

Noise Mitigation Grant Scheme – Application Guidelines

Introduction

The Noise Mitigation Scheme is run as part of Bristol Airport 12 million passenger planning permission. The main purpose of the fund is to mitigate the impacts of the Airport's operations and give something back to the surrounding communities who are affected by being situated in close proximity to Bristol Airport. It reflects our aim for responsible growth by being respectful of the local community and the environment.

These guidelines detail how the Noise Mitigation Scheme is administered and how the noise grants are provided. The fund is administered by Bristol Airport and overseen by a Management Committee consisting of local parish councillors, North Somerset Council representatives and airport managers.

What can the noise mitigation grant cover?

The fund can cover some, or all, of the costs of noise insulating works and is available to properties most impacted by noise from Bristol Airport flights. Depending on where you live you could be eligible for a grant between £5000 and £8000. Unlike the previous Noise Insulation Scheme, the Airport does not require any contributions from residents in the lower noise contour areas. Previous schemes required a 50% contribution for some noise bands. This is no longer the case.

Does the recent planning application appeal affect this scheme?

In February 2022 the Government's Planning Inspectorate granted planning permission for the airport to grow. As part of a series of measures included in this planning decision was an enhanced Noise Mitigation Scheme. 2024 is the first year of the new scheme, set out within these guidelines.

How do I know if I am eligible for funding?

A resident's ability to apply for noise mitigation funding is based on the property's location. This doesn't mean the direct proximity to the Airport, but where the property lies within the noise contours which are produced annually.

Noise contours are shown like topographical maps. Noise contour lines draw together points of the same sound level representing different areas of noise exposure. A number of factors affect the shape of the noise contours including terrain, aircraft fleet in operation and runway direction. Contours are produced for daytime and night time periods. These are based on the daily average movements that

take place between 0700-2300 local time (day) and 2300-0700 (night) during the 92-day period 16 June to 15 September inclusive.

Noise contours are compiled every January by external acoustic consultants who use the flight schedule for the summer period to predict noise levels in decibels.

If you live within the daytime LAeq, 16h (07:00 – 23:00) 63 dB, 60 dB or 57 dB noise contours or the nighttime LAeq, 8h (23:00 – 07:00) 55 dB contour you can apply for a grant.

Contour	Sum
60 dB LAeq, 16hr (0700h – 2300h) or above	£8,000
55 dB LAeq, 8hr (23:00 to 07:00)	£5,550
57 dB LAeq, 16hr (0700h – 2300h)	£5,000

A summary view of the noise contours can be found on our website at:

<http://www.bristolairport.co.uk/about-us/community/local-community/noise-insulation-grants>

How will my application be assessed?

Being within the noise contour does not mean you will automatically get a grant as there is only a finite amount of funding available each year. If the number of applications in any year exceeds the total value of funding which has been allocated to the scheme, then two factors will be considered when prioritising applications:

1. Providing noise insulation to those located in a higher contour
2. Providing noise insulation to those who have not previously received a grant

Applications are considered by the Management Committee, consisting of representatives from Bristol Airport and North Somerset Councillors, based on the following priority list:

Priority	Requirements
1	Within the 63dB day noise contour area – never had a grant before
2	Within the 63dB day noise contour area – had a grant before
3	Within the 55dB night noise contour area – never had a grant before
4	Within the 55dB night noise contour area – had a grant before
5	Within the 60dB day noise contour area – never had a grant before
6	Within the 60dB day noise contour area – had a grant before
7	Within the 57dB night noise contour area – never had a grant before
8	Within the 57db night noise contour area – had a grant before

Should the fund be oversubscribed in any one category then priority will be given to those living closest to the extended centreline of our runway. It needs to be noted that the decision of the Committee is final, and the process is established on a case-by-case basis.

How do I apply?

Please complete the noise grant application form and include a quote from a local company that you wish to use to carry out the noise mitigation works.

In obtaining your quote you will need to ensure it is for:

- High specification acoustic double/triple glazing or Secondary glazing.
- Inclusion of measures to provide suitable alternative means of acoustic ventilation where appropriate and necessary
- Fits the budget of allocated grant (and you have budgeted to account for any remaining costs)
- Is for habitable rooms (this includes bedrooms, living rooms, dining rooms and kitchens but NOT bathrooms, hallways and landings).
- Acoustic grade doors affixed to masonry walls (excludes conservatories and internal doors)

The scheme also offers funding towards loft insulation. Monies towards loft insulation will only be approved if the material chosen is effective at reducing sound transmission. The loft in the property must have adequate ventilation to avoid damp. Loft insulation must meet the following specification:

- The type of insulant should be chosen based on the material properties to reduce sound transmission, your insulators should be able to assist with this. We strongly advise using glass or rock mineral wool where possible. Expanded/extruded polystyrene (EPS/EXPS) and foam products (PUR/PIR) do not provide adequate sound absorption.

A full specification is provided in Appendix A. This should be provided to the contractor to ensure the works are carried out to meet these specifications.

When can I apply?

The scheme will be open across two periods each year to provide two opportunities within the year for residents to apply for funds. The first set of applications will be open from the beginning of April to the 1st of June and the beginning of July to the 1st September for consideration by the Management Committee. We do not accept applications outside of this period. Sound Insulation work will need to be complete by the end of the year to be covered by the scheme.

What happens once I have applied?

All applications are considered at the Committee Meeting, after which you will be contacted to let you know if you have been successful. You will hear about the outcome of your application the week following the Management Committee meeting held in either June or September, depending on when the application is submitted.

If you are unsuccessful, you are welcome to reapply in future years (assuming continued eligibility). As the higher priority properties are provided with grants, it is more likely that those further down the priority list can be funded in future years.

If you are successful, we will contact you confirming the grant amount that will be provided. You will then be able to instruct your contractor to undertake the work. Unless otherwise requested, this decision will be communicated by email.

After the works are finished, we will require a copy of the final invoice and some photographs of the completed works. These can be sent via email to the email addresses included in this document. If you are unable to share these details electronically, we can arrange a site visit, or these can be posted to us.

It is important to note that the Airport will then bank transfer funds to your contractor directly after works have been completed and proof has been received.

Environmental Noise Descriptors

Where noise levels vary with time, it is necessary to express the results of a measurement over a period of time in statistical terms. Some commonly used descriptors follow.

Statistical Term	Description
$L_{Aeq, T}$	The most widely applicable unit is the equivalent continuous A-weighted sound pressure level ($L_{Aeq, T}$). It is an energy average and is defined as the level of a notional sound which (over a defined period of time, T) would deliver the same A-weighted sound energy as the actual fluctuating sound.
L_{A90}	The level exceeded for 90% of the time is normally used to describe background noise.
$L_{Amax, T}$	The maximum A-weighted sound pressure level, normally associated with a time weighting, F (fast), or S (slow)

Sound Transmission in Rooms

Sound energy is reflected from the room surfaces and this gives rise to reverberation. At short distances from a sound source, the sound level will fall off at a rate of 6 dB per

doubling of distance, as it would in the open air – this is known as the direct field. Beyond a certain distance, the effect of reverberation takes over and the level ceases to fall off significantly with distance from the source. This is known as the reverberant field. For receiver positions in this part of the room, sound levels can be reduced by applying sound absorbing finishes to the surfaces of the room. A 3 dB reduction can normally be obtained by doubling the absorption present, which corresponds to halving the reverberation time (see below).

Sound Insulation - Airborne

Voices, hi-fi systems, television and radio sound and musical instruments are all sources of airborne sound. They excite the air around them and the vibration in the air is transmitted to surrounding surfaces, such as walls, ceilings and floors. This sets these constructions into vibration and this vibration is radiated in neighbouring rooms as sound. Energy is lost in the transmission path and this is referred to as transmission loss or, more generally, sound insulation. The most simple measure of sound insulation is the sound level difference, D , which is the arithmetic difference between the sound level, in dB, in the source room and the sound level in the receiving room.

Other measures of sound insulation include the sound reduction index, R , which is a measure of the acoustical performance of a partition, obtained in a laboratory, and the standardised level difference, D_{nT} , which is used mainly in the sound insulation of domestic separating walls and separating floors. The relevant test procedures are laid down in BS EN ISO 140. A single figure “weighted” result can be obtained from one-third octave band test results by using a curve-fitting procedure laid down in BS EN ISO 717. The subscript “w” is added to the relevant descriptor (eg $D_{nT,w}$).

The sound reduction index, R , is used in the specification of components, such as partitions, doors and windows. It is important to bear in mind that the performance of components in the field is usually lower than can be obtained in a laboratory. The transmission of sound via other components common to both rooms (“flanking transmission”) can reduce the apparent sound reduction index (R') significantly.

Sound Insulation - Impact

In the case of impact sound, the building construction is caused to vibrate as a result of a physical impact. Footsteps on floors are the most obvious example. The vibration is radiated as sound in neighbouring rooms. Impact insulation is measured using a standard tapping machine, which drops weights cyclically onto a floor. The sound pressure level is measured in the receiving room below and the result is known as the impact level, L_i for laboratory tests and L'_i for field tests.