PARAGLAS SOUNDSTOP®
NOISE BARRIER SHEET

CYRO TECH BRIEF

Flammability

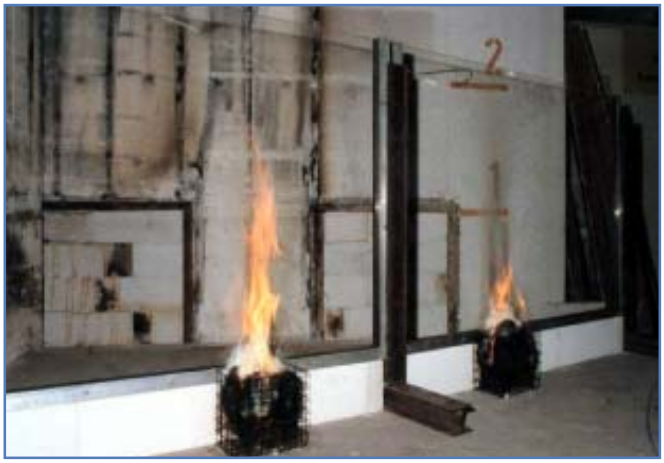
This Technical Bulletin contains a description and results of a test method used for evaluating the resistance of PARAGLAS SOUNDSTOP® Noise Barrier Sheet to a fire arising from dry vegetation or other material in close proximity to a sound wall. This test was designed to simulate small brush fire exposure[1]. It is equivalent to the fire test used in the European Standard EN 1794-2, Resistance Against Fire in the Case of Low Fire Load which has been in use for many years to evaluate the suitability of materials as road side noise barriers.

Fire Test

Two PARAGLAS SOUNDSTOP sheet panels 1.5 meters by 2 meters by 15 mm thick were exposed to a localized fire at their base, both at the front and back of the sheet. The fire sources consisted of wire baskets that each contained 600 grams of spruce shavings, 0.2 mm thick by 2 mm wide and approximately 50 mm long. The test was conducted with the panels in the vertical position.

1. Test Setup

Both of the fire sources were lit simultaneously and allowed to burn to completion.



2. Burning of Spruce Shavings

After the fires burned to completion, brown discoloration and minor blistering can be seen on the PARAGLAS SOUNDSTOP sheet panels. However, the static and acoustic functionality of the test barrier was not affected by the exposure to fire. No holes or cracks developed during the test.

One hour after the burning down of the first two baskets, two more baskets of wood shavings were placed on the opposite side of the panels and ignited. Again, only minor discoloration of the panels was noted at the completion of the test.

3. PARAGLAS SOUNDSTOP Sheet after Completion of Fire Test

Based on the results of this test, PARAGLAS SOUNDSTOP sheet is not expected to assist the spread of fire from modest amounts of dry vegetation or other brush material in close proximity to the sound wall.

1. This test is a simulated fire exposure intended to demonstrate the behavior of PARAGLAS SOUNDSTOP sheet in a specific situation. Actual results may vary due to circumstances outside the conditions of this test.

Fire Precautions

PARAGLAS SOUNDSTOP sheet is a combustible thermoplastic. Precautions should be taken to protect this material from flames and high heat sources. PARAGLAS SOUNDSTOP sheet usually burns rapidly to completion if not extinguished. The products of combustion, if sufficient air is present are carbon dioxide and water. However, in many fires sufficient air will not be available and toxic carbon monoxide will be formed, as it will when other common combustible materials are burned. We urge good judgement in the use of this versatile material and recommend that building codes be followed carefully to assure it is used properly.

Compatibility

Like other plastic materials, PARAGLAS SOUNDSTOP sheet is subject to crazing, cracking or discoloration if brought into contact with incompatible materials. These materials may include cleaners, polishes, adhesives, sealants, gasketing or packaging materials, cutting emulsions, etc.

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For Sales and Technical Information contact:

CYRO Industries
379 Interpace Parkway
PO Box 677
Parsippany, NJ 07054

800-631-5384

email: paraglas@degussa.com

web site: www.cyro.com

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