



# Test report



BTI number: 26692-B2A/2020

Processor: Kla

Date: 02.09.2020

## Order

The testing of the

**fire resistance against brushwood fires of Whisper® NBO-40-A3 noise barrier elements**

was commissioned by SEALED AIR Verpackungen GmbH in accordance with AUSTRIAN STANDARD EN 1794-2:2011-03-01 Annex A.

## 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 4 pages of text and 2 pages of image attachments.

### 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® NBO-40-A3 plate is screwed down with 13 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 2 x 1.5 m.



The setup:



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 and testing

For the test, two wire baskets were each filled with 600 g spruce wood chips.

These baskets are made of 3 mm wires, have a mesh width of 50 mm, and have the dimensions 30 x 20 x 30 cm (L x W x H).

The spruce wood chips have the dimensions 50 x 2 x 0.2 mm and were dried before testing up to constant mass.

The base plate of the noise barrier wall was set up by means of a 50 cm-high wall made of concrete blocks.

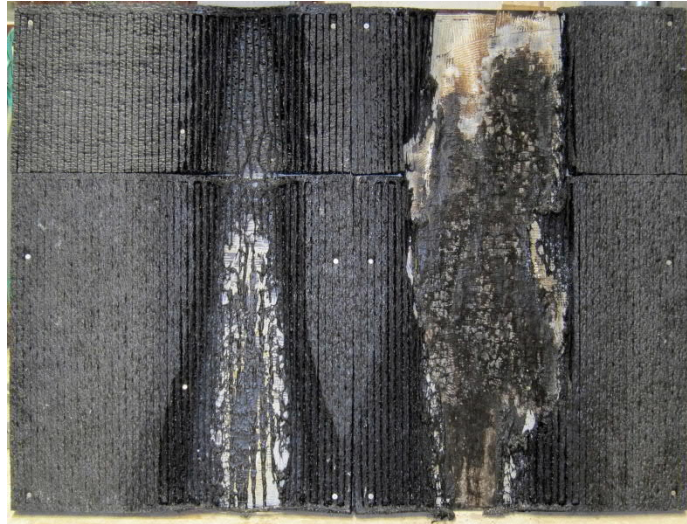
For the test, both baskets were set on fire simultaneously. This constitutes the beginning of the test.

### Result

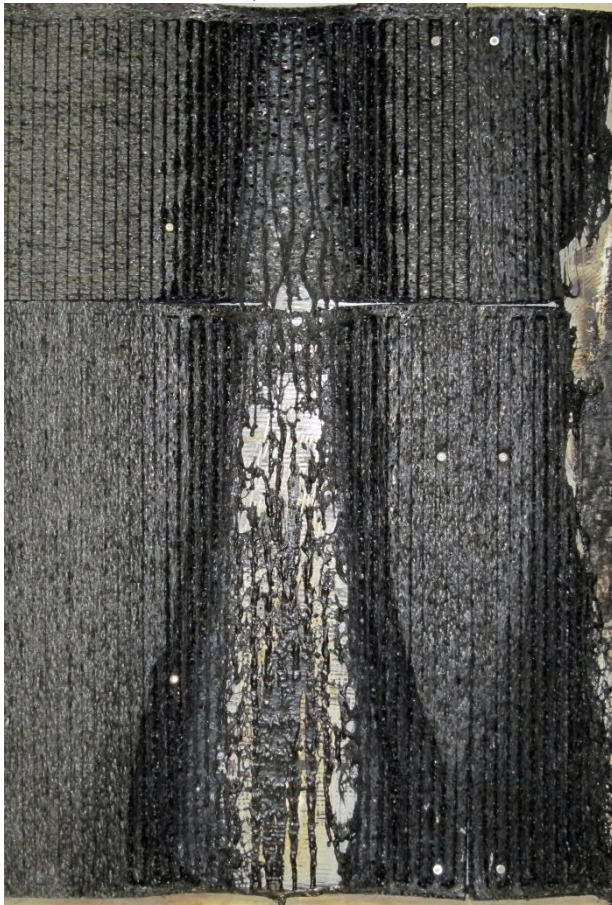
During the test, two different states set in. On the left side, the Whisper® NBO-40-A3 plate melted above the flame, but did not start to burn. On the right side, on the other hand, the whisper plate started to burn, but it was not extinguished and dripped burning from the wall; it was extinguished on the floor, however. The flame front continued to spread at the

sides. After consulting with the client, the test was aborted after 46 minutes. On the rear side, at the point of the fire, a temperature up to 103 °C set in (right side). The result of the test is shown in Fig. 2, or in the image attachments.

Overall view



Details, left side of fire



Details, right side of fire



Fig. 2: Result of brushwood fire test

The test of the rear side was performed during a previous test (BTI number: 26557/2018) and resulted in a class 3 classification.

Resume

The test according to AUSTRIAN STANDARD EN 1794-2:2011 Annex A had the result that the Whisper® NBO-40-A3 noise barrier plates are to be rated as **class 1**.

BTI Bautechnisches Institut GmbH

Director:



DI(FH) Dr. René Eckmann

Tester:

A blue ink handwritten signature, appearing to be 'EK', written over a horizontal line.

DI Edgar Klammer

Shortly before start



After 1 minute



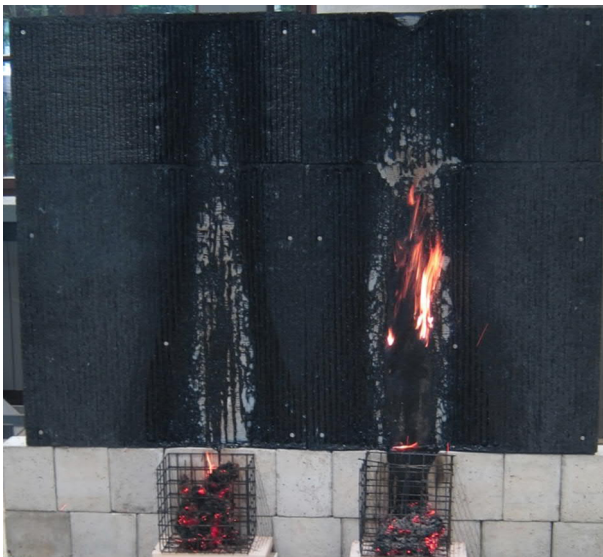
After 2 minutes



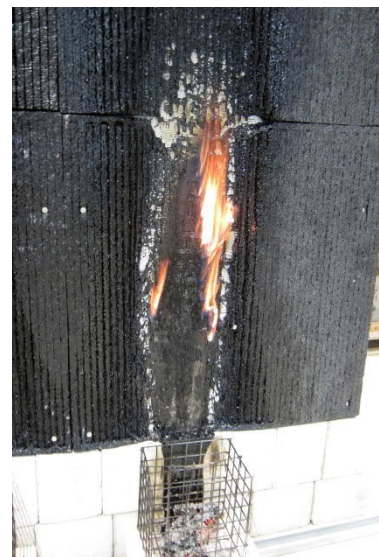
After 4 minutes



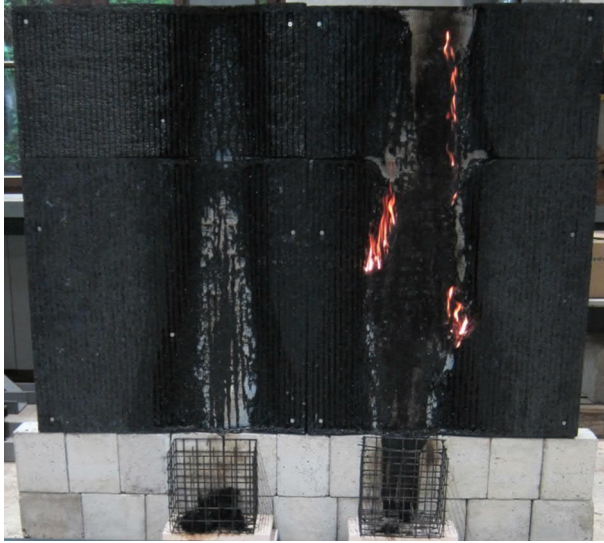
After 6 minutes 30 seconds



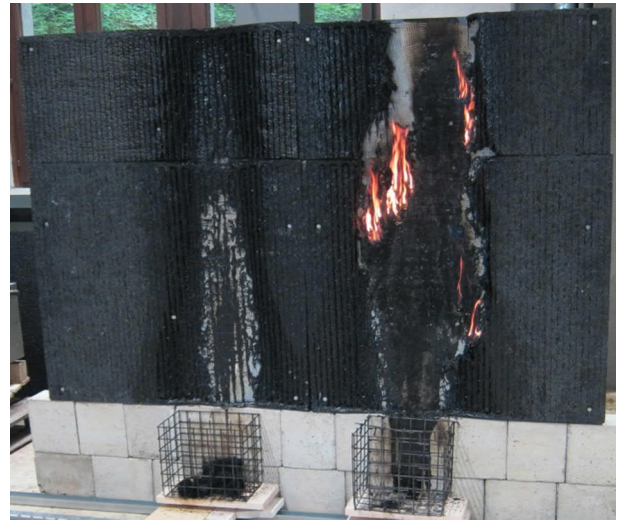
After 11 minutes



After 21 minutes 30 seconds



After 37 minutes



After the abort (46 minutes)

