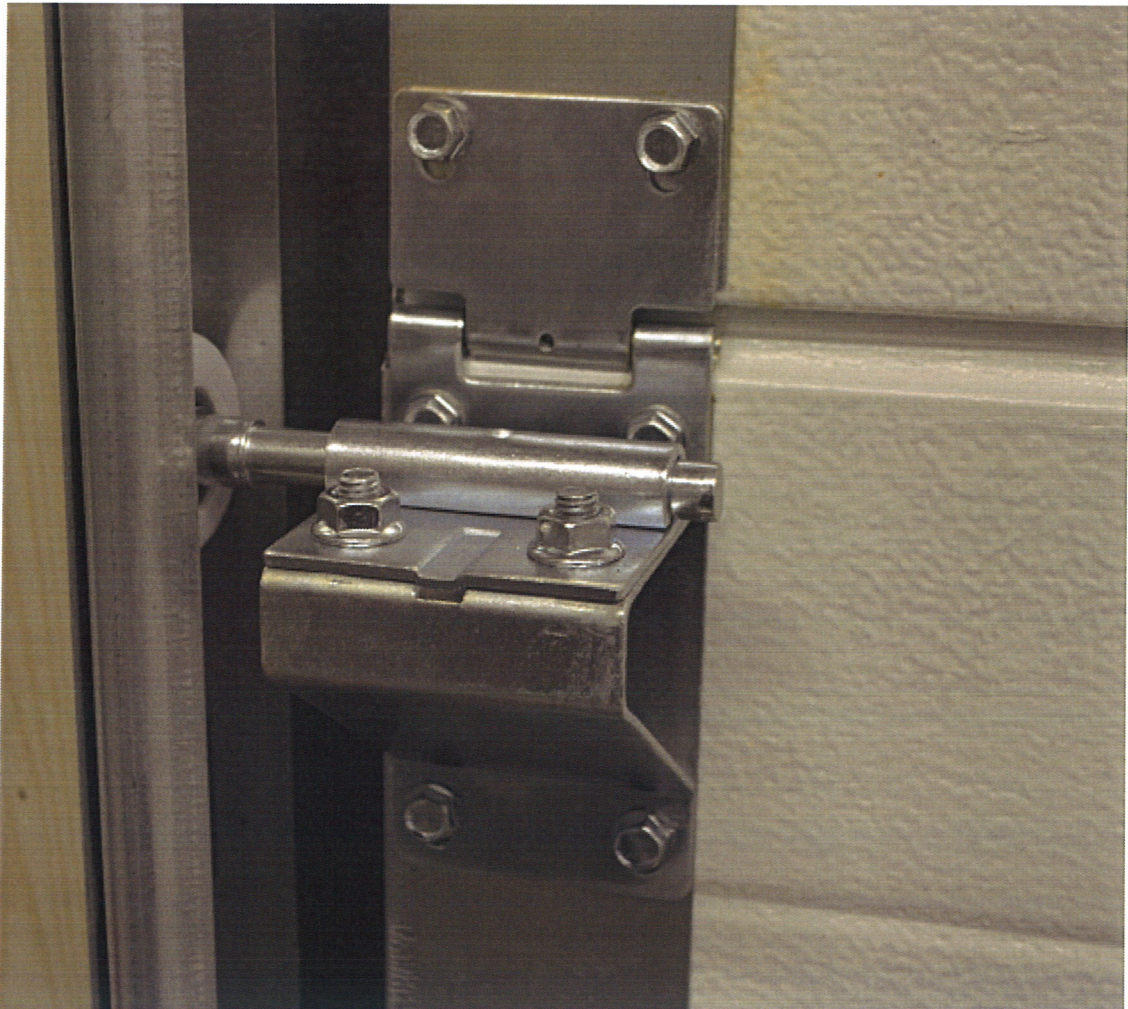


Figure 3. Hinges, slides and roller.

Appendix 1



Figure 4. The bottom bracket.

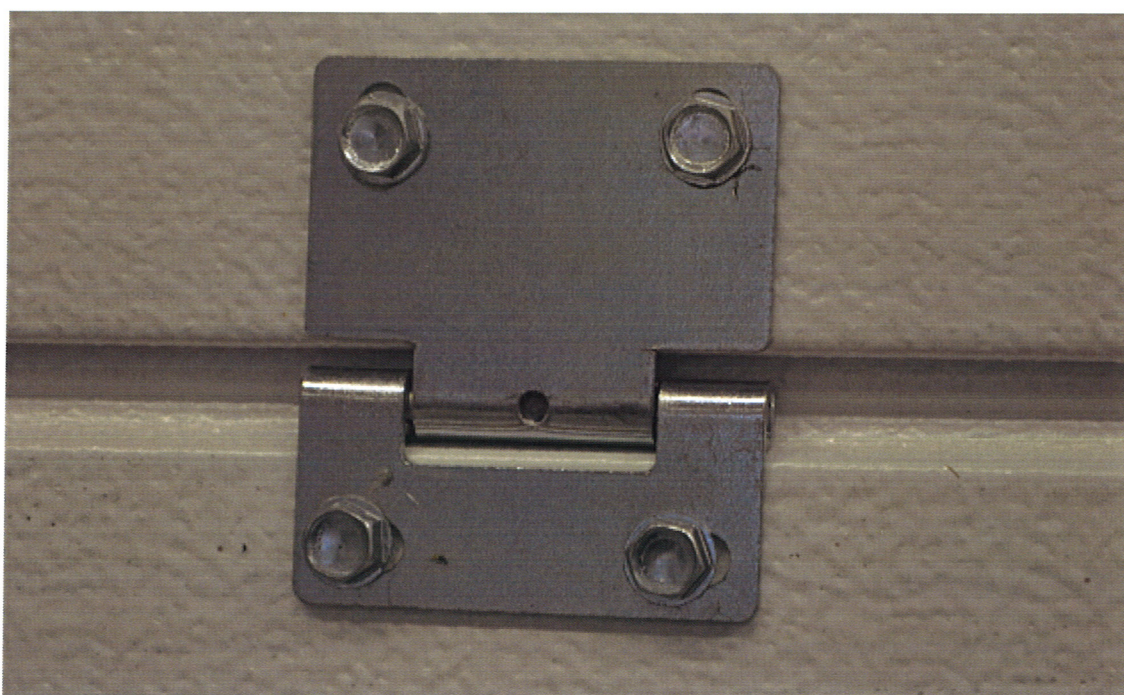


Figure 5. Intermediate hinge.

Appendix 1



Figure 6. Deformation on the hinges after an inner pressure of about 900 Pa.