

Shear Properties of CompoGrid CG100 / Sealoflex SC4 Interface



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Scharwoude, March 1998
The Board of Management, Ooms Nederland Holding bv



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Introduction

Three $\varnothing 150$ mm cores with a CompoGrid CG100 / Sealoflex SC4 (spray rate 2.0 kg/m²) interface are tested for the shear properties of the interface. The cores are taken from the M69 in the UK and delivered at the central laboratory of Ooms Nederland Holding in the Netherlands in May 2008. They were labelled respectively SBCH600L3, SBCH650L1 and SBCH650L3. The results are presented in this report.

Test program

Leutner shear tests are carried out on all three cores. The test temperature was 20 ± 2 °C and the rate of displacement 0.85 mm/s. The tests are continued till a total (shear) displacement of 9 mm, being the maximum allowable displacement of the test set-up. From the test data the shear strength, slip at maximum shear stress and shear energy till 8 mm slip are calculated.

Results

The test results are summarised in table 1. Figure 1 shows for each core the shear stress against shear slip. Photo's of the cores before and after testing are shown in appendix A. The CompoGrid showed a very good bond with both the base course (underneath the interface) and the EME 2 binder course (on top of the interface). Both "halves" of each specimen are still tied to each other after testing (see appendix A). The fabric was fully impregnated with bitumen.

	Shear strength [MPa]	Slip at maximum shear stress [mm]	Shear energy till 8 mm slip [Nmm/mm ²]
Core SBCH600L3	0.98	6.2	5.2
Core SCBH650L1	0.59	8.2	2.9
Core SCBH650L3	0.71	4.5	4.3
Average	0.76	6.3	4.2
COV [%]	26.6	29.3	26.7

Table 1: Summary of results of Leutner Interface Shear Tests

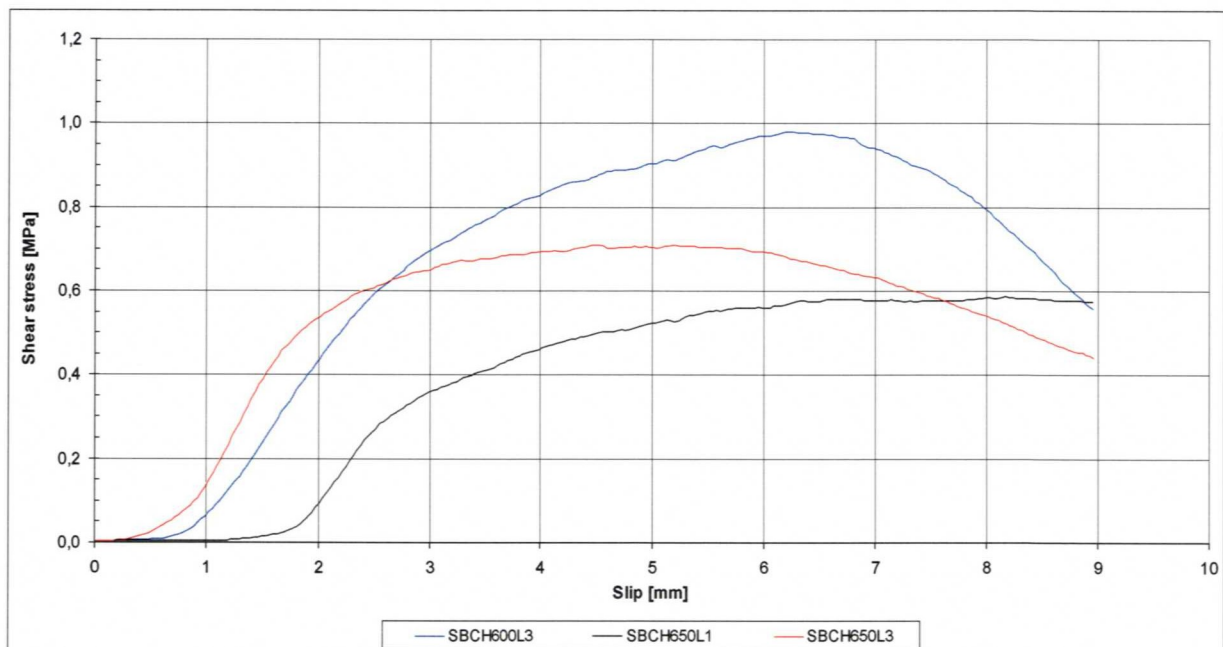


Figure 1: Measured shear stress against slip

Appendix A

Photo's

Before testing



After testing

