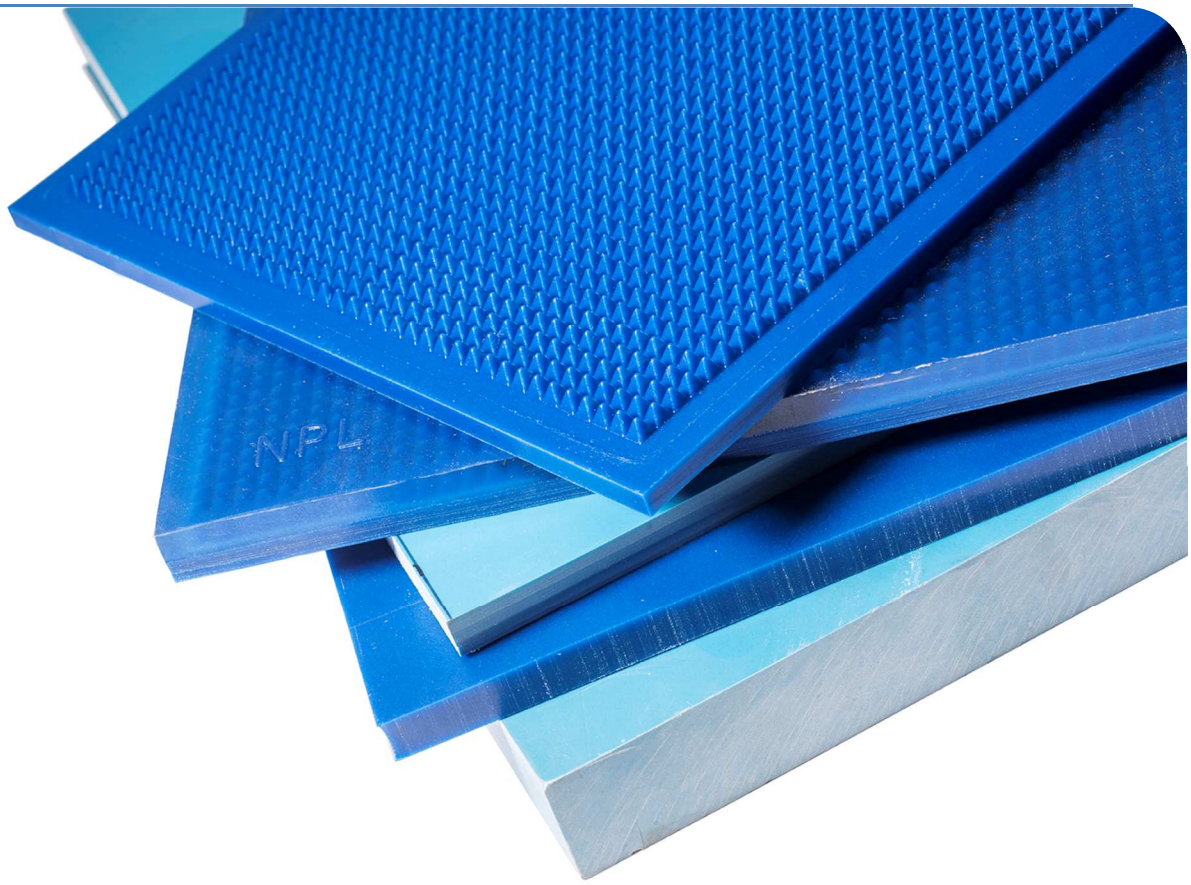
PRECISION ACOUSTICS

Acoustic materials product selector



Precision Acoustics Ltd are pleased to offer a wide range of passive acoustic materials from Acoustic Polymers Ltd, designed to operate over a wide range of frequencies and operating conditions.

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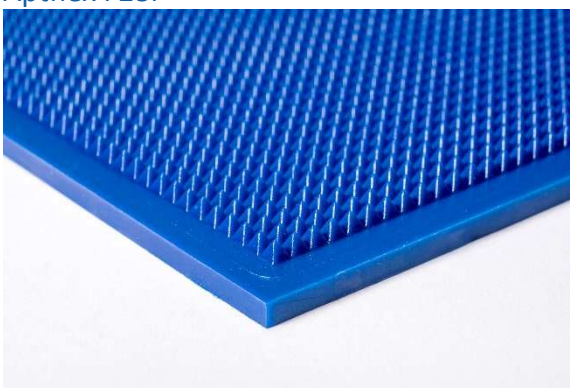
HIGH FREQUENCY ABSORBERS

HAM A

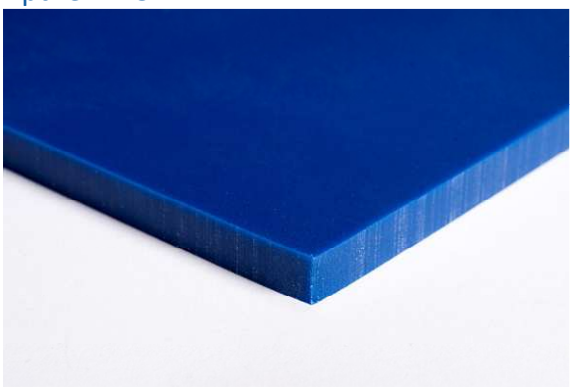
- Dual-layer pre-cast tile with internal structure and smooth external surface
- Frequency range: 1 MHz – 15 MHz
- Echo reduction:
  - >35 dB (1 MHz – 10 MHz)
- Insertion loss:
  - 30 dB @ 1 MHz,
  - >60 dB @ 2 MHz and higher

Aptflex F28P



- Single-layer pre-cast tile with structured front surface
- Frequency range: 1 MHz – 20 MHz
- Echo reduction:
  - >40 dB (1 MHz – 20 MHz)
- Insertion loss:
  - 20 dB @ 1 MHz, 38 dB @ 2 MHz
  - >60 dB @ 3 MHz and higher

Aptflex F28



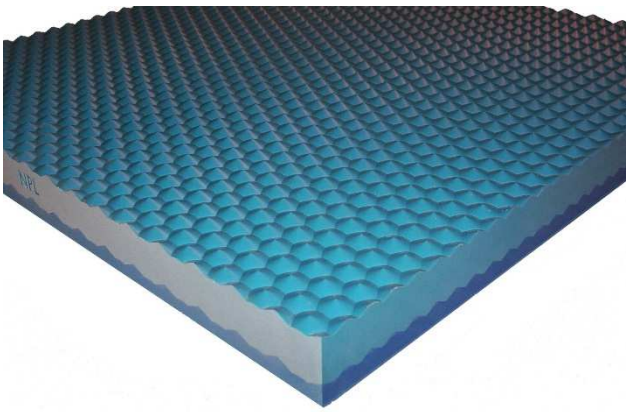
- Single-layer pre-cast tile with smooth external surface
- Frequency range: 1 MHz – 15 MHz
- Echo reduction:
  - 20 dB @ 2 MHz
  - 10 dB @ 15 MHz
- Insertion loss:
  - 30 dB @ 1 MHz, 38 dB @ 2 MHz
  - >60 dB @ 2 MHz and higher

Aptflex F36

- User-castable form of Aptflex F28
- Frequency range: 1 MHz – 15 MHz
- Echo reduction:
  - 20 @ 2 MHz
  - 10 dB @ 15 MHz
- Insertion loss:
  - 30 dB @ 1 MHz, 38 dB @ 2 MHz
  - >60 dB @ 2 MHz and higher

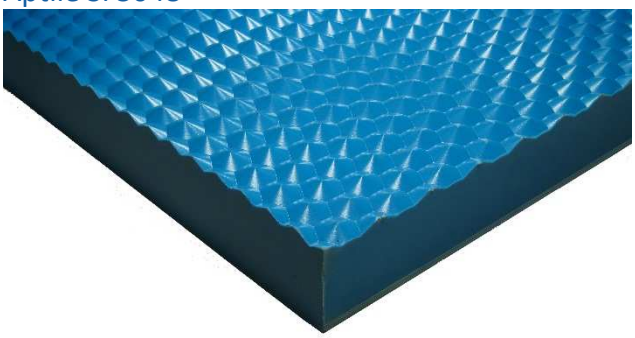
LOW FREQUENCY ABSORBERS

The Alberich Tile



- Dual-layer pre-cast tile with macro-voids between layers and structured front surface
- Frequency range: 2 kHz – 25 kHz
- Echo reduction:
  - 5 dB @ 2 kHz
  - 30 dB @ 20 kHz
- Insertion loss:
  - 5 dB @ 2 kHz
  - >40 dB @ 20 kHz and higher

Aptile SF5048



- Single-layer pre-cast sheet with structured front surface
- Frequency range:2 kHz – 200 kHz
- Echo reduction:
  - >15 dB (2 kHz – 20 kHz)
  - >25 dB (20 kHz – 200 kHz)
- Insertion loss:
  - 5 dB @ 5 kHz, 12 dB @ 20 kHz
  - >60 dB @ 150 kHz and higher

Aptflex F48

- Single-layer pre-cast tile with smooth surface
- Frequency range: 50 kHz – 1.5 MHz
- Echo reduction:
  - >20 dB (50 kHz – 450 kHz)
  - 13 dB @ 1.5 MHz
- Insertion loss:
  - 15 dB @ 50 kHz
  - >60 dB @ 300 kHz and higher

ENCAPSULANTS

Aptflex F3S

- Tough and durable user-castable encapsulation material
- Excellent hydrolytic stability & electrical insulation
- Hardness: 75-80 (Shore A)
- Density: 1040 kg/m^3
- Wavespeed: 1625 m/s (1 MHz – 10 MHz)
- Low moisture sensitivity during cure

Aptflex F7

- Flexible user-castable encapsulation material
- Excellent hydrolytic stability & electrical insulation
- Hardness: 55 (Shore A)
- Density: 965 kg/m^3
- Wavespeed: 1555 m/s (1 MHz – 10 MHz)
- Rho-C matched to freshwater

Aptflex F13

- Encapsulation material with balance between toughness and flexibility
- Excellent hydrolytic stability
- Rho-C matched to freshwater
- Hardness: 65-70 (Shore A)
- Density: 960 kg/m^3
- Wavespeed: 1560 m/s (1 MHz – 10 MHz)
- Visually transparent to allow post-cure inspection of potted components

Aptflex F21

- Encapsulation material with balance between toughness and flexibility
- Excellent hydrolytic stability
- Rho-C matched to seawater
- Hardness: 80-85 (Shore A)
- Density: 980 kg/m^3
- Wavespeed: 1600 m/s (1 MHz – 10 MHz)

SYNTACTIC FOAMS

Aptflex F30

- Two-part, user-castable micro-sphere filled syntactic foam
- Colour: Green
- Density: 650 kg/m^3
- Hydrostatic crush depth: 4,500 msw

Aptflex F40

- Two-part, user-castable micro-sphere filled syntactic foam
- Colour: Yellow
- Density: 670 kg/m^3
- Hydrostatic crush depth: 600 msw

Aptflex F50

- Two-part, user-castable micro-sphere filled syntactic foam
- Colour: Light Blue
- Density: 720 kg/m^3
- Hydrostatic crush depth: 10,000 msw

Aplex R3

- Three-part, user-castable micro-sphere filled syntactic foam
- Colour: Orange
- Density: 570 kg/m^3
- Hydrostatic crush depth: 600 msw