





Nr.:		Person responsible:
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Test description:	Sealing of glue lines by the use of AQUA-STOP-PEN	

Aims:

To protect furniture in moisture sensitive areas effectively, Döllken has launched on the market an innovative system solution – the AQUA-STOP-PEN. In this instance, the AQUA-STOP-PEN was tested in conjunction with conventional edgeband application to seal the joints.



Production of test specimen					
Machine Parameters:					
Machine/Type:					
Processing speed: v =	m/min				
Adhesion:	Glue roller Ribbed applicator: 1,6 mm Ribbed applicator: 1,1 mm	Pressure setting 1x Main pressure roller 6x Secondary Pressure rollers	Infrared heater (3,2 kW) □ on □ off		
Panel material:	☐ MFC Chipboard	MDF			
Hot melt adhesive:	Туре:	Temperature:			
Panel joint milling:					
Capping saw:					
Edgeband flush milling:					
Glue joint-flat scraper unit:					

Test procedure

- 1. Using the same production process and parameters, a Döllken edgeband was applied to six directly coated chipboards.
- 2. The joint area of three panels was sealed with AQUA-STOP-PEN and then dried at room temperature.
- 3. Afterwards, all six panels were put with the narrow surface into a water-filled container for 24 hours.
- 4. Subsequent evaluation of the results.



Components without AQUA-STOP-PEN



• Even after a few hours in the water a considerable swelling in the joint area is recognisable.

• The panel is irreversibly damaged.



Components with AQUA-STOP-PEN sealing



- After 24 hours in the water there was **no** noticeable swelling in the protected joint area.
- The furniture component remains **free** any damage.
- Further tests show that higher loads are possible.



Final Assessment

- Components which were not sealed with the AQUA-STOP-PEN show along the entire longitudinal edge swelling of the panel thickness of approx. 2 mm.
- Components sealed with the AQUA-STOP-PEN show no swelling.
- Thus, the effectiveness of the AQUA-STOP-PEN even in extreme conditions was successfully demonstrated.
- The results depend on the manufacturing conditions of the panel components and the materials used.

The above demonstration and our application-technical advice in spoken and written are based on our experiences and are made to the best of our knowledge and belief, however, they must be regarded as non-binding information without guarantee. Otherwise, current general terms of business, delivery and payment of Döllken-Kunststoffverarbeitung GmbH apply.

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