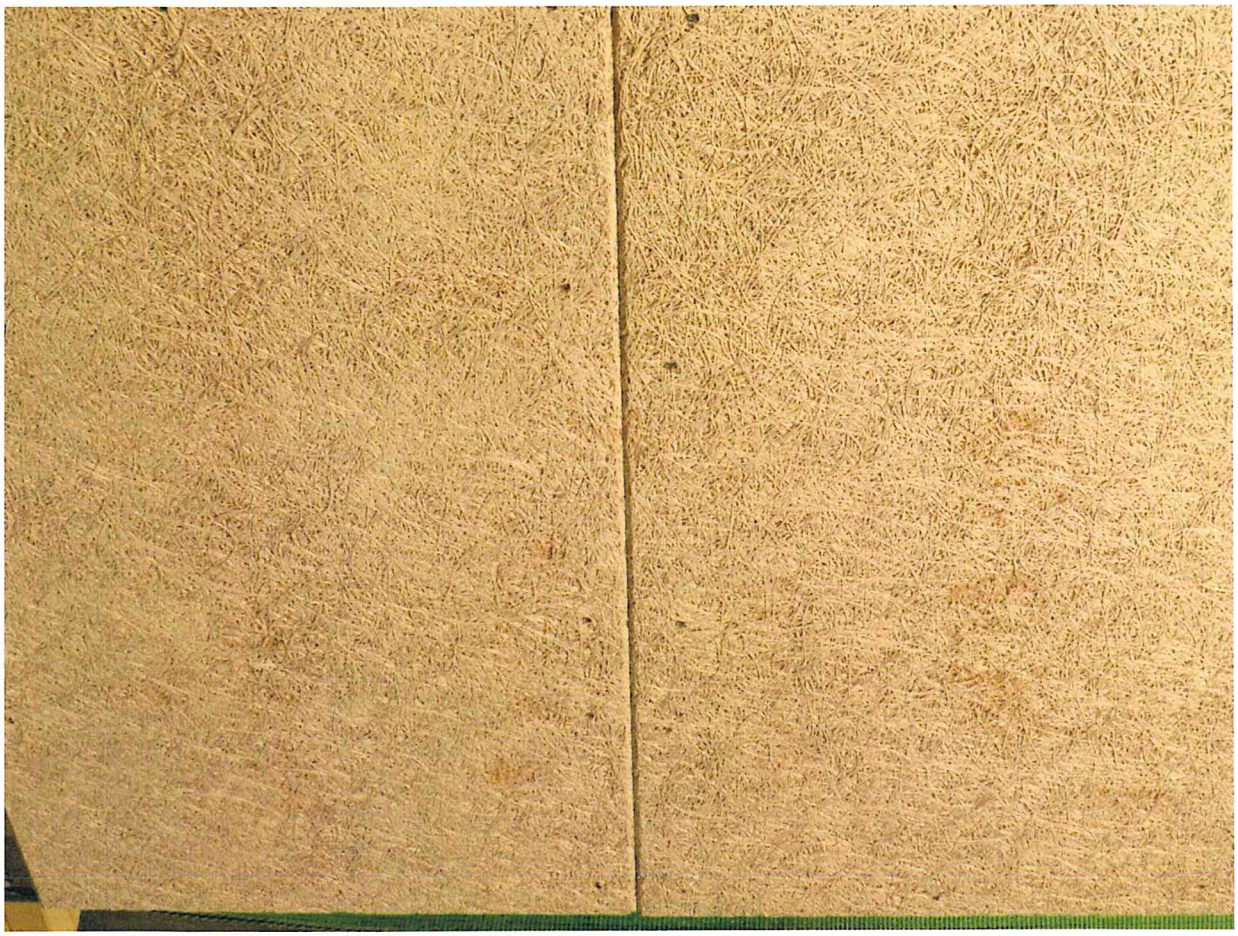
28.3.2017

Customer:	CEWOOD LTD
Tested Product:	CEWOOD CW-W25S (Later: The product)
Date of Test:	24.2.2017
Test standard:	EN 13964, Addendum D: Impact Test, Class 1A
Test Setup:	The tested specimen consists of two sheets of the product, measuring 1200 x 600 x 25 mm each. The sheets were screwed to 100 x 20 mm boards, which were installed to a frame so that the centres of the boards were 150 mm apart. The wooden frame was made out of two 120 x 45 mm planks attached to each other with screws. The distance between the centres of these pairs was 850 mm. The customer informed us that this represents a typical way of assembling the product in normal use. The product was attached horizontally above the ball canon so that the distance between the canon and the product did not exceed two meters. Before the test, the muzzle velocity of the ball was measured with five test shots. The average of the measured velocities was 16,4 m/s and the tolerance range was ± 0,4 m/s. Therefore the requirements of the test standard (16,5 m/s ± 0,8 m/s) were fulfilled.
Testing:	The testing was made according to the standard EN 13964, addendum D, class 1A. The ball specified by the standard was shot to random positions in the specimen from three different directions, totalling 36 shots.
Test Results:	There were no deformations in the specimen. The only visible changes in the surface of the specimen were some spots where some paint was removed by the impact of the ball. Therefore the product fulfills the requirements of the standard EN 13964 addendum D class 1A (Impact speed 16,5 ± 0,8 m/s). The specimen can be seen before and after the test from attached photos 1 and 2

Joensuu, Finland 28.3.2017

Jukka Tulonen

Picture 1: The test specimen before the shots (Picture: Jukka Tulonen).



Picture 2: The test specimen after 36 shots. (Picture: Jukka Tulonen)