

# **LAND COMPENSATION - YOUR RIGHTS EXPLAINED**

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## **INSULATION AGAINST TRAFFIC NOISE**

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## **GENERAL**

### **INTRODUCTION**

1. The Noise Insulation Regulations (Northern Ireland) 1995 came into effect on 7 December 1995. This booklet seeks to offer guidance on the regulations but does not purport to constitute an authoritative statement of the law.

#### **Object of the regulations**

2. The object of the regulations is to enable residents subjected to increased traffic noise at or above a specified level arising directly through the use of new roads, to benefit from a reduction in the noise level inside their home by means of double windows, supplementary ventilation and, where appropriate, venetian blinds and double doors. Insulation may also be installed against increased traffic noise arising directly from altered roads and against construction noise.

#### **Types of road to which the regulations apply and qualifying noise levels.**

3. Details of the types of road to which the regulations apply and the noise levels which qualify buildings for insulation are as follows:-
  - i. Where a new road is first open to public traffic on or after 7 December 1995 or where a new carriageway added to an existing road has been opened on or after that date the Department is required to offer insulation to occupiers of eligible buildings if the noise level on a facade of the building rises up to or above the specified level.
  - ii. In addition, the Department has a discretionary power to provide insulation in specified circumstances against noise (at or above the specified level) caused:-
    - (a) by the use of new roads or additional carriageways first open to public traffic after 6 December 1992 and before 7 December 1995;
    - (b) by the use of roads whose carriageways are altered in location, width or level,

otherwise than by resurfacing where the road as so altered was first open to public traffic after 6 December 1992; and

(c) by works for the construction of new roads, additional carriageways and altered roads.

iii. The specified noise level at which insulation is required is 68 dB(A). In addition the new noise level must be greater by a least 1 dB(A) than the old noise level and road traffic must make an effective contribution of at least 1 dB(A) to the new noise level. (dB(A) is a measure of sound pressure level ("A" weighting) in decibels.)

### **Eligible buildings**

4. Eligible buildings are (with certain exceptions) dwellings and other residential properties and parts of properties such as houses, flats, old people's homes, nurses' homes and residential accommodation in educational establishments. (In the remainder of this booklet they are all intended to be covered by the word "dwellings"). The dwellings must be within 300 metres of the new or altered road and must have been occupied before it was first open to public traffic. Alterations and additions to dwellings which were first occupied after that time will be ineligible.

### **Eligible rooms**

5. Living rooms and bedrooms which have one or more facades with windows or doors exposed to noise meeting the required criteria are eligible for treatment. "Living room" includes, for example, a dining or breakfast room, a study or bedsitter but not a kitchen.
6. Secondary glazing restricts the passage of air, and so special precautions over the supply of fresh air are necessary. For reasons of safety, therefore, a room in which a flueless combustion appliance is installed will not be eligible for insulation, unless after completion of the work it will have an uninsulated window which can be opened.

7. The Department has discretion to insulate adjoining dwellings which do not qualify so that, if appropriate, the whole of a logical unit such as a terrace of houses or a block of flats may be insulated.

### **The offer of insulation**

8. Following an assessment of the relevant noise levels, a map or list or both identifying eligible dwellings (or parts of dwellings) which qualify for insulation is required to be produced and published not later than 12 months after the opening of the new road. The map or list will be on public display at the office of the Department nearest to the dwellings identified and open to inspection once it has been deposited. (Reassessments are required to be made in the fifth, tenth and fifteenth years following the date of the first assessment and not later than 12 months after the date of reassessment a map or list or both must be prepared and published identifying every additional qualifying dwelling not included on any previous map or list.)
9. Within 3 months of the publication of any such map or list a formal offer has to be made to occupiers of the dwellings identified as qualifying for insulation.
10. The formal offer will normally be addressed to the occupier of the dwelling (but in certain circumstances it may be addressed to the landlord). The recipient of the offer (referred to here as "the first party") has 6 months in which to accept. However, if the dwelling is subject to a tenancy, then after the first 3 months the other party to the tenancy (eg, the landlord in a case where the first party is the tenant) shares the right of acceptance with the first party. If the offer has not been accepted within 6 months of being made, it may be accepted during the first 12 months after the road has been opened to public traffic (if that period is later). If the offer is not accepted by the first party within the initial 3 month period (during which he has the exclusive right of acceptance) and is subsequently accepted by, say, the landlord (the other party to a tenancy), then the first party will no longer be able to accept. Acceptance of the offer, which should be on the form provided, may be of:-
  - i. the offer to carry out insulation in any one, some or all of the rooms listed, or
  - ii. the payment of a grant for one, some or all of the rooms listed, or

iii. the offer to carry out work in some rooms and the offer of a grant in respect of others.

11. A tenant or licensee who alters a dwelling without the consent of his landlord or licensor may be in breach of his tenancy agreement or licence. If either a landlord or a tenant withholds his consent the offer may still be accepted by the other party to the tenancy and the Department or its agent has powers to carry out the work notwithstanding that the consent of one party to the tenancy is required and has been withheld. This power, however, does not in itself give the Department or its agent the right of entry into dwellings to carry out insulation work; it merely means that the work can lawfully be carried out notwithstanding anything to the contrary in the terms of the tenancy.

12. Where the Department has discretionary power to insulate against traffic noise (paragraph 3(ii)(a) and (b) refers) no map or list has to be prepared and published and the timescale for making formal offers in these cases is within 15 months of the road being first open to public traffic or if that date was before 7 December 1995 within 15 months from then. All other procedures are the same.

13. Where the Department has discretionary power to insulate against construction noise (paragraph 3(ii)(c) refers) the procedures for the offer and acceptance of insulation are different in that:-

- i. no map or list has to be prepared and published. Offers of insulation are merely made to the occupier (or the landlord); and
- ii. the offer must normally be accepted by the occupier or landlord within 2 months of it being made.

All other procedures are the same.

Even if the dwelling is not expected to qualify once the road comes into use it may nevertheless be insulated on the grounds that the Department considers the enjoyment of it will be seriously affected for a substantial period of time by noise from the construction work.

## **Appeals procedure**

14. As soon as offers of insulation have been made a notice will be published in the local newspaper circulating in the area of the new road. (Such notices are not required to be published when the Department has exercised its discretionary power to make offers of insulation.) If you do not receive an offer of insulation, but consider that you are entitled to one, you should write to the address stated in the notice setting out the facts and requesting an offer of insulation work or grant. Such application must be made within 6 months from the date of publication of the notice.
  
15. Upon receipt of your application the Department is obliged to review the noise calculation which has been made and if it is found that you are in fact entitled, an offer will be made. Otherwise the application will be refused and you will receive a written statement of the reasons for the refusal.

## **Arrangements for carrying out and inspecting the work**

16. If the Department or its agent is carrying out the work, whoever accepted the offer will be contacted to arrange a time when work can start.
  
17. The Department will wish to satisfy itself that the insulation works conform to the relevant specifications and will request whoever accepted the offer to arrange such access for it or its agent as may reasonably be required for the purpose of inspecting the work. Any questions or points on the work undertaken should be raised with the office at the address shown on the formal offer.

## **Procedure for application for a grant**

18. If you wish to make private arrangements to have insulation work carried out and receive a grant on the cost there are some important points to remember:-
  - i. The allowable grant is the actual cost of the work after taking into account the full value of all incentives and discounts, etc, provided by builders, contractors or

suppliers, or the reasonable cost which would have been incurred by the Department in carrying out the work, whichever is the less. You may ask for the current figures for reasonable cost if you have not already been told. These cost limits will be related to the area of double windows and doors to be provided, including the cost of all associated works such as lining of reveals (ie, the space between inner and outer windows), and the making good of existing decorations, the number of rooms to be provided with ventilator systems and permanent vents including installation, etc, and the area of venetian blinds where appropriate. If you are in doubt as to whether the price quoted by your contractor is within the limit set out in the information supplied to you, you should check with the contractor. If you decide to accept an estimate in excess of the limit, you must realise that you may have to bear the excess yourself.

- ii. You must indicate your intention on the acceptance form and, preferably at the same time, submit estimates itemised to show separately:-
  - (a) the dimensions of each window and external door eligible for treatment in each room in metres to 2 places of decimals;
  - (b) the number of rooms to be provided with ventilator systems and permanent vents (including supply ducts and cowls or grilles). The ventilator system and permanent vents should be on the approved lists mentioned in paragraphs 22 and 23 and if flued combustion appliances are present in the room their output rating in kilowatts should be given;
  - (c) the total area of venetian blinds in square metres to 3 places of decimals (total area is taken as the total area of eligible windows for treatment in this way);
  - (d) the total estimated cost;
  - (e) the name and address of any contractor.
- iii. Your application will be acknowledged and the amount of grant payable confirmed. You will not receive grant in respect of the cost of insulating rooms having windows or

external doors not identified in the offer as qualifying for treatment.

- iv. The installation must conform to the specifications set out in the schedule to the regulations and you are advised to make this clear in the arrangements you make with any contractor.
- v. Any contractor you employ must have completed the work to the relevant specifications within 12 months from the date you accept the offer of grant.
- vi. You will be responsible for entering into any private arrangements you decide to make and for paying your contractor. You will only be reimbursed up to the allowable cost limits and only when the work has been inspected and it conforms to the relevant specifications. You must afford the Department or its agent such access as is reasonably required for inspecting the work. If you are not the occupier you must arrange for such access.
- vii. If you do the work yourself, you will not be able to claim grant towards the cost of your own labour.
- viii. On completion of work, applications for payment of grant must be accompanied by supporting details.

## **SPECIFICATIONS FOR INSULATION WORK**

### **General**

19. The specifications offer a standard package of:-

- a. double windows and double doors;
- b. supplementary ventilation;
- c. venetian blinds in windows facing certain directions.

### **Double windows**

20. Whatever the thickness of the inner glass, the wider the air gap between the panes, the greater the noise reduction. However, in some cases it may be unduly expensive to provide a wide gap because of window design. The specification is, therefore, flexible, allowing for various gaps and providing for thicker (inner) glass with narrow gaps.

### **Air gap**

200 mm (or more)	3 mm (minimum) but less than 4 mm
150 mm but less than 200 mm	4 mm but less than 6 mm
100 mm (minimum) but less than 150 mm	6 mm or more

The most suitable combination should be selected taking into account window design, noise reduction and cost.

## **Double doors**

21. The same kind of considerations apply to external double doors; the air gap should be as wide as is practicable, preferably in the form of a lobby.

## **Ventilation**

22. The regulations normally require every noise-insulated room to have a ventilator unit (intake fan) giving a certain specified performance. The unit must also incorporate a filter. The Department or its agent will have a list of the units with their associated air supply ducts and cowls or grilles which have been certified as meeting the specifications, so if you intend to make private arrangements you should obtain a copy of this list. Only insulation work using certified ventilator systems should be installed.
23. In addition to the ventilator units, each insulated room has to contain a permanent vent through which air can freely pass in or out of the room but which nevertheless restricts the passage of noise. The size and performance of the permanent vent depend on any flued combustion appliances which may be in the room; if you intend to make private arrangements you should consult the schedule to the regulations. The Department or its agent will also have a list of the permanent vents which have been certified as meeting the specifications. Only certified vents should be installed.

## **Venetian blinds**

24. Although the supplementary ventilation will be sufficient for normal living conditions, when the sun is shining into rooms facing north-east through south to north-west, discomfort due to high room temperatures might result. Venetian blinds are, therefore, to be installed between the panes of double windows facing these directions. The schedule to the regulations gives the specification for these blinds and for the control mechanisms by which they operate. You may refuse the offer of venetian blinds if you have reasonable alternative means of solar control.

## **Dwellings not of standard brick construction**

25. Dwellings which are not of standard brick construction (for example, BISF Steel Houses or other lightweight prefabricated houses), are included in the scheme and grants are available for the specified insulation work. But there are technical difficulties about insulating buildings of this kind. It may be impossible to achieve the same degree of noise reduction and the insulation may cost more. If you own or reside in such a dwelling but wish to have the work carried out under a private arrangement you would be wise to get in touch with the Department and ask its advice. Similarly, individual rooms (such as rooms built into the roofspace), which do not have standard brick walls or the like, are not normally suitable for the form of insulation specified in the regulations and the results may be less satisfactory than with standard brick construction unless extra, and probably expensive, work is undertaken. The Department will only insulate the appropriate windows to the specifications; it will not carry out additional work such as insulating the roof structure or pay grant towards extra work which you may undertake if you make private arrangements.

## **Defects in the dwelling**

26. The Department is not obliged to carry out work, and will not make a grant in respect of work, which may be required to remedy a defect in a dwelling before the insulation is installed. If, for example, window sills are rotting away and hindering the installation of double windows, the Department may well expect that defect to be remedied before providing the insulation which has been offered.

## **Maintenance**

27. The Department will not maintain or repair any equipment such as double windows or doors, venetian blinds or ventilator systems installed under the regulations.

## **Work already installed**

28. If you have already installed insulation before the formal offer is made, only the offer of a grant will be available. This will only be paid if your installation meets, or is improved to

meet, the relevant specification and will only be paid up to the cost limits laid down. You should consult the Department or its agent to find out what the cost limits are. You will then need to consult the contractor who carried out your work and get him to itemise the work in accordance with paragraph 18 of this booklet. If you have any difficulties you should write immediately to the office at the address shown on the formal offer.

## **USE OF THE INSULATION WORK**

### **Ventilators**

29. To be effective, noise insulation requires windows to be kept shut and this will restrict natural ventilation. Fresh air is needed in buildings to reduce odours and toxic gas hazards, to help in preventing condensation and, on sunny days, to stop discomfort from too much heat. Although the double windows can be opened - and they normally have to be so as to clean them - opening them lets in the noise and so supplementary mechanical ventilation is normally necessary.
30. In addition, part of the specification provides for certain minimum areas of permanent opening in an external wall of the room, depending upon the total output rating of flued combustion appliances (solid fuel, gas or oil fired) present in the room. The minimum areas of permanent opening specified meet the statutory requirements should the mechanical ventilation be switched off; enough air then enters through the sound attenuating openings for the safe operation of flued appliances.
31. It is important, however, for the supplementary mechanical ventilation in each room to be used to supply sufficient fresh air. You should also avoid blocking up the air flow through the ventilator system and permanent vents in order that the air requirements for flued combustion appliances are met.
32. In a room containing flueless combustion appliances (such as oil heaters and gas cookers), a sufficient supply of fresh air must be allowed when such appliances are operating, either by turning on the ventilator unit (the higher the rating of the combustion appliance the higher

airflow setting) or by opening the uninsulated window.

## **Remember**

- i. Do not bring a flueless combustion appliance such as a portable oil or gas fire into a room which has been fully insulated.**
- ii. Use the ventilator unit as often as possible and especially whenever any permitted flueless combustion appliance is in use.**
- iii. If you change the combustion appliance in a room which has been fully insulated you should make sure that the appliance can operate safely.**
- iv. Keep the ventilator unit and the permanent vent unobstructed and do not block the air flow in any way (except where closable ventilators or vents are permitted).**
- v. The ventilator unit has a filter - clean it regularly.**

## **Sunblinds**

33. Although the supplementary ventilation will be sufficient for normal living conditions, high room temperatures (leading to discomfort from too much heat) are likely to occur on sunny days in rooms with windows facing in certain directions, unless proper use is made of the venetian blinds and the mechanical ventilator unit is operated at a high air flow rate. The blinds will prevent the rooms from becoming too hot only if they are lowered before the sun shines on the windows. This may necessitate lowering the blinds before the house is left empty for the day. To be fully effective, the slats should be tilted until they are at least half closed ( $45^{\circ}$ ). The correct tilt provides a downward view to the ground, not an upward view to the sky.