



Test report



BTI number: 26692-B3A/2020

Processor: Kla

Date: 02.09.2020

Order

The testing of the **resistance to rock impacts of Whisper® NBO-40-A3 noise barrier elements** was commissioned by SEALED AIR Verpackungen GmbH in accordance with AUSTRIAN STANDARD EN 1794-1:2011-03-01 Annex C.

Client

Sealed Air Verpackungen GmbH

Hr. Ingo Lublow
Ernst-Diegel-Straße 2
D 36304 Alsfeld, Germany

Delivery/setup

The test material was set up on August 11, 2020 at BTI by Delta Bloc.
It consists of a Whisper® NBO-40-A3 noise barrier plate.

Test:

The test was performed on August 14, 2020 at BTI.

The test report contains 3 pages of text.

Test material

The test material consists of Whisper® NBO-40-A3 noise barrier plates, which, for the test, were glued to a 15-mm-thick waterproof plywood panel (AW100) with Meisl Profe AKV 5055 and were additionally screwed onto this. The whisper plate is a foamed PE plastic plate, ~4.5 cm thick, on which the surface was partially opened with milled trajectories (see Fig. 1). The whisper plate is screwed down with 5 chipboard screws (4.0 x 50 mm; countersunk head TG stainless steel A2) and one washer each (M 5; DIN 9021 A2). The element has the dimensions 1 x 1 m.



Fig. 1: Image of the set-up test body, consisting of a plywood panel (AW100) and the glued-on Whisper® NBO-40-A3 noise barrier plates, additionally screwed on.

Preparations

For the test, the set-up element was frosted at -20 °C for 2 hours.

Test

The frosted element was hit at three points (see Fig. 2) with a heavy test hammer weighing 3.00 kg from a height of 1 m (30 ± 1 Nm impact energy).

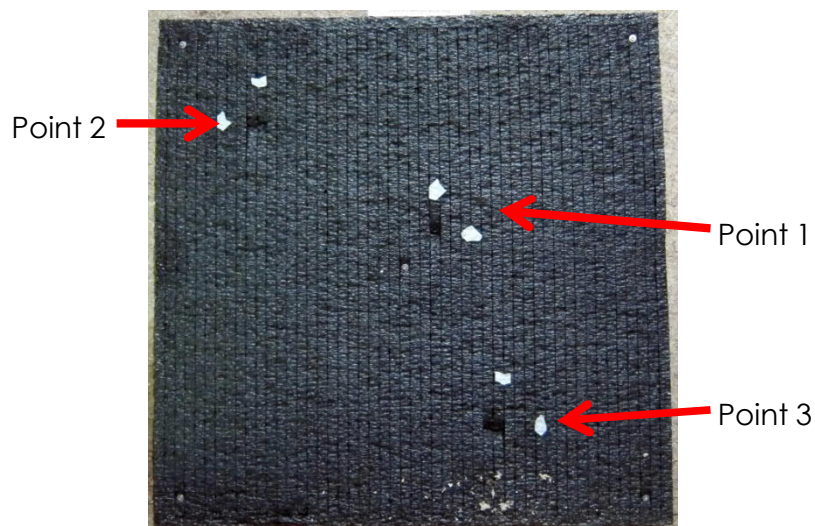


Fig. 2: Position of the test points on the test material (the white adhesive tape outlines served as position markings).

Result

During the test of the element, there were indentations of up to 25 mm, but they were only visible in the Whisper® NBO-40-A3 plate and not in the plywood panel behind it. These were only indentations and not cracks. After a few hours, these indented points nearly disappeared in the material which returned to its original position (residual depth ~5 mm).

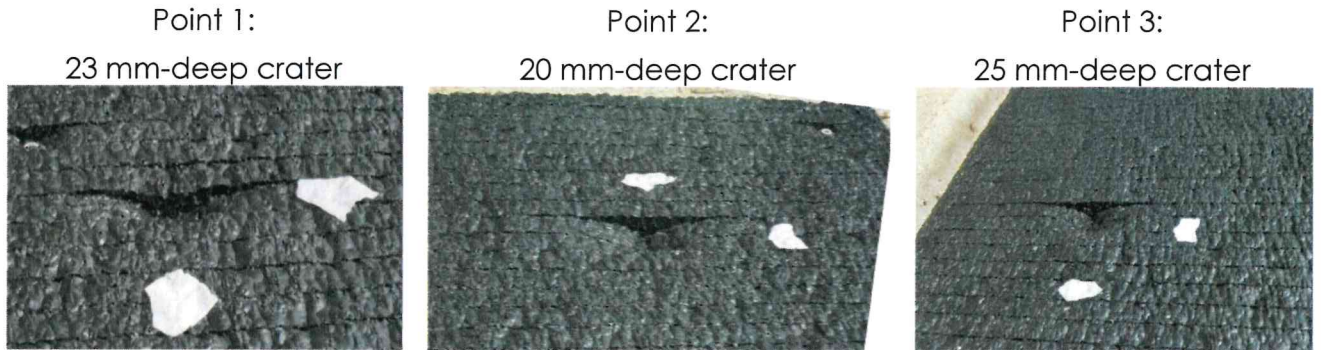


Fig. 3: Result of the test with the test hammer (the white adhesive tape outlines served as position markings).

Resume

The result of the test according to AUSTRIAN STANDARD EN 1794-1:2011 Annex C was that Whisper® NBO-40-A3 noise barrier plates glued to a plywood panel (AW100) is to be rated as **resistant to the impact of rocks**.

BTI Bautechnisches Institut GmbH

Director:



DI(FH) Dr. René Eckmann

Tester:

DI Edgar Klammer