



Compressibility of flooring underlay products

Requested by: Tupler Oy



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Order Klaus Gummerus, 29.11.2001

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Task **Compressibility of flooring underlay products**

Sample The customer delivered to VTT the following flooring underlay products:

Sample 1: 3 mm foam from Germany
 Sample 2: 2 mm foam from USA
 Sample 3: 2 mm foam from USA
 Sample 5: Tuplex


Performance of the task The tests were performed by laying the samples between two steel plates of size 100 x 100 x 10 mm. The samples were preloaded with 10 N for 60 s and then the load was increased to 60 N for 7 days. This load corresponds approximately 600 kg/m². The compression was measured during the loading. Before the compressibility test the thickness and the square weight of the products were determined.

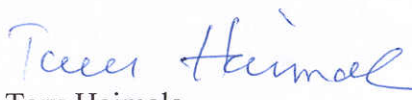
Results The results of the compressibility tests are presented in table 1.

Table 1. Compressibility of flooring underlay products.

Sample	Thickness	Square weight	Compressibility at loading				
			Preload 10 N	Load 60 N			
				60 s	5 min	24 h	7 d
3 mm foam from Germany	2.3 mm	41.0 g/m ²	0.01 mm	0.05 mm	0.37 mm	1.28 mm	56%
3 mm foam from USA	1.8 mm	125.8 g/m ²	0.01 mm	0.03 mm	0.21 mm	0.78 mm	43%
2 mm foam from USA	1.8 mm	129.8 g/m ²	0.00 mm	0.02 mm	0.37 mm	0.90 mm	50 %
Tuplex	2.9 mm	150.5 g/m ²	0.00 mm	0.02 mm	0.04 mm	0.12 mm	4%

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